

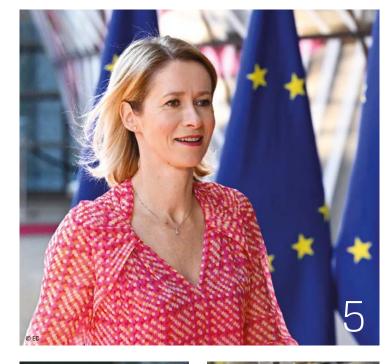


# The new defence imperative Once optional, now essential

> NEW EDA HEAD KAJA KALLAS Arming Europe for peace: deterrence as the best defence > MINISTER OF DEFENCE POULSEN Love Lego? Denmark's building a new model – for Ukraine > **CAPABILITY DEVELOPMENT** Why EDA is the natural choice for multinational cooperation

#### WELCOME **COVER STORY: THE NEW IMPERATIVE** > High Representative and Head of Agency Kaja Kallas Countering Russia through support for Ukraine and developing European capabilities > EDA Chief Executive André Denk Committing to EU defence through innovation and joint capability development > Infographic: The defence Initiatives empowering Europe's armed forces > Troels Lund Poulsen, Denmark's Minister of Defence Defence reimagined: Denmark's leap into leadership > Terma: Bridging EU and U.S. defence From aerospace to radars and beyond $\rangle$ Why today's military power is about more than just firepower Guiding the EU's shift in military posture - Frank Desit on EDA as the natural choice - What are the letters of intent? - Stefano Cont on the punch that purpose gives > Eurocorps and the Rapid Deployment Capacity **CRITICAL VIEW: ANDRIY ZAGORODNYUK** > A steel porcupine? How the EU is investing in Ukraine's defence industry FOCUS: DEFENCE INNOVATION > NATO'S ASG for Innovation, Hybrid and Cyber FOCUS: EUROPEAN DEFENCE INNOVATION DAYS > In Krakow, defence innovation finds a human voice > Ukraine's Deputy Minister of Strategic Industries talks to European Defence Matters > Time for a 'Makeathon' **INSIDE STORY: EDA DEFENCE PROJECTS** > When the robots don't work: EDA's elite bomb disposal school

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# Break On Through

In art as in life, Europe and the United States are richly intertwined. Be it Spaghetti Westerns and German Bauhaus design in California, or the NATO military alliance and transatlantic trade, U.S. and European cultures, economies and peoples are more siblings than strangers.

But in security and defence, the warnings have been clear for some time. Recent strains between Washington and the European Union over Russia and tariffs are just the most recent.

From U.S. frustration over Europe's handling of Libya in 2011, to President Barack Obama's pivot to Asia in 2014, through President Donald Trump's earlier threats to quit NATO and President Joe Biden's sudden withdrawal from Afghanistan, the message seems consistent: Washington tends to see Europe as an unfair burden on its defence.

Is this the catalyst to rebuild EU resilience and defence capabilities? Europe must now accept the reality of self-reliance, even while maintaining close defence ties with the United States. Only then can Europe hope to reclaim influence and leadership on the global stage.

We Europeans find ourselves both alarmed and galvanised. Under a new NATO initiative, allies aim to increase spending over the next decade, with a significant portion directed towards core capabilities and additional resources considered for areas such as cybersecurity and defence infrastructure.

At the same time, the European Defence Agency (EDA), under its new Head, Kaja Kallas – the former Estonian Prime Minister and a vocal advocate of Ukraine – signals a decisive shift towards responsiveness and multinational capability development. Alongside new EDA Chief Executive André Denk, the Agency's message of an integrated approach is gaining traction.

In this edition of *European Defence Matters*, we hear from senior EDA officials helping Member States develop layered air and missile defence, enhanced cyber resilience, and interoperable military assets. We profile Eurocorps and the EU's new Rapid Deployment Capacity.

Denmark, meanwhile, showcases its renewed engagement with EU defence. As a northern anchor, Denmark and its defence industry leaders such as Terma stress high-end technologies and operational readiness. In this issue, we explore the EU's plan to bolster Ukraine's defence industry, integrating it into a resilient European base serving both deterrence and innovation.

This recalibration extends to NATO and innovation, as Jean-Charles Ellermann-Kingombe explains. EDA events such as the European Defence Innovation Days, meanwhile, reveal a maturing community prioritising focus, integration, and scalable solutions.

So the new imperative is clear: unity, speed, and scale. The choices the EU makes today will shape both Ukraine's fate, and its own.

**Robin Emmott** *Editor-in-Chief*  Lionel Sola EDA Head of Media & Communication High Representative for Foreign Affairs and Security Policy, Vice-President of the European Commission, and Head of the European Defence Agency, Kaja Kallas



**Kaja Kallas** is an Estonian lawyer, politician, and former prime minister of Estonia (2021–2024), she made history as the first woman to serve in this role in her country. She sets out her vision for European defence.



# A **new head of EDA** for a new era

eace does not rest on the goodwill of others but on our capacity to defend ourselves and deter threats. The full-scale invasion of Ukraine in 2022 shattered whatever illusions remained about Europe's immediate environment. Russia is intent on causing maximum harm to Ukrainians while running a war economy at full steam. Were a ceasefire to be reached tomorrow in Ukraine - which remains unlikely without more pressure on Russia - Moscow's revisionism, outright lies and hostility to Western institutions, won't change. Russia is a long-term threat to us all, and in a world becoming more dangerous by the day.

Ukraine is Europe's first line of defence. This is why we must support Ukraine in defending itself today and consolidate its power of deterrence when the time comes. This requires a long-term commitment to deliver artillery, air defence systems, and drones, as well as support for Ukraine's military and defence industry. The EU has already trained over 75,000 Ukrainian troops. We should adapt this work and contribute to making Ukraine's armed forces even better, including through training programmes in Ukraine. A strong Ukrainian military and defence industry are the strongest security guarantees money can buy.

Europeans also have a lot to learn from Ukraine's defence against Russia. It takes a serious amount of ingenuity to take out planes worth tens of millions of euros with drones worth thousands. From day one, Ukraine has been a crucible of military innovation (*see EDM pages 28-29*). From drones to electronic warfare, it has adapted in unimaginable ways and demonstrated unbeatable courage. We must integrate their battlefield knowledge into European production at large, including as we make use of the new Security Action for Europe (SAFE) instrument and the European Defence Industry Programme (EDIP).

#### "The European Union will mobilise 800 billion euros to develop more, and procure, high-intensity warfare capabilities"

This is all part of broader European defence planning for tomorrow. There are two prerequisites for this – spending enough and developing enough. Since 2021, defence spending has increased by 30% amongst EU Member States. The European Union will mobilise 800 billion euros to develop more, and procure, high-intensity warfare capabilities. We are also creating better conditions for our defence industry, including by reducing the administrative burden. All this work will help the EU's NATO members contribute to new capability targets, as well as limiting the duplication and protectionism in this sector that have slowed Europeans down in the past.

#### Doing more

The European Defence Agency (EDA) can aggregate demand for defence products and services across Europe, which lowers the costs for Member States. It has already provided satellite services and medical evacuation for armed forces and procured ammunition and equipment for soldiers on behalf of Member States. But it can do so much more. There is already a case for EDA to procure off-the-shelf defence products on behalf of Member States as it did as part of the million rounds initiative for Ukraine.

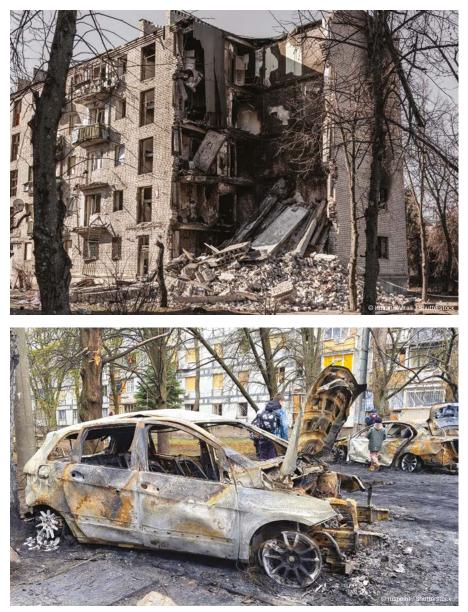
It can also align the military requirements of Member States so that equipment from different countries can work together smoothly. In a truly European defence market, ammunition produced by one company must work seamlessly with artillery of the same calibre from another company.

EDA work has already helped develop the Multinational Multi-Role Tanker Transport fleet for cargo, medical evacuation and air-to-air refuelling, as well as supporting the evolution of semi-autonomous systems. It should keep going along this path. It can also help us develop and innovate future military capabilities. Progress is already being made on integrated air and missile defence and a European Combat Vessel (ECV) (*see EDM pages 16-23*), for example. EDA should be the defence innovation hub everyone in the defence sector turns to for inspiration. It should reflect Europe's brilliance.

As Jean Monnet said, "anything is possible in exceptional moments, as long as you're ready, as long as you have a clear project at the moment when everything is confused."

In this exceptional moment, there is no clearer project than the defence of the  $% \left( {{{\rm{D}}_{{\rm{B}}}} \right)$ 

European Union and our values across the globe. This is the era in which the European Defence Agency should truly deliver. I call on every Member State and EDA's partners, including Ukraine, to make the best use of the Agency, take full advantage of the benefits it brings and empower it to lead the charge for a strong, innovative and safe Europe.



Russia's airstrikes on Ukrainian cities have been unrelenting in 2025.



André Denk is the new Chief Executive of the European Defence Agency (EDA), becoming the first high-ranking military officer to lead the organisation. General Denk brings extensive operational and leadership experience, having served as EDA's Deputy Chief Executive since 2023. His previous roles include Director of Logistics at the European Union Military Staff and command positions within the German armed forces, with deployments under EU, United Nations, and NATO missions.

# **Seven steps** to Europe's defence – plus two to keep us safe

s a soldier, I undertook many international deployments in hostile conditions, including in Bosnia and Herzegovina, in Afghanistan, and in Mali. Yet it is no exaggeration to say the toughest assignment of my career is here, in Brussels. We face the challenge of our lifetime: the defence of Europe. If we are to preserve our way of life and the values we hold dear, we must stand together with determination and purpose.

The top priority for the EDA is to serve our 27 Member States – and advance the strategic defence priorities set out by EU leaders in March 2025 and the Joint White Paper for European Defence Readiness. The White Paper's '7+2' capability framework (*see right*) outlines a comprehensive strategy to enhance European defence.

Rearming Europe will take years. That also means taking steps now, from short-term measures such as joint procurement using existing contracts, to building pan-European capabilities over the medium and long term. *(see EDM pages 16-23).* It also includes investing in research, technology and innovation; and building greater synergies with the European Defence Technological and Industrial Base (EDTIB).

One way we are doing this is by supporting joint procurement of weapons, equipment and ammunition, matching needs across countries, aggregating demand, and preparing business cases to make projects ready for funding and procurement. We have recently launched a unique government-to-government matchmaking platform at EDA. It allows Member States and certain partner countries to post needs or propose collaborative projects and connect directly with one another. On capability development, we are making headway in several key areas, from artillery systems to ammunition and missiles. Our 155mm ammunition procurement on behalf of Member States is underway, including for direct support to Ukraine. Carl Gustaf 84mm ammunition is another procurement area.

Our work on loitering munitions is progressing well, with 17 Member States involved. Alongside this, we are exploring longer-term joint development options for broader capability building. We're also working on unmanned systems, cybers and maritime capabilities such as the European Combat Vessel. Each project strengthens our technological and industrial base.

The bottom line is this: EU Member States, in support of NATO, need to be ready for high-intensity warfare. That means having the right equipment – yes – but also the systems, infrastructure, and interoperability to act. These gaps are real, and we're helping Member States tackle them together.

We are also putting our energy into innovation. The recent European Defence Innovation Days in Krakow were a great success, bringing together 1,000 participants from across Europe, and Ukraine, to explore disruptive technologies and move them from the lab into practical use (see EDM pages 32-35).

EDA is, and always will be, the agency of the Member States. Our job is to support

governments through every phase of the capability development cycle. We are committed to helping turn political ambition into operational reality.

The years ahead will require unity. It will not always be easy, but with resolve and cooperation, we can meet these challenges. Now is the time to deepen our partnerships, and ensure we are ready to respond thoughtfully and effectively. Our future depends on our ability to act together, calmly and confidently, to protect what matters most.

#### '7+2'

#### Seven Priority Capability Areas:

- 1 Air and missile defence against airborne threats.
- 2 Modernising artillery systems.
- **3** Building ammunition and missile reserves and production.
- 4 Developing drones and anti-drone technologies.
- 5 Enhancing military mobility across Europe.
- 6 Strengthening AI, cyber and electronic warfare capabilities.
- 7 Supporting strategic enablers like airlift, refuelling, maritime, space and infrastructure protection.

#### Two Cross-Cutting Initiatives:

- 1 Supporting Ukraine with military aid and integrating its defence industry.
- Boosting European industry through joint procurement, innovation and simplified regulations.

## **DEFENCE INITIATIVES** EMPOWERING EUROPE'S ARMED FORCES

# POLITICAL GUIDANCE

European Council Tasking > EU leaders in March 2025 make call to work on capability development.

White Paper for European Defence

High Representative & EU Commission define in more detail key ideas and priority area

European Defence Industrial Strategy (EDIS)

> High Representative & EU Commission in 2023 set out vision until 2035.

EDA May 2025 Steering Board > Agency asked to help "swiftly advance" joint initiatives in line with the European Cou Tasking and the White Paper.

### **IDENTIFYING PROJECTS**

Collaborative Opportunities, Letters of Intent > EDA Member States sign up to participate in projects. EDA prepares for potential grouping of orders of two or more Member States.

Coordinated Annual Review on Defence (CARD) > EDA, with Member States, identify potential projects.

#### 2023 EU Capability Development Priorities > EDA, with Member States & EU Military Committee, identify 22 priorities.

## INDUSTRIAL SUPPORT

#### EDA & European Investment Bank

 Providing expertise and increased investment to strengthen the European Defence Technological and Industrial Base.

#### Security Action for Europe (SAFE)

> EU Commission to raise up to €150 billion to loan to Member States.

#### **EU Fiscal Rules**

Member States to deviate from rules to allow for increased defence spending.

#### European Defence Fund

> Co-financing multinational research and development projects via EU budget.

#### Act in Support of Ammunition Production (ASAP)

> Time-limited regulation for industry to help fund ammunition production with a total budget of more than €500 million.

#### **EDIRPA**

> Time-limited regulation for Member States to acquire equipment together with a total budget of €310 million.



# Defence **reimagined**: Denmark's leap into EU leadership

rom his office in central Copenhagen, Danish Minister of Defence Troels Lund Poulsen watches the cyclists navigate the morning rush – fastmoving yet familiar, a quiet emblem of Danish routine. Inside the ministry, the pace is just as urgent but far less predictable: shaped by war, uncertainty and the shifting contours of European security.

Since taking office two years ago, Poulsen has been at the centre of Denmark's response to one of the continent's most volatile periods in decades. "We see a deeply troubling shift in the security landscape. The war in Ukraine is a

sad reminder of this," he says. He is overseeing one of

the biggest transformations to Denmark's defence posture in recent times, and not in isolation, but in coordination with partners across the region. Whether

through joint procurement, intelligence sharing or forward deployments, Denmark has emerged as an active contributor to the renewed sense of European solidarity in the face of shared threats.

The Danish government's decision to allocate 50 billion kroner (€6.7 billion) to defence, raise spending to 3 percent of GDP, and expand its armed forces by



5,000 personnel shows just how seriously it takes its role, and responsibilities, in an increasingly uncertain world.

In July, Denmark assumes the rotating Presidency of the Council of the European Union, and it is no bluster when Poulsen says the country is stepping into a leadership role to mould Europe's military future. "The EU has stepped up with vital initiatives to strengthen our defence readiness. During our EU presidency it will be a priority to drive these initiatives forward, alongside continuing the EU's support for Ukraine," he says.

#### "Sometimes pooling resources will be the best way forward. At other times, Member States will develop their own national capabilities"

#### Call for collective action

Although a founding member of NATO, Denmark was not always at the forefront of EU defence. Only in June 2022, after Russia's full-scale invasion of Ukraine, did Danes vote in a national referendum to lift the country's opt-out from involvement in EU defence missions and cooperation. In March 2023, Denmark joined the European Defence



Troels Lund Poulsen has served as Denmark's Deputy Prime Minister and Minister of Defence since November 2023. A member of parliament since 2001, he brings over two decades of political experience to the role, not to mention a ministerial career spanning portfolios including the environment, taxation, education, employment and economic affairs. He talks to European Defence Matters about taking the lead on EU defence priorities. Greenland and 'The Danish Model'.



"... Denmark has emerged as an active contributor to the new sense of European solidarity..."

Agency (EDA), meaning all EU countries are now members.

Revitalising its commitment to European defence and supporting Ukraine, Denmark's EU coordination in defence is not just a complement to NATO, it's a necessity, Poulsen says. "Europe needs to do more – and faster," he adds. "This is also good for transatlantic security. Europe's security benefits greatly from our collective action."

Ensuring that EU Member States align their defence investments is an effective

way to boost readiness and deterrence. "Collective projects help close critical gaps, in air defence, surveillance and logistics that no single Member State can fully address on its own," Poulsen says.

After all, it is not only Denmark that is catching up. After decades of U.S. urging, many EU governments are finally spending more on defence. "U.S. administrations over the years were right; much more should have been done. Indeed, we are doing more now." So Poulsen is overseeing a transformation of Denmark's military footprint. One example is the strategically important island of Bornholm in the Baltic Sea. In April, the government announced a new infantry battalion would be permanently stationed there. The island, sitting at the gateway to the Baltic Sea, is a potential geopolitical flashpoint. Russia's increasing naval activity in the region has prompted NATO to launch a new Baltic Sea patrol initiative, Baltic Sentry, to protect →





Conscripts from the Danish Artillery Regiment take part in training in Oksbøl.





#### The Danish Model at a glance

- **)** Goes beyond donations from Danish stocks.
- > Allows Ukraine to strictly define military needs first.
- > Facilitates deliveries with funding from Denmark and others.
- > Puts checks and balances in place to reduce risk of fund misuse.
- > Creates a responsive aid model, tailored to urgent needs on the ground.
- > Funding 2024: Total: Approx. €590 million. Sources: Denmark: €175 million. Sweden, Iceland. EU: €390 million from windfall profits on immobilised Russian assets.
- > Funding 2025: Denmark expects to implement some €1.3 billion through the model, with funds from Denmark, EU, Sweden, Norway, Canada and Iceland.

(Above) "The fight for Ukraine's freedom is crucial for all of Europe. And we must stand together behind Ukraine. Both today and tomorrow" – September 2024.

*(Left)* Danish frigate Niels Juel sails alongside the French minesweeper Croix du Sud during joint operations.

## underwater infrastructure and assert presence.

Poulsen is careful to avoid the perception that Europe is retreating into strategic isolation. "European defence should not – and cannot – be strengthened in isolation," he says. Denmark continues to advocate for third-country participation in EU initiatives. "We need strong partnerships, especially across the Atlantic."

#### Rue des Drapiers 17-23

Part of that work is done at EDA's offices in Brussels. Poulsen is eager to see EU Member States pool resources when it makes sense, especially to reduce duplication and strengthen interoperability. "To overcome fragmentation, we need more collaborative European initiatives to deal with small, localised markets that have a limited scale of production." In addition, that means deeper supply chain resilience, joint procurement, and fewer overlapping national projects. "We need to be pragmatic. Sometimes pooling resources will be the

#### "Greenland's future is decided by the people of Greenland"

best way forward. At other times, Member States will develop their own national capabilities."

Member States have mandated EDA to do more joint procurement as a core task, even if it is not a procurement agency. For Denmark, EDA is also there to address the challenges for small- and medium-sized defence companies. That support was on show at the European Defence Innovation Days in Krakow, Poland, in May (see EDM pages 32-35).

"EDA is an important forum for cooperative projects, laying groundwork for developing or procuring assets in integrated air and missile defence, logistics, and surveillance – areas no single EU country can tackle alone", Poulsen says. Denmark is also investing in maritime capabilities to enhance situational awareness. These efforts align with broader EU initiatives to bolster maritime security.

#### Arctic investment

The increased significance of Arctic security only adds to the complexities for Danish defence planners. With melting ice opportunities, the strategic importance of the Arctic and North Atlantic region is obvious, and Poulsen emphasises that Denmark is determined to invest in more Arctic capabilities. "In January, we announced a significant Arctic investment package, including three new naval vessels, long-range drones and enhanced satellite surveillance." A second agreement is expected later this year to boost deterrence across both maritime and air domains.

When it comes to the security of Greenland, an autonomous part of the Kingdom of Denmark, Poulsen understands the heightened interest. "Clearly, Greenland plays an important role due to its geographic position between the United States, Canada and Russia," Poulsen says. "NATO needs stronger domain awareness and presence in the region. But at the end of the day, Denmark is clear on its position. "Greenland's future is decided by the people of Greenland," Poulsen says.



Ukrainian Minister for Strategic Industries Herman Smetanin, Danish Defence Minister Troels Lund Poulsen and Ukrainian Defence Minister Rustem Umerov sign an agreement in February 2025 to strengthen cooperation based on the 'Danish Model'.

# Vikings, The Little Mermaid, Lego, and now... The **Danish Model**

Denmark is famous for Lego bricks, Hans Christian Andersen, sleek design and its world class pharmaceuticals industry, among other things. Might the so-called Danish Model in Ukraine join the list? As EU and NATO countries reach the limit of what they can donate from their own stocks, Denmark has developed another way to deliver aid to Kyiv, funding weapons manufacturing in Ukraine for the Ukrainian armed forces to buy.

In essence, Ukraine identifies the weapons it requires; Denmark pays the bills. Danish officials then work with Kyiv to evaluate suppliers and oversee fulfilment. In 2024 alone, the model delivered roughly €590 million worth of equipment, including long-range drones, anti-tank systems and 18 Bohdana artillery systems.

"What's crucial is that all donations are based on Ukrainian recommendation and priorities," Poulsen says. "A number of checks and balances are set up to minimise the risk of misuse of funds."

The funding in 2024 came from a mix of sources: Denmark (around €175 million), Sweden, Iceland and €390 million from the EU via windfall profits generated by immobilised Russian assets. In 2025, Denmark will continue to implement this mechanism on the EU's behalf. Funds for 2025 are being implemented, some €1.3 billion. Denmark, Sweden, Canada, Norway and Iceland have pledged "substantial" contributions to the Danish Model, Poulsen says.

"Our focus right now is on securing long-term support by establishing multi-year funding for Ukraine's prioritised requirements such as air defence and artillery," he adds.

Longer term, Poulsen supports a more integrated European defence industrial base that includes Ukraine. "We can learn from them. It is a two-way street." Drones are one example. "It is also a clear priority for Denmark to see Ukraine firmly integrated into the European Defence Technological and Industrial Base," he says. It's no fairytale.



Steen Lynenskiold is Executive Vice-President, Government & Partnerships, at Denmark's largest defence and space company. At Terma since 1989, he has helped establish the company as a recognised defence technology provider - in a career that included a stint supporting the Joint Strike Fighter programme and working on satellite command systems for the European Space Agency. He speaks with European Defence *Matters* about radars, pension funds, Denmark's embrace of European defence and protecting Greenland.



A Royal Danish Navy patrol vessel, HDMS Ejnar Mikkelsen, sails through the Kasakkerne.

# Radars and reinvention: Terma's role in **bridging EU and U.S. defence**

amous Danish brewer Carlsberg's new ad campaign for alcohol-free beer in Brussels has a simple message: it is still a well-balanced beer. Denmark's largest defence company, Terma, knows something about balance too – having operated in European defence while Denmark stayed outside the EU's Common Security and Defence Policy for nearly three decades. By all accounts, the experience was not quite so crisp and refreshing.

"In those years, we had to find our own way to align with European partners, whereas other (non-Danish) companies probably benefited from more direct national engagement," says Steen Lynenskjold, Executive Vice President of Terma. Throughout Denmark's years on the sidelines, Terma still took part in European programmes, but without full government backing. Denmark's absence from decisionmaking left companies with less strategic guidance. To stay connected despite the opt-out, Terma opened a Brussels office almost a decade ago.

"Authorities sometimes had a seat at the table, but they were listeners, not contributors," says Lynenskjold. "That made things less clear, less coordinated. We had to understand the programmes ourselves. With Denmark fully back in, it's a completely different picture."

#### No more 'soft' Euroscepticism?

Since Russia's invasion of Ukraine, the public mood has also changed. There is



strong national support for Ukraine and recognition of the importance of collective European security. Denmark is no longer an EU outlier on defence, rejecting policies on the grounds of sovereignty.

"There is strong support for Ukraine and the strengthening of EU defence efforts. Danish society understands now that Europe must be able to stand on its own two feet," says Lynenskjold. "Now, with Denmark at the table, we're not just reacting. Terma is helping shape where we go next."

Terma's renewed role in European defence is both a return and a reinvention. From its Aarhus headquarters, Terma has always been outward-looking, with international operations in the Netherlands, Germany, the United States, Singapore, UAE, India and Indonesia. Today 84% of its revenue is generated outside Denmark. "It's not about whether we should work with friends, but how. We must have open systems architecture, ensure compatibility, and join efforts together."

Still, Lynenskjold recognises the complexity. In the Baltics or Arctic, joint maritime surveillance and protecting infrastructure thrive under European

#### "There won't be purely European or American solutions in our collective defence. Technology will be mixed – varying by domain and country"

cooperation, especially given the harsh environmental conditions. "But integration fails if national forces have different priorities. Cooperation only works when tasks and requirements align," he says.

#### 'Neither a start-up, nor a giant'

Terma is a long-established provider of coastal surveillance and airspace security systems, with radar technologies in operation at over 200 airports worldwide. The company has

been involved in radar development since the 1950s, and this technology continues to play a central role in its activities. Known for their reliability, they operate around the clock in demanding environments –  $\rightarrow$ 

#### Terma at a glance

- > Terma is Denmark's largest defence and space company, with over 2,000 employees and 84% of its revenue from exports.
- ${\bf Y}$  A key supplier to NATO and the U.S., Terma produces over 80 components for the F-35 and integrates electronic warfare systems on F-16s for Ukraine.
- > Terma is a leader in radar technology, with systems operating globally in harsh environments, including the Arctic.
- > Terma is Denmark's most active industry member in the European Defence Fund, with innovation in AI, cyber and defence technology.

> Terma's goal is to double turnover in three years.

#### Terma Europe

EUROPEAN FOOTPRINT



1,800+ employees across nine European countries

#### SPACE MISSIONS



100+ missions for the European Space Agency

#### SELF PROTECTION SYSTEMS



Terma self-protection systems on board various aircraft in 11 EU countries

# AIRPORT GROUND SURVEILLANCE



25 airports across Europe use Terma SMR radars

#### RADAR SURVEILLANCE



**100,000+ km** of European coastline secured

#### **EUROPEAN COOPERATION**



Terma contributes to NATO AGS program and 10+ European Defence Fund projects

# Pension fund backs Terma in defence investment shift

Terma has welcomed Denmark's largest pension fund, ATP, as a minority shareholder. The deal could mark a shift towards more private sector involvement in European defence, reducing reliance on public funds and paving the way for long-term, sustainable investment in the industrial base.

The Terma-ATP partnership comes at a pivotal time, as the company pursues an ambitious strategy to double its turnover within the next three years. While Terma did not require debt financing, it sought capital to support its expansion and innovation – particularly in the defence sector.

"We were not in need of money, as we are debt-free. But we're quite ambitious in our growth, and therefore, obviously, you need funding for that," Lynenskjold says. ATP's investment – a single-digit billion sum in Danish kroner – reflects its commitment to backing Danish businesses. ATP has also secured a seat on Terma's board. The move is aligned with ATP's Long-Term Danish Capital initiative, launched in 2021 to support high-potential Danish companies.

Lynenskjold underlines the importance of the partnership: "It's very positive that we see pension funds stepping in. The United States obviously has very deep capital markets, whereas the Europeans do not. We can't just rely on taxpayer money."

from the heat of the Middle East to the icy extremes of the Arctic.

The company has advanced its systems to tackle emerging threats like drones, using artificial intelligence and data fusion to accurately classify targets – even in poor weather. "We use Al and edge computing to reduce false alarms," says Lynenskjold.

Involvement in the European Defence Fund (EDF), which provides funding for multinational projects from the EU's long-term budget, is one example of the benefits of being fully part of EU defence, and Terma is Denmark's most active member in the programme. It has completed three projects, is involved in seven, and has submitted three more. These span space systems, cyber security, NATO combat support, AI, simulation and aeronautics. "We're not just inventing alone anymore," says Lynenskjold.

One such project is the Artificial Intelligence for Defence (AI4DEF) project that Terma coordinated, with 19 partners from 11 countries. It demonstrated how AI can improve military capabilities in situational awareness, decision-making, and planning. It delivered a cloud-based AI platform used in unmanned aerial vehicle (UAV) mission planning, joint intelligence, surveillance and reconnaissance (ISR) analysis, and tactical decision support.

However, co-funded work is not always the solution. "Even with the will and capability, moving from research to operational delivery can be tricky," he admits.

And Terma faces structural barriers, being too big for schemes focused on small- and medium-sized companies, yet not on the same financial footing as Europe's largest defence primes. "We're not a start-up, but we're not a giant. We need targeted support, and a fair playing field."

#### Going local in Ukraine

Beyond the tragedy of war in Ukraine, Terma has been learning to do things differently there too. After NATO allies approved F-16 deliveries to Ukraine in 2023, and Denmark led the way in transferring these jets to replace Ukraine's ageing Soviet-era fleet. "We've been integrating electronic warfare systems, ensuring the aircraft are fit to fight before leaving for Ukraine," says Lynenskjold.



Terma's new SCANTER Sphere 3D counter-drone radar.

Terma's role has also expanded beyond aircraft. Known for coastal surveillance and airport security, its capabilities support Ukraine's long-term stabilisation. "We're working to become local, partnering with Ukrainian companies. We see huge potential," he says. The company has also had to work faster. "In Ukraine, projects take months, not years. We've learned the importance of speed," he explains.

#### "We're not a start-up, but we're not a giant. We need targeted support, and a fair playing field"

Lynenskjold is confident that support for Ukraine will remain firm. "I don't see the need for European support diminishing in response to any potential shifts in U.S.-Russia relations," Lynenskjold says. "We're in a situation of war with its own unique characteristics."

#### No U.S. 'opt-out'

In its attempt to steer a course between a new policy direction in the United States and an ascendant China, the EU's principle of strategic autonomy has been much debated. For Terma, which works with both European and U.S. defence companies as a systems integrator, pragmatism guides the company's focus. The United States is Terma's biggest market, representing half of its business. Denmark joined the F-35 programme in 2002 and today produces more than 80 components for the aircraft.

"There won't be purely European or American solutions in our collective defence. Technology will be mixed – varying by domain and country," Lynenskjold says.

> "Denmark has chosen U.S. aircraft such as the F-16 and F-35. But when it comes to modernising our brigade or short-range air defence, much of that is European," he says. Terma currently supports the Danish armed forces with a 30-year contract as the

systems integrator for Very Short-Range Air Defence (VSHORAD) capabilities, compliant with NATO.

This blend is likely to continue. For decades, the company has integrated European tech onto U.S. platforms. Its work with Lockheed Martin and Elettronica is an example. "With Elettronica, we worked on the Italian C-130J, integrating radar systems. We've done similar work on the F-16 with other European firms," says Lynenskjold.

"Denmark is increasing defence spending, and a big chunk is going into European tech, but we're still investing in U.S. technology. It's about the right mix."

#### Greenland

Some aspects of Denmark's relationship with the United States work smoothly, but Prime Minister Mette Frederiksen has made it clear Denmark will not relinquish Greenland, after the suggestion that the United States should acquire it.

"As Denmark is an Arctic nation, issues in the region matter to Terma too," Lynenskjold says. "We're already making substantial investments, and there are plans for even more, especially in military capabilities." One is to help design and build three new ice-strengthened patrol ships to operate in the challenging Arctic waters. "All the electronics must operate flawlessly in such an unforgiving environment."

Terma will also be providing coastal radars for Greenland, and drone technology for Arctic surveillance, responsible for managing and interpreting the data collected, not to mention its role helping to integrate NATO's combat management systems.

Even as Greenland itself seeks greater autonomy, Lynenskjold believes Denmark's role will remain. "Greenland's influence is growing, but Denmark, together with the Faroe Islands, will coordinate efforts in the region," he says. "This united front remains a cornerstone of Denmark's Arctic strategy, despite mounting external pressures."

# Why today's military power is about more than just firepower

"Capability development is all about being able to deliver the right effect on the battlefield – and that effect requires more than just the hardware" Conor Kirwan, EDA Project Officer, Capability, Armament and Planning Directorate

Effective military power involves more than just owning tanks or fighter jets. True defence capability means everything to deliver a specific effect, from the right equipment and training to leadership, logistics and coordination. This broad approach, known as capability development, is central to modern defence. So instead of asking "Do we have tanks?", the real question becomes, "Can we deliver the effect we need on the battlefield?"

When it comes to defence, the approach within the European Union defines the strategic objectives, then charts the ways by identifying the capabilities required to meet them and finally applies the means, with financial and other resources. So two main activities emerge: Force Planning and Force Development.

Force planning involves assessing what military forces are needed and uncovering the gaps that currently exist; force development focuses on how to address those gaps, typically through cooperative projects and multinational collaboration addressing those identified capability shortfalls. While both are vital, the EU places particular emphasis on force development, championing a shared effort among Member States to build the capabilities they cannot easily achieve alone.

The European Defence Agency (EDA) plays a central role. Since its launch in 2004, EDA has helped Member States move beyond ad hoc procurement and towards more structured, collaborative capability planning. Working across all aspects of capability development – from doctrine and concept development to training, materiel and interoperability – EDA guides national efforts towards shared EU goals.

#### Phase 1: **Setting Priorities**

The first step in the EU-CDPS process is agreeing on what defence capabilities need to be developed across Europe. These priorities come from two main areas:



**Military Needs:** What armed forces need to be ready for different kinds of operations, from long and intense conflicts to defending territory.

Wider Strategic View: Looking at trends in technology, industry and global politics that affect defence capability planning.

The four phases of the EU Defence Capability Development Planning System (EU-CDPS).

#### Phase 2: From Priorities to Action

Once the priorities are set, the next step is turning them into practical projects.

This is done using Priority Implementation Roadmaps (PIRs) created by Member State experts and planners, within the EDA working groups. These roadmaps lay out short, medium and long term steps.

#### Teams of planners and experts work together to:



Align plans and timelines

Spot good opportunities for working togethe

#### Phase 3: From Business Cases to Programmes

In this phase, initial ideas and plans (business cases) are turned into full programmes.

#### This involves:

Agreeing on what each project will deliver and the technical details

Making sure all supporting elements (like training and logistics) are included, not just the equipment

Involving industry early on to check if the ideas can be built and delivered

The EU also uses new funding and policy tools including those managed by DG DEFIS.

#### **DOTMLPF-I** explained

DOTMLPF-I is a framework used to ensure lines of development of a capability are covered:

- Doctrine Principles guiding how forces operate
- Organisation Structure and command systems
- Training Preparation and readiness • Materiel – Equipment and technology
- Leadership & Education Decision-making and professional development
- Personnel Skilled people to use and support systems
- Facilities Bases and infrastructure.

#### Phase 4: Execution

Carrying out the programmes is the responsibility of each country. However, the EU helps coordinate to make sure everything stays in line with shared qoals.

Proper governance makes sure all parts of the project are working together to create real, usable defence capabilities.

# "EDA is, and **must remain**, the natural choice for preparing capability development together in EU defence"

**Opinion** – Today's military needs are too pressing to indulge in duplicative efforts, argues **Franck Desit**.

RUSSIA'S WAR OF AGGRESSION against Ukraine has injected a sense of urgency in our efforts to rearm EU nations and reinforce our defence industrial base. This puts the spotlight on an activity more complex than is commonly known, amid high expectations and with 27 Member States, various institutions and a diversified industrial base. But, we are not starting from scratch.

This activity is generally encompassed in what we call military capability development. That can mean different things to different people, although it is clearly defined. Let me give an example.

With more than three decades of experience, Franck Desit is Deputy Director of the Capability, Armament and Planning directorate (CAP) and Head of the Air Domain Unit at EDA. His previous roles include France's representative to NATO on armament matters and several leadership positions within the French Ministry of Defence and NATO's Allied Command Transformation, in particular in capability development and armament procurement.

> From the 1990s, I worked at France's defence procurement agency, the DGA, to develop and procure various capabilities, including the Mistral class Helicopter Landing Dock. These ships are more than just helicopter carriers. Before designing them, we needed to define their capability environment and requirements.

> Capability development goes beyond developing and procuring a military asset; it includes all means required to make it work as we intend and deliver the desired military effect. This includes concepts and doctrines, organisational structures, training and education, logistics, infrastructure – all the elements necessary to ensure that the acquired

product is truly fit for purpose within the armed forces, both today and in the future.

The future is important here. Capabilities must be interoperable not only with current systems but also with those that are under development in parallel. This calls for a coherent and integrated approach, encompassing interoperability alongside training, leadership and command systems.

Consider the Mistral again. After decades without amphibious operations, geopolitical needs prompted France to reconsider. We couldn't simply resurrect old concepts; we had to rethink and renew the entire capability. That meant developing a new concept for modern amphibious operations, adapting sea, land and air doctrines.

It meant rethinking the medical role incorporated in the missions of the ship, coordinating the development of the ship with that of the landing crafts, addressing coastline multidomain threats and designing logistics to sustain the rhythm of rotations of landing crafts and helicopters. It also meant developing new training and education programmes for the navy and marine infantry to plan and conduct missions with this new tool.

The capability is not just a ship.

In the age of interconnected systems, capability development has become ever more vital. Technologies evolve rapidly and disruptively. Digitalisation is pervasive and combined operations have become the norm. Capabilities must be designed for what these new technologies enable, with agile processes to avoid products becoming outdated upon delivery.

#### A political choice

It is important to stress that capability development is not always implemented in a unique manner. Sometimes, ministries of defence turn to the market to buy what they need when they decommission a platform or when they need to reinforce forces. Developing a product or procuring one is a national



choice driven by operational, economic and political factors.

This choice also depends on a country's internal capacity to manage and engineer large and complex projects: acquiring something that does not exist yet requires managing technical and financial risks. But even when acquiring off-the-shelf, procurement is a strand of capability development. It is one piece of a larger puzzle: education and training, logistics, infrastructure and interoperability must be addressed with a structured approach.

In a multinational context such as the European Union, the challenge is to harmonise the needs and requirements and synchronise activities and decisions, including budget planning. Member States have varying timelines, requirements and strategic approaches. So, the goal is to foster convergence: aligning budgets, operational needs, acquisition strategies so that collaborative developments succeed.

#### Enter EDA

Through processes such as the Coordinated Annual Review on Defence (CARD), EDA discusses Member States' plans and intents, focusing on opportunities for cooperation and defragmentation, and supports them in synchronising efforts. We have created fora where national experts and planners can converge on requirements and plans. EDA facilitates the evolution from identifying priorities to seizing concrete collaborative opportunities.

Depending on the context, we take a hands-on role, developing concepts, elaborating and harmonising requirements, coordinating experiments, or even implementing training and exercise programmes for new capabilities. But when it comes to execution – the actual development and acquisition – it remains primarily the Member States' responsibility, especially for large, complex projects.

#### What is Capability Development?

Capability development means developing everything needed to carry out a military task – not just purchasing equipment and armaments. Whether it's firing beyond the line of sight, or defending against missile attacks, the aim is to ensure the full package is in place to deliver the required effect. This includes:

- Concepts and doctrines
- Dedicated organisational structure and leadership
- Suitable equipment (e.g. drones, tanks, sonar)
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- Proper education and training
- Facilities for maintenance and use
- And the ability to work effectively with others (interoperability).

A vivid example of this is the Future Mid-size Tactical Cargo (FMTC) project. This aircraft is envisaged to become the workhorse for tactical air mobility, complementing larger transport platforms like the A400M, from 2035. Initially discussed at technical expert level within EDA fora, the project has matured through the CARD process and was proposed as a Permanent Structured Cooperation (PESCO) initiative. Contributing Member States then leveraged EU funding mechanisms such as the European Defence Fund (EDF) to support development and feasibility studies. EDA continues to support this strand, ensuring consistency with an overall EU capability development approach of a family of tactical air transport assets.

#### The natural choice

EDA has often been the genesis of collaborative capability development in Europe. We played a catalyst role in programmes such as the Multinational Multi-Role  $\rightarrow$ 

#### The emerging EU defence capability development planning system: a strategic shift

*European Defence Matters* outlines the strategic essence of the EU Defence Capability Development Planning System (EU-CDPS).



These elements act in concert, with EDA coordinating efforts to ensure coherence, sequence and alignment across national and EU priorities. Political Direction is set by EDA's Steering Board, establishing long-term strategic and political objectives within broader EU frameworks such as the Strategic Compass.

2 Operational Means and Ways are delivered through EU-CDPS itself, encompassing processes led by EDA with military input from EU Military Staff (EUMS) and EU Military Committee (EUMC).

3 Industrial and Technological Policy is driven by the European Commission, with support from EDA, ensuring that capability development aligns with the strengthening of the European Defence Technological and Industrial Base (EDTIB).



Tanker Transport fleet – a shared pool of strategic lift and air-to-air refuelling aircraft – and the Eurodrone, where after initial involvement, responsibilities transitioned to OCCAR, the Organisation for Joint Armament Cooperation.

EDA's strength lies in bringing Member States together early, harmonising requirements, and enabling collaboration before handing over to those who lead the development and acquisition.

That is why EDA is the natural choice for capability development and preparation of common procurement within the EU defence constellation. We operate at the intersection of national interests, technical expertise, and political will. We facilitate cooperation that no single nation or organisation could manage alone.

Member States are our shareholders. EDA is intergovernmental. That is different from other EU agencies and institutions. EDA acknowledges that other stakeholders who are making decisions to help governments invest in capability development need to understand Member States' needs and plans.

Pragmatism, while respecting everyone's role and responsibility, is a necessity. It may require relying on informal bridges. In the end, it is up to Member States to build upon preparatory activities conducted under EDA auspices and reinject them into compatible and relevant acquisition frameworks and financing tools. Member States play a crucial role as conduits between these EU spheres, ensuring that planning and funding activities match up.

While imperfect, this informal bridge must remain functional and grow stronger. Multinational capability development is challenging enough, and we cannot allow parallel tracks to develop. By fostering cooperation, synchronising efforts and embracing this pragmatic approach, EU Member States can build the defence capabilities they need to keep our citizens safe.

# What are the **letters of intent** and how do they fit into capability development?

Ministers of Defence last year approved the 2024 Coordinated Annual Review on Defence (CARD) report – the EU's 'State of the Union' on defence. The review identifies so-called actionable collaborative opportunities for Member States to develop critical capabilities together. For the first time, the adoption of the report is combined with the signature of letters of intent by Member States in four areas: integrated air and missile defence, electronic warfare, loitering munitions and a combat surface vessel.

#### Purpose of LOIs:

- LOIs are political declarations by Member States expressing their intention to collaborate on key defence capability areas.
- They serve as an early and visible commitment to cooperative development, procurement and planning.
- LOIs mark the transition from identifying collaborative opportunities to signalling a political intent to pursue them.

# How are capability areas selected for letters of intent (LOIs)?

LOIs are based on collaborative opportunities identified through a structured assessment using these key criteria:

#### Political priority:

- Reflecting Member States' strategic concerns and recent political guidance.
- Alignment with NATO Capability Targets.
- Support for the European Defence Technological and Industrial Base (EDTIB).
- Focuses on areas where industrial capability can be strengthened through cooperation.

#### Examples of capability areas backed by the letters of intent



Integrated Air and Missile Defence (IAMD):

- Medium term: Development to counter drone swarms and high-velocity threats.
  Long term: Building a robust IAMD architecture.



- Medium to long term: Common doctrine, training, exercises and future systems for jamming and counter-jamming.



- Medium to long term: Further development, joint testing, operational concepts and common terminology.



European Combat Vessel (ECV):

• Long term (by 2040): Joint development of next-gen naval platforms using a systems-to-hull approach.

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- Activities include harmonising requirements, developing a business case and preparing for joint

#### **Project maturity:**

- Avoids launching premature initiatives.
- Prioritises areas where convergence among Member States already exists and concrete next steps are feasible.

#### How LOIs support the Capability **Development Planning (CDP) cycle**

- They help mature business cases into viable projects.
- Indicate strong Member State buy-in.
- Bridge the gap between early focus areas and actual implementation.
- LOIs are the driver for concept work.

E.g., for IAMD, EDA developed a detailed concept paper that underpinned the LOI.

- LOIs are an important political signal that can accelerate collaboration.
- They help structure defence planning around realistic, Member State-driven priorities.
- The ultimate goal is to move from intent to joint R&D, procurement, and operational capability - backed by the right tools, maturity, and political will.

EDA has numerous projects across different frameworks

# Money can't buy you strategy: Purpose gives the **real punch**

EDA's acting Deputy Chief Executive and Director Capability, Armament and Planning, **Stefano Cont** speaks to *European Defence Matters*.

IN EARLY JUNE, Ukraine launched a daring drone strike deep into Russian territory. One hundred and seventeen unmanned aerial vehicles (UAVs), smuggled in containers, flew as far as eastern Siberia, some 4,000km from the Ukrainian border. The attack reportedly damaged or destroyed at least 41 Russian aircraft, including strategic bombers that Moscow will find difficult to replace.

On the surface, it looked like an act of clever innovation, with drones in containers. But looking deeper, it told a more profound story, argues Cont.

"You don't start with drones. You start with purpose," says Cont. "You need to know what your end state is – what you want to achieve. Only then do you look at how you'll get there, and what tools you'll need."

Stefano Cont is EDA's acting Deputy Chief Executive and Capability, Armament and Planning Director. With a distinguished career in the Italian Air Force and international defence circles, Lieutenant General Cont previously served as the highest-ranking representative of Italy's armed forces to the United States, Mexico and Canada.

> This methodical process is known as capability development. It is often misunderstood as just acquiring more advanced equipment. But, as Ukraine's drone strikes deep in Russian territory demonstrated, real capability is never just about hardware.

"Think of it like this," Cont says. "If you have fifthgeneration fighter jets but your pilots aren't properly trained, your doctrine is unclear, and your organisation is flawed, the jets are like putting children in sports cars. You won't get the equipment's full potential."

#### Doing the same thing 27 different ways

Cont, who between 2013 and 2018 served as chief military adviser to the Italian Minister of Defence, says that military capability is not the sum of different elements, it is their product. A shortfall in any area, be it training, leadership, logistics or doctrine, reduces the impact overall. Ukraine's success did not come from just buying drones, but from blending them with intelligence, strategy and agility, Cont says.

As the European Union grapples with developing its defence again, in support of NATO, it faces a very particular problem: chronic duplication of effort. "We have 27 chiefs of defence, 27 joint staffs, 27 military training schools for almost everything," Cont says.

For Cont, the proof of the pudding is in the eating. "The United States spends roughly three times as much on defence as Europe – let's say \$900 billion compared to \$300 billion. So, can we say we get one third of the capabilities the U.S. has? The reality is that we are not even close."

For the EU, the challenge lies in moving beyond national silos. "Defragmenting our armies, not just our industries, would unlock enormous operational gains," Cont says. Joint doctrine, joint training centres and pooled strategic assets are a huge step in the right direction.

Cont points to NATO's joint pilot training programme at Sheppard Air Force Base, which brings 16 nations together to produce interoperable aircrews. "Those young officers grow into generals with shared tactics, doctrine and mindset," he says. "That's true capability." EDA's helicopter training programme, which ran from 2009 to 2024 before being handed over to a centre in Portugal, is another example.

Long term thinking is essential. Capability development spans short, medium, and long term horizons. You can buy munitions quickly. You cannot produce a fighter pilot in under four years. A fifthgeneration aircraft may roll off the assembly line in a month, but training, planning and organisational cohesion take years.

"If capability is a barrel," Cont says, "you can't just keep draining it during crises. You have to fill it, drop by drop, over years."

#### Turns out, EDA was paying attention

Since March, the release of the White Paper for Defence Readiness and the European Council (EUCO) taskings are bringing the lens of multinational capability development into sharper focus.



#### "You need to know what your end state is – what you want to achieve"

"Now we have a clear indication from the political perspective – what they consider politically to be the main areas we should concentrate on. It helps us immensely to address priorities."

These documents are not just abstract declarations. They shape where resources go, what programmes are prioritised, and how the EU collectively prepares for future

threats. **The seven-plus-two capability areas** (*see box below, right*) endorsed by the European Council earlier this year – seven priority military domains plus two horizontal enablers – now guide much of EDA's ongoing coordination work.

But as Cont points out, the White Paper and the EUCO taskings are not the result of magical thinking. "At EDA, we anticipated this. It reflects what heads of EU governments heard from their own staffs, and what we heard from the ground early on in bilateral consultations with Member States."

"If you look at what we proposed to ministers in May (at EDA's most recent Steering Board), we're not starting from zero. We've already begun aggregating demand in key areas. In some cases, discussions with Member States are well underway (*see box below, right*)."

One such example is integrated air and missile defence, which is too ambitious to coordinate at national level. In 2024, EDA not only presented a pathway to Member States, but also secured their support through so-called letters of intent signed by Ministers of Defence. "Everyone acted as if they were surprised when integrated missile defence was named in the White Paper," Cont says. "But we presented it a year ago. The political recognition came later."

#### Don't all chase the ball

EDA, seen as a technical facilitator, is now aligning closely with political leadership to implement capability development based on shared goals. The key, Cont says, is to stay grounded: "We organise by domain – land, sea, air, space and cyber – because that's functional. But we can repackage that work to reflect the political structuring. That's what is happening now."

In capability terms, that means moving beyond fragmented national planning to something resembling a coherent European force posture. "We've



talked about fragmented industries," Cont says. "But maybe the bigger issue is fragmented armies. The White Paper, the seven-plus-two – these are tools to fix that."

Capability development, in other words, is no longer just an ambition. It's a strategy with political weight, technical planning and, crucially, momentum.

So defence is firmly back on the European agenda. While the political will is finally in place, the institutional machinery is still finding its rhythm. At present, it resembles a group of enthusiastic players chasing a football – well-meaning, energetic, but lacking structure.

The message is clear. Everyone wants to get on the pitch. What is really needed is for the EU to start playing as a proper team.

#### '7+2'

#### Seven Priority Capability Areas:

- **1.** Air and missile defence against airborne threats.
- 2. Modernising artillery systems.
- **3.** Building ammunition and missile reserves and production.
- 4. Developing drones and anti-drone technologies.
- **5.** Enhancing military mobility across Europe.
- 6. Strengthening AI, cyber and electronic warfare capabilities.
- **7.** Supporting strategic enablers like airlift, refuelling, maritime, space and infrastructure protection.

#### Two Cross-Cutting Initiatives:

- **1.** Supporting Ukraine with military aid and integrating its defence industry.
- **2.** Boosting European industry through joint procurement, innovation, and simplified regulations.



#### Lieutenant General Piotr

Blazeusz is a distinguished Polish officer who has been serving as the Commander of Eurocorps since April 2024. Based in Strasbourg, France, Eurocorps is a multinational headquarters, capable of operating under the European Union, NATO, or the United Nations. A graduate of the United States Air Force Academy and a veteran of Afghanistan, Błazeusz is a seasoned paratrooper who most recently served as Vice Chief of Defence at the General Staff of the Polish Armed Forces. He speaks to European Defence Matters.

# Europe's littleknown HQ: why **Eurocorps** might be the future of defence

ecurity architecture' is not always what you might think - not the design of systems and technologies to protect IT and business from cyber attacks. In defence, it also means different things to different nations. For the 23 NATO allies who are also in the European Union, Europe's security architecture is the alliance's responsibility. But with the United States rethinking its global role, Britain now outside the EU, limits on what some countries will allow in EU-NATO cooperation, and the EU itself growing more ambitious, 'coalitions of the willing' could be part of future designs.

#### "From a soldier's perspective, it's essentially the same job, whether I wear an EU or NATO flag"

So, what about a multinational headquarters rooted in cooperation, serving both NATO and the European Union, and drawing on the armed forces of all? If that sounds fanciful, perhaps it should not. Eurocorps may not have broken into mainstream awareness. But it is very much a reality.

Eurocorps was born of a Franco-German initiative in 1992, led by President François Mitterrand and Chancellor Helmut Kohl. At the end of the Cold War, it was a gesture of unity and ambition: a standing multinational headquarters capable of acting under NATO or EU command – or independently, should Europe ever require it. In an era of institutional complexity, Eurocorps continues to represent a rare blend of ambition and pragmatism. It is neither a 'European Army' nor a NATO replica. Although not as well known as its current commander, Piotr Błazeusz, would like, it is well suited to Europe's needs. "From a soldier's perspective, it's essentially the same job, whether I wear an EU or NATO flag, I must be prepared in the same way," Błazeusz says.

Headquartered in Strasbourg, Eurocorps comprises six framework nations who share the costs – France, Germany, Spain, Belgium, Luxembourg and Poland – alongside several associated

nations – Greece, Italy, Romania, Turkey and Austria – who provide staff to the headquarters.

It has grown from a symbolic gesture into a fully operational command structure, with real-world deployments under both NATO

and EU flags. With more than 30 years experience, Eurocorps has commanded two NATO-led peacekeeping forces, the International Security Assistance Force (ISAF) mission in Afghanistan and the Kosovo Force (KFOR). Equally, it has played a central role in EU-led operations, most notably in Mali, where it led the European Union Training Mission (EUTM) multiple times between 2015 and 2022.

#### 'We are family'

Eurocorps operates in a space increasingly essential to Europe's security architecture that could be termed as 'institutional interoperability'. "We act  $\rightarrow$ 

















In March and April, Eurocorps assumed the role of Force Headquarters for LIVEX 25 at Pápa Air Base in central Hungary, where the German-led EU Battlegroup – comprising 850 soldiers from 13 Member States – was deployed.

1992	Birth of Eurocorps
1993	Establishment of HQ in Strasbourg, France
1995	Eurocorps fully operational
1998	Eurocorps part of peacekeeping in Bosnia and Herzegovina
1999 2000	Eurocorps part of peacekeeping in Kosovo
2004	Eurocorps commands multinational military mission in Afghanistan under NATO
2012 2013	Eurocorps again deploys to Afghanistan
2016	Eurocorps commands EU Training Mission in Mali (EUTM Mali)
2021	Eurocorps supports EUTM Mali and EUTM Central African Republic
2024	Eurocorps fulfils its NATO Joint Task Force HQ commitment
2025	Eurocorps leads EU Battlegroup and oversees LIVEX25

#### Eurocorps at a glance

- **>** Framework nations: France, Germany, Spain, Belgium, Luxembourg and Poland.
- $m \lambda$  Associated nations: Greece, Italy, Romania, Turkey and Austria.
- > Support to the EU Battlegroup 2025: Ireland.
- $\boldsymbol{\boldsymbol{\mathcal{Y}}}$  Eurocorps is officially recognised by both the EU and NATO.

#### "We act as connective tissue between the two organisations"

as connective tissue between the two organisations," Błazeusz says.

That connective role has prompted some to call Eurocorps a prototype for Europe's future force structure, one that neither duplicates NATO nor divorces from it. "I often refer to the operational tier under Berlin Plus as the best example," Błazeusz says, referring to the arrangement where NATO assets can be used for EU operations. "It's still within NATO channels, just under an EU flag."

But its dual identity brings complexity.

"One of the most difficult challenges is the need to use completely different procedures when switching between NATO and EU missions," Błazeusz says. "It's a challenge for staff." This duality, though operationally demanding, also represents Eurocorps' strategic advantage. "We receive first-class training from NATO – exercises, specialist courses – and we benefit from that experience, even without access to classified NATO systems," Błazeusz says.

#### Just say the word

So does it make sense to expand Eurocorps?

"Absolutely," Błazeusz says. "To invest more in Eurocorps and raise its priority. Our unique structure makes us the ideal laboratory to explore operational benefits between the two organisations." Whether as a command and control (C2) hub for EU operations, or as a crisis-response headquarters for NATO, Eurocorps' versatility is relevant.

"Eurocorps remains an option for any peacekeeping operation or crisis management. An EU Battlegroup under Eurocorps' command could be deployed to any country," Błazeusz says. "The earlier the decision, the better we can prepare and deploy."

But despite being on standby for nearly two decades, EU Battlegroups have never been activated abroad. "Whether it's Ukraine or elsewhere, if the political decision is made, we'll deploy – just like any other force."



In March and April 2025, the EU tested the newly operational RDC, a force of up to 5,000 troops, reaching a milestone in the Union's ambitions to go beyond soft power.

# RDC forces deploy to 'Seglia', putting EU's military readiness to the test

In the fictional nation of Seglia, a regional crisis is brewing following a coup in a neighbouring state. Seglia's leadership has issued an urgent plea for help from the European Union. Enter the EU's new Rapid Deployment Capacity (RDC).

The crisis scenario, though simulated, echoes events familiar to European strategists: fragile states near the EU's borders, wars and power vacuums. During the chaotic Western withdrawal from Afghanistan in 2021, European nations lacked the means to act independently, forced to scramble aircraft into the collapsing country to evacuate citizens and vulnerable Afghans. And today, amid possible ceasefire talks with Russia, European nations are exploring the deployment of troops to Ukraine to support any potential peace deal.

In Seglia, Eurocorps assumed the role of force headquarters for the live portion of the exercise (LIVEX 25) at Pápa Air Base in central Hungary, where the German-led EU Battlegroup, comprising 850 soldiers from 13 Member States, deployed.

*The exercise unfolded in two phases.* The first, a Command Post Exercise (CPX), focused on alert procedures and crisis planning at the strategic level. The Military Planning and Conduct Capability (MPCC), acting as the operational headquarters, led this phase from Brussels, supported by personnel from various Member States.

"We worked closely with the MPCC to begin developing something similar to NATO's alerting mechanisms," says Eurocorps Commander Piotr Błazeusz. "The aim is to establish a framework within the EU for faster response, akin to NATO's crisis response measures, which enable quicker action and reduce delays."

#### Barriers, borders

During the second phase, known as LIVEX 25, soldiers took part in a series of high-intensity drills, tactical operations and live-fire exercises in Hungary, which had offered its air base for the drills. Eurocorps coordinated the complex deployment that integrated land and air forces in real time. From reception and staging to onward movement, the EU Battlegroup conducted a full-scale mobilisation, demonstrating the interoperability and readiness of forces from Austria to Ireland. LIVEX 25 underlined the importance of coordination between strategic, operational and tactical command levels.

Yet, despite operational successes, *military mobility is an issue*. "What remains a challenge is the timely deployment of troops within the EU," Błazeusz says. "We still lack something like a 'military Schengen' that would enable the rapid transport of military and hazardous materials across EU borders," he adds, referring to the EU's passport-free travel area.

Military mobility aims to ensure the smooth, efficient and effective movement of military personnel, goods and assets across and beyond the territory of the EU. It is something that the European Defence Agency, with the European Commission and NATO, is working to improve.

"Take some of our transports as examples, whether by train or road convoys. Lead times for this exercise were up to 40 days," says Błazeusz. "That doesn't help readiness or rapid deployment, especially when we're talking about movements within Europe, not to a distant location."

What would be ideal? For Błazeusz, it should be similar to transporting any other goods within the EU, notifying the relevant country ahead of the movement of hazardous or military materials, ideally three days in advance. The nation should retain the right to object to such a movement if deemed too dangerous, but Błazeusz believes the system would significantly speed up the process.

"If we're discussing RDC readiness – express readiness in five days, standard readiness in 20 days – well, we still need to work towards that," Błazeusz says.

#### Andriy Zagorodnyuk, chairman of Ukraine's Centre for Defence Strategies



Andriy Zagorodnyuk served as Ukraine's Minister of Defence from 2019 to 2020. He talks to European Defence Matters about a two-part "steel porcupine strategy" to support Ukraine, proposed by European **Commission President Ursula** von der Leven. The plan involves increasing European weapons procurement for Ukraine, particularly airdefence missiles, and strengthening Ukraine's own defence industry, which is seen as the most costeffective way to bolster its military.

# EU investment in Ukrainian defence: Building a **'porcupine strategy'**

## *EDM:* What is this 'porcupine strategy' and how is it being implemented?

The 'porcupine strategy' in the EU's 'Joint White Paper on European Defence Readiness 2030' refers to Ukraine arming itself sufficiently to deter Russian aggression, despite being a smaller country. The aim is to become resilient and defensively robust enough that Russian offensive actions are basically rendered ineffective.

Implementation focuses on our domestic production. Ukraine's defence industry is extremely deregulated, which allows for fast and decentralised manufacturing. We can begin producing weapons virtually anywhere in the country. It's agile, cost-effective and responsive. As was emphasised at the recent EU–Ukraine Defence Industry Forum, and the European Defence Innovation Days, our production model is based on survival – immediate, practical, and born from battlefield necessity.

# *EDM:* Right now, how is Ukraine's defence industry different from that of the European Union's?

Ukraine's soldiers know what is needed on the front, and they are adaptive. If our forces say they need changes to equipment, those changes are implemented straight away. The pace of research and development in Ukraine is extraordinarily fast, I would say truly unprecedented.

In contrast, many European companies are more formal in their processes and operate at a slower pace. It's not a question of capability; it's that they haven't needed to move at the speed we do. We're in survival mode. Our battlefield experience is now helping to accelerate innovation cycles across Europe. This isn't theory. Unfortunately it is reality under fire.

# *EDM:* So how can the European Union and its Member States better support Ukraine's defence production?

Help us with the components – propulsion technologies like engines, communications equipment, geopositioning systems, and optics. Europe has these technologies and can scale up production. Ukrainians can assemble the final products quickly, but we still need access to many of the core components. The EU is already playing a vital role. It has committed  $\pounds$ 1.4 billion from the windfall profits of immobilised Russian central bank assets. That support is helping us accelerate production of everything from artillery to drones.

# *EDM:* What would you say is the EU's specific role in Ukrainian defence systems?

Our drones use engines and optics made in EU Member States, and EU-developed positioning systems. Central European countries are also producing key components. Software is often developed in the EU. Companies such as France's Dassault and Germany's Siemens play a huge role in the development of next generation, computer-aided design platforms for aerospace engineering.

People might not be aware, but Europe is essentially a global leader in manufacturing military equipment. These partnerships have become the backbone of Ukraine's most advanced defence systems. European technology is deeply embedded in Ukraine's defensive capabilities.



Ukraine's Minister of Digital Transformation, Mykhailo Fedorov, shares on his X profile the handover of over 2,000 Ukrainian-made drones to logistics forces, including reconnaissance, kamikaze and bomber UAVs.

# *EDM:* Is it fair to say that Ukraine is already becoming part of the EU's defence industrial base?

Ukraine wants to be part of Europe, part of the EU – and we are an official candidate country. So yes, we see the European manufacturing base and Ukraine's manufacturing base as working hand in hand. Integration is already well under way. It's quite advanced, and we've made progress.

As highlighted in Brussels, we're aligning closely with the objectives of the White Paper. The EU is actually ahead in this integration with Ukraine's defence industry – more than Britain, much more than the United States. U.S. support is constrained by ITAR regulations, which limit the sharing of know-how

and technology. Of course, Britain provides generous financial support and training, but in practice, Ukrainian importers often wait over a year for export controls to be lifted and sometimes those permissions never arrive.

## *EDM:* Which EU Member States are leading in defence cooperation with Ukraine?

We work closely with Finland, Norway, Lithuania, Estonia and Latvia. Germany is

ramping up, and Sweden has become very active – in fact, Sweden is definitely among the leaders.

Denmark, though, has set the gold standard (*see EDM pages 8-11*). Denmark was the first to start buying directly from Ukrainian manufacturers and supplying to the front lines without delay. It became the initial step towards a wider model of partnership that others are now beginning to adopt.

#### "We're in survival mode. Our battlefield experience is now helping to accelerate innovation cycles across Europe"

## *EDM:* What challenges does Ukraine face in deepening cooperation?

Frankly, the biggest obstacle is time – time for some policymakers to understand the reality. Some still don't grasp how serious the threat is, not just for Ukraine but for Europe as a whole. This is not just about Ukraine versus Russia. It's about Russia and the world. Europe is the cornerstone of the free world. Unfortunately, we've lost time. While we're deeply grateful, we must acknowledge that we missed a critical moment back in 2022–23. Russia was on the back foot, and then they recovered. Delays in decisionmaking come at the cost of lives.

## *EDM:* Finally, what is the bigger picture, and what is needed going forward?

Ukraine's transformation into a drone superpower has changed the nature of modern warfare. Since 2022, we've led Europe in unmanned technologies – from first-person view (FPV) drones to long-range and naval systems. These innovations have helped offset artillery shortages and have been crucial in disrupting Russian control in regions such as the Black Sea. So our experience can help EU Member States.

But the task now is broader. We need a free-world alliance – not just the EU, but also Norway, Britain, Canada and Australia. These countries understand the threat and are ready to act. Russia may be isolated from the West, but it is not isolated globally. Recent announcements of strategic cooperation between China and Russia show that Russia does not feel as though it is losing. This is a defining moment for how the democratic world responds. NATO's Assistant Secretary General for Innovation, Hybrid and Cyber



Jean-Charles Ellermann-Kingombe is NATO's Assistant Secretary General for Innovation, Hybrid and Cyber. Appointed in 2024, Ellermann-Kindombe is a senior Danish diplomat whose career has taken him across continents via Copenhagen and Brussels. As he leads NATO's efforts in coordinating with initiatives such as DIANA. Ellermann-Kingombe speaks to European Defence Matters about the importance of collaboration across borders in advancing technology.

# "Test, fail, start again": how NATO is trying to **innovate** like a start-up

ean-Charles Ellermann-Kingombe sits by a window at a desk, the atrium of NATO headquarters behind him bathed in spring light. From the outside, the claw-like glass and steel structure on Brussels' northeastern edge projects a quiet power. Inside, its bureaucracy seems coolly efficient. Yet Ellermann-Kingombe is anything but detached. A career diplomat and former Danish ambassador to Afghanistan, he embraces the role of bureaucrat without hesitation – and believes that makes him better at his job.

"If NATO allies want to innovate, we need to push our bureaucracies to organise themselves in a way that accelerates the adoption of technology," says Ellermann-

Kingombe. "I also need to look at myself as a bureaucrat and provide the incentives to allow us to take more early-stage financial risks," he says.

The issues in Ellermann-Kingombe's portfolio are the defining strategic challenges of our time: hybrid warfare, energy resilience, cyber security, and emerging and disruptive technologies (EDTs). As NATO Secretary-General Mark Rutte has said, NATO allies are not at war, but they are not at peace either.

"We are being attacked in the hybrid domain every day," Ellermann-Kingombe says. "Attempts to disrupt us, damage our infrastructure – these are manifest ambitions to destabilise us."

At the heart of NATO's evolution is that military power in the 21st century is no longer solely about the size of armed forces or the number of tanks. The battlefronts are also in the digital and cognitive domains. The rise of AI and autonomous systems is reshaping how military leaders approach decisionmaking, strategy, and even logistics.

#### Searching for the big idea

With an 80-member team and oversight of NATO's Defence Innovation Accelerator (DIANA), Ellermann-Kingombe stresses that the alliance is not just adjusting to the times, it is attempting to get ahead of them. "The old adage that the United States innovates, the European Union regulates, and China copies is no longer true. At a time when we need to assume a war mindset, we are beginning to grasp what that means."

The war in Ukraine has proven a sobering teacher, demonstrating that technologies such as AI can speed up decision-making and improve precision on the battlefield, in turn reducing the number of shells required and helping to save lives, Ellermann-Kingombe says.



An autonomous underwater system is deployed in NATO military activity 'Baltic Sentry' in January 2025 to strengthen the protection of critical infrastructure.

If the scope of this work is vast and the environment is unpredictable, collaboration is a strength.

That is perhaps most tangible in DIANA: an initiative agreed by all allied nations at the NATO Summit in Brussels in 2021 to bridge the gap between civilian technological innovation and defence capability. Now closing in on full operational capacity, DIANA is a federated network supporting accelerator sites and their test centres.

"DIANA is in itself a start-up," Ellermann-Kingombe says. "It's had 24 months, more or



An uncrewed system provides persistent detection and surveillance to enhance situational awareness in the maritime domain.

less. And in that time, it has managed to establish itself as an important organisation in the defence dual-use start-up ecosystem." Its early impact is measurable. In just its first year, over 1,300 companies applied to its challenge programme. In its second, more than 2,600.

#### **DIANA** invitation

Ultimately, NATO is trying to resolve a conundrum. There is a vibrant community of new companies developing promising products, but they are often unaware of the needs of the defence sector – just as the defence sector is not always familiar with the innovations available.

Much of this innovation is softwaredriven. "Test, fail, start over again. That's what we need to learn."

Bringing that into a multinational defence alliance is no small task. NATO, under Ellermann-Kingombe, is working to speed up acquisition cycles, define effects-based requirements instead of strict technical specs, and educate its personnel on the basics of the technology they must govern. That is part of the new Rapid Adoption Action Plan (RAAP). The plan includes measures like increasing access to test environments, creating NATO-compatible demonstration zones, and connecting defence needs with what's already on the shelves of innovative start-ups. "Like many people, I don't fully understand Al or quantum," he says. "But I have a political appreciation of their importance, of getting them right and getting them earlier than the others. That's true for many of my colleagues working in acquisition organisations, or in government, and who need to take crucial decisions."

There are already results. NATO is developing Task Force X, a tech-based surveillance system in the Baltic Sea using uncrewed assets, some of which were provided by DIANA start-ups.

#### An old EU hand

Ellermann-Kingombe is careful to point out that DIANA does not exist in isolation. It works in dialogue with the EU's own innovation apparatus, including initiatives such as the European Defence Agency's Hub for European Defence Innovation (HEDI) and the European Commission's EU Defence Innovation Scheme (EUDIS).

Having also worked in the European Commission earlier in his career, Ellermann-Kingombe is not just paying lip service. "It's about making people from different backgrounds and cultures work together for the common good." Separate from innovation, energy is a case in point. "Energy is a critical enabler for us to do our job, which is to defend NATO," he says. "As Europe transitions away from fossil fuels, NATO must contend with falling refining capacity even as military liquid fuel needs remain high. We need to factor in the security dimension in EU reforms," Ellermann-Kingombe says.

For NATO, the goal is to create a defence posture that is as flexible and forwardthinking as the technologies and policies themselves – while balancing it with a dependable bureaucracy. "So the best way to describe my week? It's very versatile. No two days are alike. I find that inspiring," Ellermann-Kingombe says, as an assistant knocks on the door to signal that his next meeting awaits. ◀

#### DIANA at a glance

- More than 20 accelerators across NATO countries.
- > Partners with over 180 tech test centres across NATO countries.
- An investor network for secure third-party funding, anchored by the NATO Innovation Fund.
- > Opportunities to develop technology in operational environments.
- Pathways to market within NATO and its 32 allies.

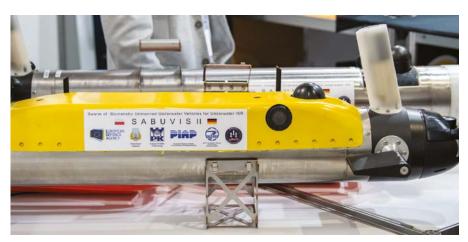
FOCUS: EUROPEAN DEFENCE INNOVATION DAYS



# Krakow 2025: Smells Like Team Spirit

Innovation, yes. Business, certainly. But also a sense that success is about working together. Between 13 and 16 May 2025, Krakow hosted the third edition of the European Defence Innovation Days (EDID25). This year's edition was marked by a notable Ukrainian presence, a competitive robotics showcase and a defence expo featuring over 90 innovators from across the EU and Ukraine. *European Defence Matters* was there.

- The event highlighted Europe's shift towards 'ecosystem thinking' – considering each type of system and how they all interact – in collaborative defence innovation involving start-ups, researchers and frontline users.
- The Makeathon a robotics competition demonstrated rapid, practical development of uncrewed vehicles under real-world constraints.
- Ukraine shared vital wartime innovation experience, also calling for closer EU-Ukraine defence cooperation.
- The event stressed the importance of speeding up procurement and linking up European defence markets for greater efficiency.



The underwater autonomous vehicle from the SABUVIS II project, built for swarm missions. Made of easily replaceable parts, the mast integrates global navigation systems and Wi-Fi antennas, as well as LED lights for visual signalling within the swarm.

# In Krakow, defence innovation finds a **human voice**

obots, not people, should be fighting." So declares Ukraine's SkyLab in a brochure for its unmanned ground vehicle, the Sirko-S1. By the time *European Defence Matters* encounters this bold statement at SkyLab's stand, it is clear that the people behind such robots are doing plenty of talking. For once, that's a good thing.

Deep in the expo hall on the edge of the Polish city of Krakow, the pitches for sleek uncrewed aircraft, low-orbit satellites, and quantum computers rise to the rafters. With almost 1,000 participants, as well as a high-level conference, the European Defence Innovation Days are coordinated by the European Defence Agency (EDA), and for the May 2025 edition, hosted under the Polish Presidency of the Council of the EU.

#### "No one wants to wait two years for an idea to get support"

The Innovation Days are the brainchild of the Hub for EU Defence Innovation (HEDI), which is run out of EDA and serves as a platform to foster cooperation on defence innovation across EU Member States.

Away from the razzmatazz of defence expos, the European Defence Innovation Days are a more intimate place where smaller battlefield tech and big defence brains momentarily meet. They underscore how defence innovation is no longer the sole province of states and generals. It is about start-ups with microgrids. It is quantum physicists with custom hardware. It is ground drones designed for war but with their operators longing for peace.

As Michael Hofstätter from the Austrian Institute of Technology explains: "The objective is to know what's going on." He is not talking just about the expo. He is eager to explain to potential investors how an uncrewed reconnaissance vehicle, equipped with sensors capable of real-time chemical detection and data fusion, works. "We can combine several vehicles," he says.

Is that a special order?

#### Let's go European

Elsewhere in the expo, it is hard not to notice the Ukrainians, who have several of the 90 stands. Ground drones dominate the display at SkyLab. "This one

is for logistics," Tetyana Balakan, the company's financial director, says. "This is for laying mines." The modifications seem endless. The drones can ferry supplies and navigate harsh terrain, from swamps and wet snow to cold water and sharp stones. "They've been used by our soldiers for more than two years. We have good results." What do Ukrainian innovators want from EDID25? "We want more orders. But we really want peace."

Several rows back, a low-profile but high-impact project is quietly making waves. Poland's Military University of Technology (WAT) has brought their quantum key distribution system, developed entirely in Poland, using Polish electronics. "This device generates symmetrical keys using quantum physics," explains one of the developers, who requests anonymity to speak.

It's not a device for the average consumer but for secure links between data centres, military command infrastructure and government networks. The university is now looking for European partners to help them build a full Polish quantum computer infrastructure. "We can't do it all alone."

Quantum Systems, for example, is already successful in Germany in drone systems that combine sensors, artificial intelligence, hardware and software. But it wants to see defence in the European Union move beyond 27 fragmented markets. "We want to be part of the European market, not just the German one," says Jan-Frederik Dammenhain, governmental sales manager at the company, which is now marking its tenth anniversary.

#### No more MoUs

Speed too is a focus, not just in drones or communications, but in procurement, in prototyping and in transitioning civilian tech to military use.

"It's about lowering the barriers for smalland medium-sized companies," says one official at the Swedish Defence Research Agency (FOI). FOI is a government body  $\rightarrow$ 



The WASPER-1 rotary wing 'one-way attack' drone, developed by Polish company Orbotix, shown at the European Defence Innovation Days on 14 May 2025.

known for its contributions to defence and civil security. It plays a role in strengthening Sweden's resilience through science-based policy and innovation. "No one wants to wait two years for an idea to get support," the official says. "No endless 'memorandums of understanding'. We are trialling short-cycle innovation schemes. That is six months from concept to demo."

The Slovenian Energy and Environment Partnership in Defence (SiEnE) is making the case for energy self-sufficiency in the field. Simon Majnik, senior project manager, says: "We're building mobile hybrid microgrids, such as battery-powered, diesel and renewables. It's about independence for military camps." As war becomes more digital and more mobile, so must the energy that powers it.

Then there is Bertalan Eged of Hungary's Sagax Comms, standing by a display of sleek radios and electromagnetic warfare gear. "We provide communication, intelligence, signal intelligence solutions. So spectrum dominance," he says. With Hungary's defence sector growing, Eged sees EDID as a chance to show what a smaller company can do. "We're here to talk, to cooperate."

In Krakow, it is clear that the future of defence is not just autonomous, it is also collaborative, deliberate and increasingly vocal. From quantum keys to ground drones, it is not just machines doing the work. For those working towards smarter, safer battlefields, and ultimately peace in Europe, it is good to keep talking.

# **Anna Gvozdiar**, Ukraine's Deputy Minister of Strategic Industries of Ukraine talks to *European Defence Matters*



Left to right: Anna Gvozdiar, Ukraine's Deputy Minister of Strategic Industries, Herman Smetanin, Minister of Strategic Industries, Valerii Churkin, Deputy Minister of Defence, and Andre Denk, EDA Chief Executive, visit the expo hall on 14 May 2025.

# In Krakow, Ukraine brings frontline lessons in innovation to EU

Refly swapping wartime Kyiv for a gently buzzing expo floor in Krakow, Anna Gvozdiar, Ukraine's Deputy Minister of Strategic Industries, is not in Poland to deliver diplomatic niceties. She makes a clear call for more EU-Ukraine defence collaboration.

"We've learned how to do things quickly and we also have a lot of know-how to share," she says. "Speed matters when your cities are under fire. In recent times, European countries often lack what we've had to build from scratch – the experience of war." But EU companies have the resources and the structure, she says.

Gvozdiar is a committed European. She was part of the huge pro-EU protests in 2014, which Ukrainians call the Revolution of Dignity. She remains committed to helping veterans from the front, working with the families of fallen soldiers and volunteering at Kyiv's main hospital. Deputy minister since September 2023, Gvozdiar's remit is sharply defined: to bind Ukraine's defence industrial base to that of Europe's, and not as a junior partner. "We need cooperation. We already have very effective systems. But together, Ukraine and the EU are stronger. We can match that with lessons from the field."

#### How soon is now?

Those lessons are being learned daily, in code and shrapnel. Ukraine's soldiers are not just fighting; they are shaping doctrine. Behind the lines, ex-coders and engineers – veterans of Kyiv's tech sector – have repurposed peacetime skills into wartime needs: algorithmic targeting tools, drone countermeasures, and decentralised command platforms that blend NATO standards with Ukrainian improvisation. It is not simply adaptation. "We have no time for endless procurement cycles," Gvozdiar says.

One example cited by Ukraine's Deputy Minister of Defence Valerii Churkin at the forum in Krakow is 'Iron Bench'. Launched as a digital liaison between battlefield and back office, Iron Bench epitomises Ukraine's wartime innovation model: lean, rapid, fiercely pragmatic. So the question is: can this spirit survive in the complex, highly regulated machinery of EU defence policy?

Gvozdiar believes it must. "Look, we are already inter-operating Ukrainian and European assets. It's not perfect – we've got a mix of Western gear, Soviet legacy kit, and our own inventions all in one battlespace. But integration is happening, not because we're told to, but because it's what the battlefield demands."

With joint grants, the EU's White Paper on Defence Readiness 2030, and sustained collaboration, Ukraine will become part of Europe's defence backbone, she adds. The reason? Russia's war of aggression is no distant conflict. "Russia has already attacked in the middle of Europe," she says. "There are trenches, tanks and battlefields not very far from here."



Makeathon competitors test autonomous platforms in the field, navigating obstacle courses.

# You might have heard of a Hackathon, but what about a **Makeathon**?

cross a field of military tents, robots roll out onto the grass. One is French, in red, white and blue, scarcely half a metre tall, carving a path through the obstacles, pausing just long enough to identify chemical hazards and deliver payloads. Two Polish rovers bump over uneven ground while a fourth, a sleek Dutch black unmanned vehicle pauses before what might be an enemy soldier with a weapon. No one moves from their tents, eyes fixed on the first-person view cameras of the robots. They are, after all, in the middle of a military experiment.

Four teams of students, engineers and military technologists take part in the EDA's first-ever Makeathon. It is a competition designed to develop an unmanned ground vehicle (UGV) under tight constraints. The rules are simple: spend no more than  $\pounds$ 25,000, keep your robot under 75 kg, and complete three field tasks: logistics, object recognition and CBRN (chemical, biological, radiological and nuclear) sampling.

#### La French Touch: cool, cosmopolitan

What would eventually be the winning team, calling themselves French Touch, arrive with a machine they have built from scratch in just two months. The team is an eclectic mix: four members from the French military, who are drawn from the navy, air force, and artificial intelligence units; and engineers from France's defence procurement agency DGA. What they build is not just a robot, but a statement about what can be achieved with improvisation, grit, and a good internet connection.

"We see how to build something from the ground up. Not just the robot, but the team," French Touch member Jorand Gallon explains. "And we learn how to adapt. To fix things with what we have, with no time and under pressure." That pressure, he adds, mimicked the stress of military deployments, where kit breaks, plans change and you have to think quickly.

French Touch's machine, weighing under 50 kg, is well-equipped for all three tasks. It uses an Al-driven camera to identify military pictograms, collect water for pH testing with its robotic arm, and includes sensors for detecting radiation and gas leaks.

Most of the parts have been sourced online, and the motors repurposed from electric scooters. The arm is the only component they did not make themselves. The aluminium frame has been CNC-machined and bent by hand in a workshop outside Rennes in northwestern France. The powertrain – four 1,000-watt motors embedded in the wheel – gives the robot a surprising amount of speed and torque, which proves useful during the logistics task, when the robot has to carry blocks at designated coordinates.

#### Supermarket saviour

Other challenges are less predictable. During the object recognition phase, their robot struggles to correctly identify symbols using its stereo camera and onboard Al. Midway through the course, something snaps. With no time to lose, the team dashes out to a nearby Lidl supermarket to buy tools, improvising field repairs in the shadow of the competition tent.

The other three teams approach the challenge differently. The Polish Impuls team take second place with a lighter, semi-autonomous rover constructed from polyamide composites. Built by students from Kielce University of Technology, it is agile and responsive but less durable.

Another Polish entry, the Legendary Rover Team, known for their Mars exploration robots, places third with a more rugged machine featuring a new drive system and enhanced manipulator arm. The Dutch DykstrAV team brings up fourth place with a modular robot prone to navigational hiccups but capable of finishing most tasks using a hybrid control system.

Eventually, the robots return to their crates, the tents come down, and the field is empty again. But there is also a sense of satisfaction that EU innovators are thinking about defence innovation in a world set to be shaped by code, sensors and uncrewed machines.



French Touch, the winning team of French innovators and military personnel, prepare to test their unmanned ground vehicle on 15 May 2025.

#### EDA DEFENCE PROJECTS

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Colonel Juergen Pirolt, ECMAN's director, in his storeroom of training IEDs, in Vienna in May 2025.



The European Centre for Manual Neutralisation Capabilities (ECMAN) is unique in the European Union. Since 2018, it has trained highly specialised operators in the dangerous task of manually defusing improvised explosive devices (IEDs). Operators are on call at any time across the EU to respond to a crisis.

\*Some of the names in this article have been changed to maintain confidentiality

# When the robots don't work: Inside EDA's elite bomb disposal school

n the early days of Russia's full-scale invasion of Ukraine, a video made the rounds among military observers in Europe: a soldier approaches a downed drone in an open field. Within seconds, the drone explodes. For bomb disposal experts more accustomed to dealing with roadside devices or car bombs, it was a new reality. Small, commercially available drones carrying explosives and chemicals could be designed to kill or disrupt civilian infrastructure – to explode not only in the air, but on the ground – and to prevent the technology from being analysed.

"If that kind of unmanned aircraft crashes near a power plant or a communications hub, suddenly it's not just a technical issue. It's a life-or-death scenario," says Colonel Juergen Pirolt, Director of the European Centre for Manual Neutralisation Capabilities (ECMAN). "Sometimes it's also about protecting the data: flight paths, surveillance intel, targeting information."

While such a scenario remains only a potential threat on European Union territory, the urgency is real. Russia's war of aggression against Ukraine has turbocharged the evolution of IED threats. Off-the-shelf components can be wired with advanced sensors and artificial intelligence (AI) to make defusing a bomb much more complicated.

#### Homemade success

For Captain Jan Groen (not his real name), Deputy Director at ECMAN, hands-on defusal is best explained as "a situation when detonation is unacceptable, when it is life-threatening. A human must do the job that a machine cannot." His is no theoretical definition. In 2010, crouched in the Afghan desert, Groen was often that last line of defence, given less than 30 minutes to defuse an IED before an enemy attack.

Honed by the fight against the Taliban in Afghanistan and Islamist militants on European soil, ECMAN is unique in the EU. Along with so-called military search, or the ability to help commanders at battlegroup level find IEDs, another European Defence Agency (EDA) project tracks bombmakers. Known as JDEAL, based in the Netherlands, the Joint Deployable Exploitation and Analysis Laboratory provides a lab in-theatre to analyse enemy tactics. So ECMAN completes the expertise.

#### "Britain had the knowledge – but not the willingness to share it permanently"

As an EDA project worth €25 million, ECMAN's students are trained not only in explosives and electronics but also in psychology as they work in extreme proximity to devices designed to kill. At a course in May, *European Defence Matters* saw how trainers created the scenario of a woman taken hostage and seated on a booby-trapped bench using an IED known as a pressure plate. Any sudden movement would detonate the bomb, so the hostage needed to be reassured to stay calm. Basic training lasts five weeks, though most trainees effectively double that time, Pirolt says. "We are always adapting our training too. Adversaries are always trying new technologies and techniques," he says from ECMAN's buildings – careworn barracks that once served as stables for the Austrian Hussars.

#### A very British affair

ECMAN began not with EU policy papers but by a chance meeting in EDA in Brussels in 2010. That is when Pirolt, then a young Austrian explosive ordnance disposal officer, encountered a British Army veteran and EDA project officer named Jim Blackburn, who was also instrumental in setting up JDEAL. Blackburn had once commanded a platoon

with manual neutralisation capabilities.

"Jim asked us a question no one could answer," Pirolt recalls. "'Can you deal with a bomb by hand?' 'Can you work in the dark?' We didn't realise how much we didn't know!"

For a brief period, the British government allowed this knowledge to be shared – just enough for Pirolt and a small group of Europeans to begin learning from retired British military instructors who had since gone private. "It is highly classified in Britain. Those who shouldn't know about it, don't," Pirolt says.

What to do? Pirolt was clear: Europe would build its own capability. The first Manual Neutralisation Techniques (MNT) course for European operators took place →

#### EDA DEFENCE PROJECTS





later that year, funded and organised by EDA, with Austria as the host.

The international momentum grew from there. From 2014 to 2017, EDA formally ran the MNT Courses and Exercises programme involving five nations: Austria, Germany, Ireland, Sweden and Italy. But the model lacked permanence. "There was no enduring staff, no long-term development task," Pirolt explains. Eventually, the project evolved into an established European centre in 2018: ECMAN. "Without EDA, it wouldn't have been possible. Britain had the knowledge – but not the willingness to share it permanently," Pirolt says.

Since its creation, ECMAN's Research & Development branch has also grown in importance. It plays a role in improving niche equipment, such as specialist voltage regulators. The expertise demonstrated by the branch has led to the introduction of the 'ECMAN certified' label, a mark of quality among manufacturers. "It's a clear example of collaboration delivering long-term benefits," says Stefano Cont, Acting Deputy Chief Executive at EDA.

#### The Guardians

What exactly happens inside ECMAN's walls is only partially known, its activities being too sensitive to publicise. In one room

are stacked shelves of simulation bombs in black bins, as well as briefcases with blue and green wires as if props from a Hollywood spy movie. But it is no fiction. ECMAN's graduates have gone on to defuse IEDs across Europe, Afghanistan, Lebanon, Mali and Syria. No graduate has ever been lost in an operation.

"It's never comfortable," Groen says. "But you're not doing it for yourself. You're a quardian."

Groen's first manual defusal felt, (as we say, in his words) a little bit weird. But experience kicked in. "You just follow the drill," he says.

For all ECMAN's success, the project cannot remain in EDA's hands forever. "It is one of EDA's most successful," says Giuseppe Dello Stritto, Head of Land and Logistics at the Agency. "But our mission is to develop and increase Member States' capabilities, not those of the Agency." He adds: "The Agency will work towards handing over ECMAN into whatever setup the participating countries think best suits their needs." During field exercises, operators are confronted with simulations of sophisticated improvised explosive devices (IEDs). These IEDs are embedded in realistic scenarios based on past, current and potential threats at home and abroad, including minor CBRN incidents.

ECMAN, as a multinational, low-cost solution to a pressing threat in modern warfare is surely too good to close. "For MNT operators, this is their alma mater," says EDA's Project Officer for Counter-IED Danny Heerlein. Pirolt says that Austria cannot host the centre as a national institution. Austria's constitution contains provisions that do not allow foreign soldiers to be permanently stationed in the country, except under an international or multinational framework.

#### **Relocation riddle**

Could ECMAN move elsewhere?

Technically, yes. Politically, less so. "The other eight nations have acknowledged what it takes to run this kind of centre. Austria knows how to lead this," Pirolt says. "We're not just running 40 weeks of events a year. We're maintaining a military capability." EDA's role in supporting ECMAN includes contractual and financial activities, project management and strategic communication.

Similar to other projects, the status of a "Centre of Excellence" could be considered – an EU-recognised body with stable funding, permanent staff, and structured governance.

ECMAN's absence could create yet another gap in European readiness, and in a rare area where there was none. "ECMAN is needed more than ever today," Groen says. "The threat has come full circle, comparable to the Cold War. But now the bombs are much easier to make."

- Established by EDA, ECMAN has been hosted by Austrian Armed Forces' Logistics School in Vienna since February 2018. EDA will run the current arrangement until 2029.
- Participating Member States are Austria, Belgium, Czechia, Germany, Finland, Ireland, Italy and Sweden, as well as non-EU country Switzerland.
- ECMAN focuses on advanced IED disposal skills by hand, reserved for situations where other procedures are unsuitable, and the risk of detonation, or the release of harmful substances, are unacceptable.
- Training includes European-level education, doctrine development, equipment testing, concept validation and practical exercises.
- ECMAN shares expertise with a limited community in Australia, Britain, Canada, Israel, Norway, the United States and New Zealand.



EDA's guidelines from Member States are agreed in the PMG

Linas Linkevičius is the chairman of the Politico-Military Group (PMG) which is one of the Council of the European Union's preparatory bodies. As a member of the European External Action Service (EEAS), he represents the High Representative for Foreign Affairs and Security Policy in the PMG. Linkevičius previously held roles at the European Defence Agency (EDA) and the EEAS, with a focus on capability development, crisis management, and partnerships. He also served at Lithuania's Special Mission in Afghanistan and Lithuania's defence ministry. He talks to European Defence Matters about the art of negotiation and upholding the 'golden rule'.

# "**Never go back** on what you've just agreed"

inas Antanas Linkevičius, Lithuania's respected former foreign minister from 2012 to 2020, was known as Lithuania's big man in Brussels, not only for his build but for his commanding presence. The current chairman of the Politico-Military Group, another Lithuanian named Linas Linkevičius (a collateral relative), cuts a trimmer figure, but he too has found that negotiating with Member States in one of the EU's principal defence forums requires strength of character.

For Linkevičius, the chairman of the PMG, the extension in September 2024 of the EU's Ukraine training mission by all 27 Member States was a trial by fire. It was also a case study in how EU defence policy is made – not by grand declarations, but by painstaking agreement among EU governments, each with its own instincts, interests and red lines.

Formally called the EU Military Assistance Mission in support of Ukraine (EUMAM Ukraine), the training mission was established in 2022. Launched swiftly in response to Russia's invasion, the mission has trained 75,000 Ukrainian troops, mainly on German and Polish territory. EUMAM Ukraine remains an important element of the EU's military support for Ukraine.

In late 2024, with the mission's initial two-year mandate nearing expiration, a decision had to be made: extend, revise or reform?

#### "Every word, every comma carries significance"

#### Under pressure

The process began with a proposal from the EEAS, the EU's diplomatic service, outlining both a continuation and a potential expansion. This required a renegotiation of the mission's scope. EU defence policy still operates largely by consensus, which means its effectiveness is shaped not just by collective ambition, but by the work of aligning positions.

"There was a proposal on the table to extend the mission by another two years," Linkevičius explains. "But there was also a debate around expanding the mandate." The idea was that some EU military advisers could be based in Ukraine to better coordinate the EUMAM Ukraine training. It was bold – and for some, too bold.

But this is the kind of work the PMG is designed to do: agree a unified EU position document on Common Security and Defence Policy (CSDP) files, which are then passed up to the Political and Security Committee

(PSC), the Council's senior foreign policy forum.

"PMG is not a place just for discussion but for negotiating ambitious decisions. Every word, every comma carries significance," Linkevičius says.

The draft recommendation prepared by the EEAS led to six negotiating sessions. That is unusually high. "Sometimes we manage in two or three," he says. "This one took six, plus two silence procedures. And both were broken." In EU parlance, a 'silence procedure' means a proposal passes unless some Member States object – in which case, the file reopens.

#### A compromising position

With no deal in sight, Linkevičius did what a chairman is rarely eager to do: delegate to a higher authority. "I sent a  $\rightarrow$ 

#### SPOTLIGHT: THE EU'S POLITICO-MILITARY GROUP



The Europa building in Brussels, where the PMG meets. Flags are on display before an EU summit in April 2024.

letter summarising the negotiations and explaining to the PSC why we could not reach agreement, and that this was something for a higher level of political authority."

But in this case, there was an impasse too. The file went up to PSC, COREPER II (the Committee of Permanent Representatives, or EU ambassadors), and even featured in the conclusions of an EU leaders summit – evidence of just how politically charged the file had become.

But if Linkevičius thought he had avoided a headache, he was soon proven wrong. The file came back after EU leaders urged Member States to keep working for a decision.

For Linkevičius, what followed was a series of informal consultations, where positions were aired, softened, and occasionally reimagined. PMG delegates are on good terms, whatever their country's flag and political instructions. (A recent team-building session involved going to a crossbow range.)

#### Golden rule

This is where chairpersons earn much of their credibility, in the hallway conversations, quiet phone calls and back-channel problem-solving that define the EU's internal diplomacy. "It's not just about negotiating. It's about understanding what can move and what really can't," he says. Each negotiation is different, not only because it handles a different issue, but also because the positions of Member States vary from one issue to another, which means that each time a new political compromise has to be found, sometimes with an innovative approach.

"It is not always a smooth path," Linkevičius says. "But each negotiation is a fantastic way to learn the process, and the golden rule in drafting texts: you never go back on a paragraph that has already been agreed. Still as the old saying goes: nothing is agreed until everything is agreed."

#### The process has its limits

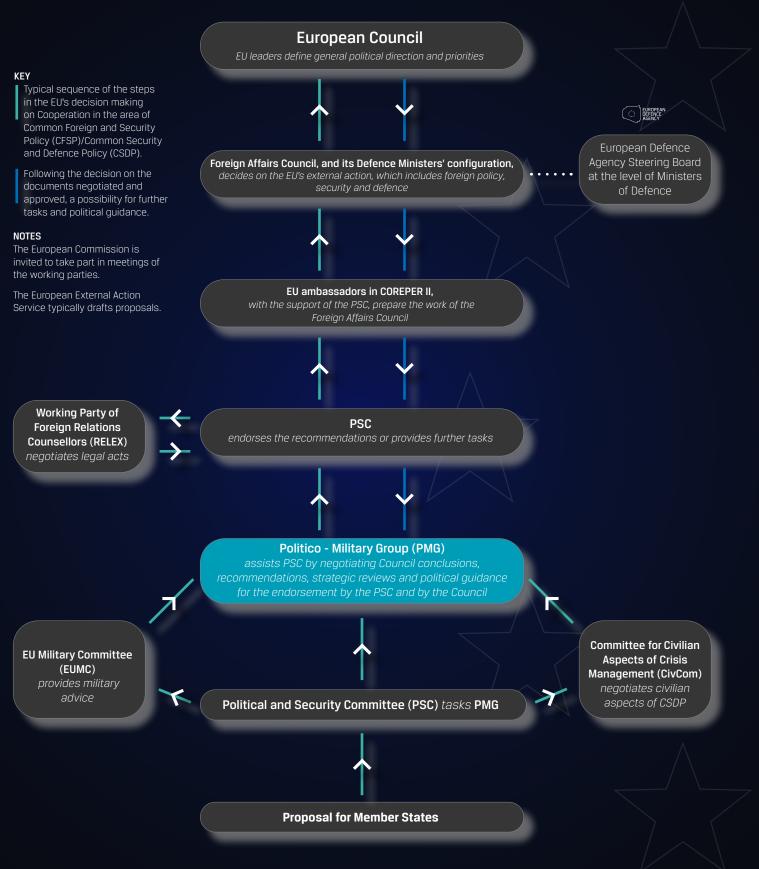
While many advocate extending qualified majority voting (QMV) in decision-

making with regard to EU defence, doing so still requires unanimity. Still, Linkevičius remains positive.

In his short time as chairman, he has already seen through more than 20 negotiated policy documents, such as Council Conclusions on Permanent Structured Cooperation (PESCO), recommendations on strategic reviews of CSDP military missions and operations, political guidelines for EDA's work, and security and defence partnership agreements with the EU partner countries, among others. "Some might say compromise is about making everyone unhappy, but I disagree. It's about maintaining good atmospherics, staying calm, being fair and ensuring unity."

#### What is the EU's Politico-Military Group (PMG)?

- The EU's Politico-Military Group made up of representatives from EU Member States – is a working group within the European Union's Common Security and Defence Policy framework.
- It meets every Monday and Wednesday in Brussels.
- It negotiates all EU Council Conclusions on defence.
- It places an emphasis on agreeing ambitious, clear political guidance.
- It serves as one of the EU's primary forums for briefings with NATO.
- It conducts strategic reviews of EU CSDP military missions and operations.



# Deciding security and defence policy in the EU

# In warzones, **technology alone** is not enough



n 1991, as the Cold War ended and international peacekeeping missions entered into a period of reassessment, Seán White deployed to Lebanon as part of the United Nations Interim Force in Lebanon (UNIFIL). In 2025, White is focused on the realities of war once again on the European continent and the implications for European defence. He could be forgiven for confining his time overseas to the past. Instead, he senses a strong thread of continuity.

"We can't deny that the battlefield is changing every day, and yet certain military requirements remain consistent: the need for artillery, air power, soldier protection, command and control systems, cybersecurity and defence. Our job now is to make sure Europe is not just catching up but shaping the future."

White's 38-year military career maps geopolitical flashpoints. From Lebanon to Somalia to Chad and Kosovo, he has served under the banners of the United Nations, NATO's Partnership for Peace, and the European Union as well as at the highest levels of EU Defence Planning in the EU Military Staff. "I've seen the real-world impact of capability development in the field," he says.

"When we sit around the table now and talk about military platforms or logistics and supply chains, I know how they actually function under stress – in 50-degree-Celsius heat, during a sandstorm, or in the mud when nothing moves, or in minus 25 degrees."

It was in Chad in 2008 that such extreme conditions highlighted the meaning of military readiness. "People can often focus solely on the hardware: the vehicle, the weapon system."

White adds: "But experience shows us that it's the sum of its parts – supply chains, maintenance in the field, personnel resilience – that determines operational success. It's one thing to design a capability. It's another to see how it performs when lives are on the line." This aspect also forms a key part of his directorate's work around defence test, standardisation and evaluation.

#### From reconnaissance to mission makers

White's expertise extends beyond the battlefield. Most recently, he drew technological insight from his role as Director of Communications, Information Systems and Cyber Defence at Brigadier General rank within the European Union Military Staff. While working to promote the military dimension of the EU's cyber defence policy, he was also involved in advancing the next-generation EU Command and Control System for the Military Planning and Conduct Capability (MPCC) – the headquarters of the EU military training programmes.

This most recent operational lens now brings his work at the European Defence Agency (EDA), into sharp focus where discussions increasingly focus on European self-reliance amid the geopolitical repositioning in the world. "It is a moment for Europe to look inward, to ask ourselves: what are our capabilities? What can we do for ourselves? How are our industries prepared to support that? What can EDA do to bring greater coherence to these issues, in line with our core tasks?"



A year into the role of Director of the European Defence Agency's (EDA) Industry, Synergies & Enablers (ISE) Directorate, **Seán White** is drawing on four decades of military experience as Europe's quest to rearm gathers real momentum.





(Above) White at the Israeli-Lebanese border, 2015.

(*Left*) Under the authority of the United Nations, NATO has been leading a peacekeeping operation in Kosovo since 12 June 1999.

The question is pressing. As Russia doubles down on its war of aggression against Ukraine, European ministries of defence find themselves not only reacting to current threats but preparing for a radically different and dynamic future.

"We're observing a dynamic evolution of warfare. Drones and cyber operations are no longer future concepts," he says. "When I was in Lebanon, we'd monitor a daily air picture. Drones were already there. But now they're central to all aspects of military planning, especially looking at the operational situation in Ukraine."

#### Ramp up... and ramp on

Yet technology alone does not win wars. Interoperability, standardisation, and harmonisation of requirements – all areas of EDA's work – are, in White's view, critical to both capability planning and capability development. EDA's ISE directorate covers a wide remit, from the aforementioned defence testing and evaluation, airworthiness and ammunition safety, to industry strategy and exercise and training support.

"These are foundational. If two Member States want to operate side by side, their systems, certifications, and logistics need to speak the same language."

One well-known area of focus in EDA is military mobility: not just moving troops but enabling the seamless and safe transit of equipment across borders by rail, road or air.

"I worked on customs negotiations between the Israeli and Lebanese armed forces in my liaison role in UNIFIL as well as dealing with port authorities during my time in Kosovo," he recalls. "I saw how regulatory friction can delay or derail operational intent. We're trying to remove that friction here in Europe."

White's commitment to smoother defence integration also extends to his directorate's work with the defence industry. At White's direction, the ISE directorate has increased its engagement with EU defence firms, especially small- and medium-sized enterprises.

"I have observed a perception that the industry is fragmented," he says. "I prefer the word 'dispersed'. Different countries, different firms, different approaches, different strategic outlooks. Yes, they're at different stages in their procurement cycles. But that doesn't mean we can't enhance coordination."

The Agency's response has been multifaceted: European Defence Innovation

#### ISE's four units at a glance

 Industry Strategy & EU Policies: Involves companies in EDA activities, sets priorities and addresses defence aspects of EU policies, from legislation to funding.

- 2. Critical Enablers: Supports defence cooperation and boosts interoperability by defining and maintaining safety, certification and standardisation requirements.
- 3. **Single European Sky:** Coordinates military perspectives, bridging EU institutions and related bodies to enhance military aviation alongside civil aviation.
- 4. Operations, Training & Exercises: Integrates EDA into EU military operations, manages contracts for services such as satellite communications and medical evacuation, and oversees training and exercises for crewed and remotely piloted aircraft.

Days (see EDM pages 32-35), industry information events, and expanded collaboration with national defence associations. But he cautions, production alone is not enough.

"You can't ramp up industrial output without clear, explicit requirements," he says, drawing on his background in information management and financial services design. "Defence is a long-term endeavour. If you want to build something today, you need to have scoped it out yesterday."

For someone who has operated in warzones and boardrooms alike, White's philosophy centres on convergence, of technical rigour and political nuance, of past and present. Perhaps what makes White's position count at EDA is not just his experience, but his capacity to translate it into action, turning war's hard lessons into policies that might deter any aggressor in the next one.



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