

# EDM

EUROPEAN DEFENCE MATTERS

## Countdown to 2030

### Making defence readiness a reality

> IRISH MINISTER OF DEFENCE  
Balancing neutrality,  
McEntee recommit  
s to Europe

> NO USER MANUAL INCLUDED?  
EDA's new drone  
network trains pilots  
in Latvia

> FROM STRASBOURG WITH RESOLVE  
Why the EU Parliament's  
SEDE Committee  
counts

2030



Innovation



Cooperation

Capabilities



Industry



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# The shape of things to come

The year is 2030. Data centres feed AI systems from space, while on Earth robots routinely conduct reconnaissance and fight alongside human soldiers. Britain has rejoined the European Union, and Russia has made peace with Ukraine, unable to overcome Kyiv's new anti-ballistic interceptors. Mindful that Moscow may try to rearm, EU Member States are developing the weapons, equipment and training they need, while stockpiles have been replenished, production lines expanded, and new technologies fielded. What was once known as the Readiness 2030 agenda is no longer a target. It is today's reality.

## Wishful thinking?

Perhaps. But the future has a habit of arriving more quickly than expected. The question is not whether we can imagine such a future, but whether we are prepared to build it.

Above all, the EU must move beyond its traditional hesitation in defence and act in line with the weight it already carries in global trade. Russia's war of aggression against Ukraine has sharpened awareness of the growing alignment between Russia, Iran and North Korea. Europe cannot afford to delay.

In this edition of *European Defence Matters*, we examine how the EU, and most importantly the European Defence Agency (EDA), is helping Member States prepare. **Defence Readiness 2030** is about turning political ambition into capability.

Ireland's Minister for Defence, Helen McEntee, reminds us that no European state can efficiently address every capability challenge alone. Cooperation is not a choice between dependence and autonomy, but a practical necessity in delivering credible defence. Senior defence analyst Alessandro Marrone poses the essential question: as Europe rearms, will it do so together as partners or apart? For the European Parliament's Marie-Agnes Strack-Zimmermann, the answer is self-evident.

To that end, EDA Chief Executive André Denk outlines the progress made towards Readiness 2030 and explains why Member States are building a stronger Agency. Newly appointed Deputy Chief Executive Anders Sjöborg adds perspective from Sweden's experience – and reflects on how much time was lost during the post-Cold War peace dividend.

We also explore readiness in practice. From a growing EDA drone training network across Europe, to additive manufacturing initiatives capable of transforming battlefield logistics, to the expansion of the EDA's Government-to-Government Platform and advances in maritime surveillance through MARSUR, the common thread is cooperation.

Each project demonstrates that readiness is not built through declarations alone, but through practical collaboration, innovation and sustained investment.

The countdown to 2030 is already under way. The capabilities required are increasingly clear. The task now is delivery – and that is not easy, as the collapse of the joint French, German and Spanish effort to develop a next-generation fighter aircraft has shown. In defence, as in life, strength is a patient choice, built steadily, tested continuously, and realised through action, ideally together.

**Robin Emmott**  
Editor-in-Chief

**Lionel Sola**  
EDA Head of Media & Communication



EU High Representative Kallas addresses EUFOR troops at the Butmir NATO Military Base in Sarajevo on 3 November, 2025.

## "The more Europeans invest, innovate, and procure together in defence, the stronger we will be"

**I**n the short term, the priority is to close critical capability gaps. Several coalitions of Member States are now working on addressing these, including with joint projects on drones and counter-drone systems.

A second major priority is to support Europe's defence industry, where work is progressing on the financing and regulatory side. This includes easier access for companies to EU defence funding for joint projects, faster permitting for defence products, simplified procurement processes for Member States and industry, and a smoother transfer of defence-related products between Member States.

The keys to success in defence are resources and innovation. You only need to look at the battlefield in Ukraine to see why. Every day, Ukrainian drones are wreaking havoc on Russian supply chains. Access to financing and defence technologies – particularly in drone warfare and domestic arms production – have changed the way wars are being fought since this one began.

Ukraine has become one of the world's most dynamic military innovators.

By incorporating lessons from Ukraine's battlefield experience, the EDA's Hub for European Defence Innovation will accelerate promising ideas from the experimentation phase to procurement and operational use. It can also help Member States to identify, test and scale-up promising technologies. When we focus on home-grown defence technologies, we reduce over-dependence on external supply and enhance Europe's strategic autonomy.

Europe must draw on every resource it has to get ready for our defence, not least our European mind-set. That is why the role of the European Defence Agency is as important as it has ever been, to improve capability planning, develop a genuinely collaborative defence procurement platform, and boost defence research. Europe's success in defence hinges on our ability to do what we've agreed, remain united and act together – we are always stronger for it. [K](#)



**Kaja Kallas**, the EU's High Representative for Foreign Affairs and Security Policy, European Commission Vice-President, is also Head of the European Defence Agency (EDA).



André Denk visits the Austrian defence industry day exhibition together with Austria's Minister of Defence Klaudia Tanner, June 2026.

## In defence, as in life, strength is a patient choice

Lieutenant General **André Denk** is the Chief Executive of the European Defence Agency (EDA). A former EDA deputy chief, 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. He outlines the latest EDA defence data and why Member States support a stronger Agency.

**Save the date!**  
EDA annual conference  
28 January 2027 in Brussels

**T**he idea behind the European Defence Agency is a simple one: we are stronger together.

Our shareholders, the 27 Member States and their Ministers of Defence, need us to cooperate on issues that are often too complex, too expensive or too important to tackle alone. The Agency can never replace national decision-making, but we can help countries find practical ways to develop the capabilities that militaries need.

The ballistic missiles that Russia relentlessly launches against Ukraine remind us everyday that we too are vulnerable. For EDA, it has reinforced a lesson impossible to ignore: no EU or NATO country can address today's security challenges alone.

The response across Europe has been impressive. Gone are the days when defence spending was at the bottom of the list of priorities. As new EDA data shows,

in 2025, defence expenditure by EU Member States reached €418 billion, equivalent to 2.2% of GDP. It is projected to rise further to €454 billion, or 2.4% of GDP, in 2026, according to our figures.

Yet I am convinced that investment, innovation and political ambition only deliver results when they are translated into capabilities that our armed forces can actually use. Put simply: spending more is not the same as becoming stronger. Again, our figures show that defence investment reached €134 billion in 2025, representing almost one-third of total defence expenditure. However, a capability is never as simple as purchasing equipment. It requires the people, systems and training to employ that equipment over time and across borders.

We must not forget that many EU countries face remarkably similar defence requirements. Certainly they are →



André Denk at the EDA Ministerial Steering Board meeting, May 2026.

confronting the same threats. Yet collaborative procurement accounts for less than a quarter of defence investment. Of course multinational cooperation can be laborious, but we need to achieve greater economies of scale and interoperability so that people, equipment and systems from different nations can work together.

As the Irish Minister of Defence notes in this issue of *European Defence Matters*, the capabilities most critical to future security remain difficult to develop alone. Strategic enablers, information superiority, deep-strike capabilities and advanced command-and-control systems require levels of investment, expertise and coordination that increasingly favour multinational approaches. As we feature in this magazine, EDA leads the project to provide a classified EU maritime surveillance network, MARSUR. It can be done, together!

**Strengthening EDA for Europe's Defence Readiness 2030**

As EU leaders agreed in March 2025, greater ambition requires greater capacity. The Agency is therefore being strengthened in innovation, capability development and collaborative procurement. Ministers of

Defence approved the first steps in May, and our plans focus on:

- Reinforcing research, technology, innovation and experimentation
- Expanding capability development work
- Establishing a collaborative procurement centre
- Strengthening policy support and partnerships


**"The Agency can never replace national decision-making, but we can help countries find practical ways to develop the capabilities that militaries need."**

The Hub for European Defence Innovation (HEDI) is being expanded into a full defence innovation centre with a structured portfolio, in part because the war in Ukraine has shown how quickly new technologies can move from concept to battlefield. Europe has world class researchers and companies, but turning ideas into capabilities remains a challenge. In 2025, Member States invested €17 billion in defence research and development, but that is only 4% of expenditure.

On capability development, our goal is twofold: to provide Member States with more robust proposals that they can act on, and to support them in implementing collaborative projects. This work is designed to advance the nine Priority Capability Areas (see EDM pages 12-15) and contribute directly to the EU's Defence Readiness 2030 objective.

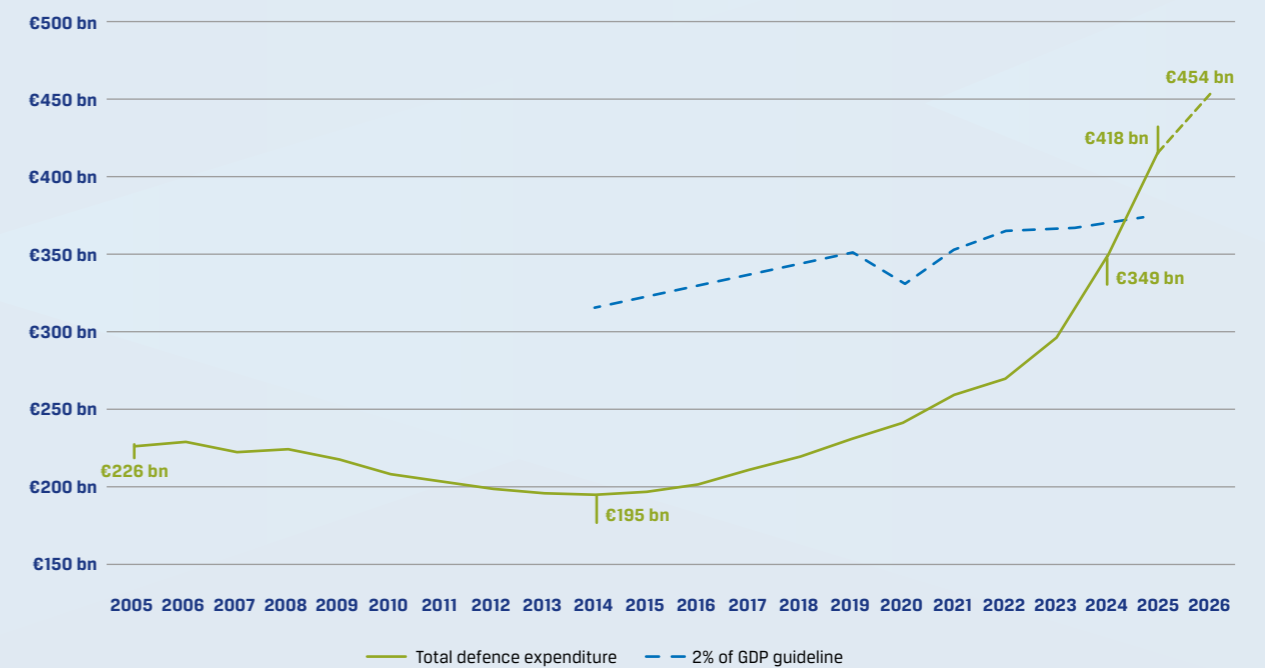
We have also proposed the creation of a collaborative procurement centre. Its remit will be limited to services and off-the-shelf equipment, allowing us to manage multiple projects simultaneously. This function will complement, not duplicate, the work of other procurement agencies in Europe.

Of course, European cooperation does not compete with NATO. On the contrary, they reinforce one another. Stronger European capabilities contribute to a stronger alliance.

Here in Brussels, I cannot stress enough that strengthening EDA is not about expanding an institution for its own sake. It is about ensuring that the EU has more tools needed to cooperate in defence more effectively at a time when cooperation is so indispensable. 

EDA collects defence data on an annual basis, and has done so since 2006. The Ministries of Defence of the Agency's 27 Member States provide the data.

**Total defence expenditure**



**MAIN FINDINGS OF THE 2025-2026 EDA DEFENCE DATA**

**SPENDING IS ACCELERATING, BUT THE ARMED FORCES' ABSORPTION CAPACITY IS EMERGING AS A CONSTRAINT**

The Member States of the European Union are increasing defence spending faster than projected (+20% since 2024), reaching €418 billion in 2025, or 2.2% of GDP, and are further projected to reach €454 billion in 2026, or 2.4% of GDP. This is partially attributable to EU initiatives such as the Security Action for Europe (SAFE) loans and the fiscal flexibility provided by the National Escape Clause (NEC) from 2026. However, this acceleration is increasingly constrained by the armed forces' capacity to absorb and transform the funding, due to industrial timelines, administrative and human resource readiness and long-term sustainability pressures.

**INCREASED SPENDING IS NOT YET TRANSLATING INTO PROPORTIONAL OPERATIONAL OUTPUT**

Despite defence investment reaching €134 billion and over 32% of total expenditure in 2025, the tangible delivery of military effect has not increased at the same rate. Disparities in corresponding personnel, infrastructure, and operations and maintenance requirements emerge, which limit operational readiness.

**SPENDING CONTINUES TO PRIORITISE SHORT-TERM GAPS OVER STRUCTURAL CAPABILITY DEVELOPMENT**

Defence spending continues to prioritise urgent materiel capability gaps, limiting progress towards European strategic autonomy.

**NATIONAL APPROACHES CONTINUE TO DOMINATE, REDUCING EFFICIENCY AND INTEROPERABILITY**

Collaborative procurement remains below the desired target. It represents 24% of investment in 2025, and is unevenly distributed across Member States and capability areas. National approaches dominate capability development, as procurement initiatives and equipment life-cycles remain largely unsynchronised, undermining economies of scale, interoperability and long-term convergence.

**INDUSTRIAL CAPACITY IS STRENGTHENING, BUT NOT YET SUFFICIENT TO MEET DEMAND**

While 68% of Member States' defence investment is directed to strengthening EU industry, the reality is that industrial capacity, supply chains and coordination are insufficient to absorb and structure the rising demand.

**R&D IS NOT KEEPING PACE WITH EQUIPMENT PROCUREMENT**

This trend is exacerbated in Research & Development (R&D) expenditure, as the gap between acquisition and development continues to widen with equipment procurement. Member States' €17 billion spent on R&D in 2025 represents only 4.0% of defence expenditure.

For full details please see the EDA website [www.eda.europa.eu](http://www.eda.europa.eu)

# Adapting Ireland's defence in an era of heightened global instability



Helen McEntee is Ireland's first female Minister for Defence, she is also serving as Minister for Foreign Affairs and Trade. A senior figure in the centre right Fine Gael party, she has held multiple cabinet roles since first entering the Dáil in 2013, including Minister for Justice and Minister of State for European Affairs. She speaks to *European Defence Matters* about Ireland's EU Presidency priorities, pragmatism and why maritime security must be at the heart of the agenda.

**N**eutrality is never simple, especially in conflict-ridden Europe, yet for Ireland, neutrality has long meant solidarity with fellow democracies under attack, a stance borne out by its record.

Ireland is firmly pro-European, a consistent supporter of Ukraine, and embedded in EU defence cooperation, not least as a member of the European Defence Agency (EDA) that helped negotiate the Agency's establishment in 2004 (see sidebar). As Ireland assumes the Presidency of the Council of the European Union, it does so in a Europe once again stressed by war and engaged in a widening debate over what neutrality can mean inside an interdependent security order.

"Military neutrality has long been an important strand of Ireland's independent foreign policy," says Minister for Defence Helen McEntee. "I also recognise our responsibility to support the security and defence of Europe."

## Insecurity comes west

So Dublin is redefining itself for an era shaped by cyber-attacks, sabotage of critical infrastructure, maritime insecurity and Russia's war of aggression against Ukraine. For Ireland, an island nation whose economy depends heavily on digital connectivity and international trade, those concerns have become increasingly tangible.

**"Ireland's approach to defence cooperation is best understood as partnership rather than dependence"**

"Irish public opinion continues to reflect a strong attachment to neutrality, while at the same time showing meaningful support for increased EU security cooperation," McEntee says.

That is in part because the threats are coming closer. In November 2024, the Russian intelligence gathering vessel Yantar was tracked operating in the Irish Sea above subsea cables, with

Irish Defence Forces observing drones possibly launched from the ship. Irish authorities have also monitored Russian naval support tankers transiting through Ireland's Exclusive Economic Zone – part of the so called shadow fleet that has drawn increasing scrutiny (see EDM pages 38-40).

So the Irish government's aim is to protect Ireland, bolster European security and respect the different defence traditions of Member States, says McEntee.

The country's strategic location has become newly significant. Vast volumes of transatlantic data pass through cables running beneath waters under Irish jurisdiction. Ireland hosts critical digital infrastructure and serves as a gateway between North America and Europe – a potential target in an era of hybrid conflict.

For McEntee, maritime security will be among Ireland's central priorities during its presidency "in recognition of the importance of cooperation in the area of our shared maritime security, particularly in safeguarding critical maritime infrastructure."

## Threats beyond military domains

Dublin also intends to prioritise crisis preparedness, critical infrastructure protection, cyber resilience and responses to hybrid threats. Europe's vulnerabilities are embedded in the systems that make modern life possible.

The ransomware attack on Ireland's Health Service Executive in 2021 offered a vivid demonstration. The incident disrupted healthcare services across the country and exposed weaknesses in critical public infrastructure. Similar lessons have emerged elsewhere in Europe through →



McEntee travelled to Kyiv on 31 March 2026, as EU ministers gathered to reaffirm support for Ukraine and commemorate the fourth anniversary of the liberation of Bucha.



McEntee has reaffirmed her commitment to transforming the Irish Defence Forces into an organisation capable of defending the state and its people.

cyber-attacks, foreign interference campaigns and concerns about infrastructure sabotage.

"The experience of recent years has demonstrated that threats to European security are no longer confined to traditional military domains," says McEntee.

Dublin firmly opposes any notion of advocating a European army, seeking to transform the EU into a military alliance or aiming to militarise the country. Although historically one of the lowest spenders on defence, Dublin has increased its defence expenditure considerably in recent years.

McEntee stresses that the Irish government is committed to increasing investment in defence to achieve a significantly enhanced capability by 2028 and moving as quickly as possible to develop capabilities that would match those of other similarly sized western European countries. This determination is clear from the record defence spending, projected in 2026 to reach €1.5 billion for the first time.

Importantly, Irish officials frame cooperation in practical terms: capabilities, resilience, interoperability and efficiency.

"The future of European security depends on our ability to combine national strengths, invest and build capabilities together where cooperation delivers greater resilience and value," McEntee says.

The challenge facing Europe is not simply spending more money on defence but spending it more effectively, she believes. Fragmentation remains one of the defining weaknesses of the European security landscape. Dozens of procurement systems, competing standards and duplicated capabilities continue to limit efficiency.

**Old principles, new realities**

For smaller countries such as Ireland, EDA offers a practical way to bridge capability gaps without sacrificing autonomy. Yet Ireland remains cautious about the language used. "Ireland's approach to defence cooperation is best

**Ireland's EU Presidency priorities at a glance**

- > EU financial and military assistance to Ukraine
- > Progress on EUMAM Ukraine
- > Implementation of Ireland's maritime security strategy
- > Protection of undersea cables and critical maritime infrastructure
- > Strengthening EU response to hybrid threats and cyberattacks
- > Participation in EU-NATO coordinated exercises (Integrated Resolve 2026, PACE)
- > Enhanced use of EU Cyber Diplomacy Toolbox
- > Agreement on EU minimum preparedness requirements
- > Implementation of EU-wide crisis preparedness framework
- > Progress on Military Mobility
- > Defence Procurement Directive
- > Critical infrastructure protection
- > Focus on drone and counter-drone measures
- > Protection of energy and communications infrastructure

**Strengthening EDA: Ireland's involvement comes full circle**

It was Ireland that hosted the 2004 EU Presidency while the establishment of the European Defence Agency (EDA) was being negotiated, and now, as it holds the EU Presidency from July 2026, attention is again turning to how the Agency can be strengthened and remain "a fit for purpose Agency for all Member States," as Minister for Defence Helen McEntee notes.

In that respect, Member States' approval of the first phase of EDA's strengthening, as requested by EU leaders (see EDM page 5) marks a milestone for Ireland. The Agency's increased focus on procuring off-the-shelf material and services for groups of Member States is particularly valuable for smaller nations. Equally, the expansion of EDA's capability development and innovation is welcomed by Dublin.

More broadly, McEntee says one of the benefits of EU defence is in the way a collective approach delivers greater operational and financial value than national efforts. For Ireland, it brings access to a wider range of specialist expertise.

"EDA has played an important role in supporting the efforts that matter," McEntee says, pointing to its function as a practical framework through which Member States can cooperate on planning, standards, research, and collaborative projects.

She adds that this is increasingly important in areas where no single state can efficiently deliver capability alone, including maritime surveillance, cyber resilience, space-enabled services and autonomous systems. The Agency also helps align operational requirements with industrial and technological development, supporting more coherent capability investment across Europe, she says.

Ireland's engagement with EDA is becoming more and more operational. Ireland participates in projects spanning maritime security, counter-IED, cyber defence, energy resilience and military search, alongside joint procurement initiatives covering ammunition and CBRN equipment. Irish forces are also involved in EDA's EU SatCom programmes and maritime surveillance (see EDM pages 38-40).

Areas of the EDA-Ireland relationship include:

- Maritime security initiatives and surveillance cooperation
- Counter-IED capability development programmes
- Cyber defence and resilience projects
- Energy security and resilience initiatives
- Military search and support capability work
- Joint procurement of ammunition, soldier equipment and CBRN protective equipment
- EU SatCom programmes, including Ukraine-related logistics support
- Multinational training and exercises to improve interoperability with European partners

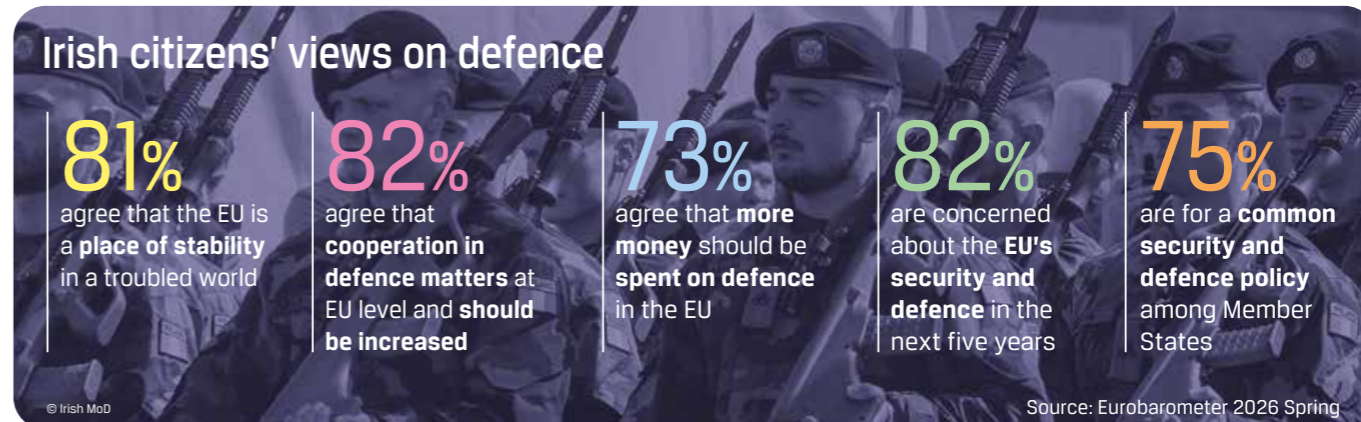
**"The future of European security depends on our ability to combine national strengths, invest and build capabilities together where cooperation delivers greater resilience and value"**

understood as partnership rather than dependence," McEntee says.

The distinction may sound semantic, but politically it matters. Ireland's support for European defence depends in part on the belief that collaboration strengthens national capabilities rather than replacing them.

The Irish EU Presidency is not seeking to lead Europe toward a radically different security architecture, McEntee says. Dublin's ambitions are more realistic yet more consequential than they first appear: advancing practical cooperation, building consensus among Member States and strengthening resilience against emerging threats. The continent is adjusting to a world in which threats are more diffuse, technology is reshaping conflict and the line between civilian and military security is difficult to draw.

Ireland's experience offers a glimpse of that transition. The question facing Ireland is ultimately the same one confronting much of the EU: how to preserve old principles while responding to new realities. As McEntee puts it, the challenge is ensuring that Ireland can "respond effectively to real-world security demands while maintaining public trust." ❏



**Maritime Capabilities**  
 LEAD NATIONS  
 Germany, Italy, Spain

**Air & Missile Defence**  
 LEAD NATIONS  
 Denmark, France, Germany, Italy, Spain, Sweden

**Ground Combat**  
 LEAD NATIONS  
 Finland, Germany, Italy, Sweden

**Artillery Systems**  
 LEAD NATIONS  
 France

**Cyber, Electronic Warfare, AI & Quantum**  
 LEAD NATIONS  
 Cyber: France, Italy. EW: Spain, Italy. AI: Austria. Quantum: Austria, Denmark

**Missiles & Ammunition**  
 LEAD NATIONS  
 France, Germany, Italy

**Military Mobility**  
 LEAD NATIONS  
 Belgium, Germany, The Netherlands

**Drones & Counter-Drone Systems**  
 LEAD NATIONS  
 Croatia, Denmark, Latvia, The Netherlands, Spain

**Strategic Enablers, including Space**  
 LEAD NATIONS  
 Strategic Airlift: France. Command & Control: Spain. Space: France, Italy

# NINE PRIORITY CAPABILITY AREAS

Information in graphic accurate as of June 2026

The EU's Priority Capability Areas are not new military requirements, but a political mechanism to focus effort, money and cooperation.

## When is a priority really a priority?

In data science, PCA can stand for Principal Component Analysis; in healthcare, Patient Care Assistant; or in international law, Permanent Court of Arbitration. In EU defence, it now has another meaning: Priority Capability Areas. The European Defence Agency (EDA) has been tasked by EU leaders to monitor progress in PCAs and produce annual defence readiness reports with the collaboration of the European Commission, the European External Action Service (EEAS) and the EU Military Staff (EUMS), in the second half of 2026. *European Defence Matters* explains.

**O**ne misconception needs clearing up at the outset. The European Union's Priority Capability Areas – the PCAs – do not contradict the 22 capability development priorities agreed by Ministers of Defence in 2023. Nor are they the product of some exhaustive strategic review. "They reflect leaders' political focus of the moment, where to put our efforts to achieve defence readiness at EU level by 2030," says Franck Desit, Deputy Director of the Capability, Armament and Planning Directorate at EDA.

For Vedrana Gujic, a senior EDA policy officer who is working with Desit to make sense of how the PCAs fit into capability development goals, that explains a lot. "They are a construct derived from the language of European Council conclusions," she says of the March 2025 leaders' declaration. "So PCAs are not a military concept."

Initially seven categories and later expanded to nine, they range from drones and counter-drones to artificial intelligence and include air and missile defence as well as military mobility.

These politically driven PCAs led EDA to create a new layer of flexible coordination bodies across existing structures within EDA. With this approach, self-designated lead nations can now cooperate with partners of their choosing, including Ukraine and NATO, in any of the nine areas, while

drawing on EDA's established work strands, expertise and support.

By volunteering to take the lead in PCAs, Member States have seized the opportunity to accelerate, scale up, and even initiate collaborative activities, building on what was already taking place at national and multinational levels, including within the EDA framework.

In practice, this role allows lead nations to develop projects benefiting from all available frameworks and enabling instruments, and to exercise governance over all resulting strands of work.

**"They reflect leaders' political focus of the moment, where to put our efforts to achieve defence readiness at EU level by 2030"**

Instruments can include SAFE loans (see EDM page 43), or European Defence Projects of Common Interest, a possibility offered through the European Defence Industry Programme.

"If you're going to procure defence equipment or assets in any of the nine PCA categories, then you're on the right track," Gujic says.

### Alphabet soup ... again

Collaborative planning and development of capabilities needed by the armed forces

is organised at EU level through a broad approach called the Capability Development Planning System (EU-CDPS). This process starts with the identification of Member States' needs and priorities – what should be developed collaboratively within the EU.

In 2023, the process led to the definition of the Capability Development Priorities (CDP) (see the next page) across operational domains, strategic enablers and force multipliers. These priorities are based on extensive analysis and draw on:

- Member States' national capability requirements
- NATO capability targets
- Lessons identified from operations
- Technological developments
- Industrial considerations
- Political priorities

They remain the agreed reference point for all EU capability-related initiatives.

"The 2023 priorities are not ranked," says Desit. That might sound like a paradox, but he is right. The 2023 capability development priorities are the menu. Member States then focus on the most urgent capabilities and the most mature solutions throughout the EU-CDPS, making use of the toolbox setup in that system. "The 2023 priorities are comprehensive," Gujic explains. "The PCAs are highlighting an urgency or magnitude that attracted leaders' attention." →



Vedrana Gujic and Franck Desit.

**Something new: money**

If PCAs do not contradict the CDP and are seen as "prioritised priorities", they do raise overlapping questions. Nor do they address the overall scope of the capability development. Air combat, where many EU countries continue to invest the most, is notably absent. Logistics, another critical component of readiness, barely appears.

For Desit and Gujic, another challenge has been organisational. The existing EU-CDPS – working groups, capability roadmaps and planning processes – had

been organised around the 2023 CDP. The new political categories cut across existing structures, forcing experts to work in new combinations. EDA needed to underline that the EU-CDPS remains the system's engine, the outcomes of which feed the politically driven strands of effort.

Gujic admits there may have been some initial friction. "Initially, PCAs might have slowed things up a little," she says. "But they have also unlocked something new that is generating momentum: money."

**'Projects, not objectives'**

With more EU funds, countries that might previously have pursued separate national programmes are now forming so-called capability coalitions in PCAs. Taking advantage of the European Defence Industry Programme developed by the European Commission and the European Parliament, lead nations can pitch projects that can become European Defence Projects of Common Interest, the EDPCIs, making them eligible for funding. In some cases, participation has grown to include almost all Member States plus Third Countries.

"PCAs are bringing more project work into EDA," Gujic says. "Member States are not just defining objectives but preparing projects." Similar in style to Permanent Structured Cooperation (PESCO), PCAs are seen as frameworks where contributing Members States can define and steer overarching programmes that will be ideally positioned to take advantage of the coming European Competitiveness Fund in the EU's new multiannual budget.

Desit and Gujic are careful not to overstate the relationship between PCA and the Commission's funding instruments. PCAs provide the forum, and address operational readiness challenges, from an overall capability perspective. But the participating countries choose the instruments.

**A coalition might choose to:**

- Expand an existing programme
- Launch a new initiative
- Seek EU funding
- Contribute national resources
- Combine multiple funding streams

Desit is also clear: "Equipment alone doesn't create readiness." Readiness also requires trained personnel, logistics, doctrine and the ability to operate together.

Yet both Desit and Gujic believe the broader trend is clear. By creating politically visible areas, EU leaders are pushing institutions, money and governments in the same direction.

*That's surely a priority.*

**The 2023 EU Capability Development Priorities**



**What are PCAs?**

**Nine politically defined areas** set out in the March 2025 European Council conclusions to focus progress towards defence readiness by 2030.

**Designed to guide prioritisation** without duplicating the 2023 EU Capability Development Priorities agreed by Ministers of Defence.

**Focused on capability challenges underpinning readiness**, rather than individual projects alone.

**Categories**

A mix of **operational domains** (e.g. maritime), **capability areas** (e.g. air and missile defence), **systems** (e.g. artillery), and **enabling technologies** (e.g. AI and quantum).

They address both platforms and cross-cutting capability challenges, **supporting readiness across multiple domains**.

Require **coordination across multiple PCAs** due to interdependencies between domains and technologies.

**Governance and delivery**

Each PCA has a **lead nation** or **group of co-lead nations** responsible for coordination.

Lead nations may subdivide PCAs into sub-areas, resulting in **14 specific workstreams across 9 PCAs**, supported by EDA coordination groups.

Funding may come from **national budgets, Commission grants, or EU loans** depending on the project.

Projects can include **short-term joint procurement** as well as **mid- to long-term capability development**, not limited to equipment.



NATO Secretary General Mark Rutte addresses a joint session of the European Parliament's Committee on Security and Defence (SEDE) and Committee on Foreign Affairs (AFET) in Brussels on 26 January 2026.



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Military mobility is central to ensuring the swift, safe and efficient movement of military personnel and equipment across Europe – whether for operations, exercises or daily activities.



**Marie-Agnes Strack-Zimmermann** is the inaugural Chair of the European Parliament's Committee on Security and Defence (SEDE), representing Germany's Free Democratic Party (FDP) within the Renew Europe group. A former member of the German Bundestag who chaired its Defence Committee, Strack-Zimmermann has been a prominent advocate for stronger European defence cooperation and sustained support for Ukraine. Strack-Zimmermann talks to *European Defence Matters*.

## "The EU is still very young. It could be destroyed in a moment"

**O**n the ninth floor of the Altiero Spinelli building in Brussels, the office of Marie-Agnes Strack-Zimmermann offers a view not just over the city's European quarter, but into Europe's past too. Along one wall sits a library inherited from her parents: biographies, histories, political memoirs, and thick volumes on the rise and fall of states. Otto von Bismarck is there. Willy Brandt. Cardinal Richelieu. The Americans, Steve Jobs and Donald Trump, are there too. Together they form an eclectic catalogue of leadership, ambition and disruption.

"When my father died, my mother said to me, 'Take these books.' Not only in memory of him, but because they are a reminder of what he believed," Strack-Zimmermann says. "My parents had a deeply European outlook. They always told me that the EU was the biggest chance for peace, but be sure that times will

change, and the next challenge will come in 10, 20, 30 years."

Today, as Russia continues its war of aggression in Ukraine and nationalist parties gain ground across the continent, those warnings feel less like family wisdom than political prophecy. Europe's post-war achievements can appear permanent to younger generations who have known only open borders, the euro and freedom of movement. Strack-Zimmermann worries that Europeans forget how recent these gains are. "The EU project is still very young. It could be destroyed in a moment."

### Defence moves centre stage

The conviction to think more European in defence animated Strack-Zimmermann's campaign in 2024 to transform the Parliament's defence subcommittee into a full committee.

But turning consensus into institutional reality proved harder. Fierce resistance came from other parliamentary committees reluctant to surrender jurisdiction over parts of the defence portfolio. Still, the effort succeeded. Two years later, Strack-Zimmermann considers it her most significant achievement. "Two years ago we had the subcommittee without any real function. Now the mindset has totally changed. Now we have the ability to pressure our Member States to think as Europeans."

The SEDE Committee's elevation reflects a larger shift underway in Brussels. Defence, once peripheral to European integration, has moved to the centre of political life. Now Strack-Zimmermann argues that the deeper challenge lies in overcoming very European obstacles. "The defence landscape, just at the EU level alone, is

incredibly fragmented," Strack-Zimmermann says. "Then consider the national level."

This extends beyond procurement and military planning. Constitutional traditions differ dramatically. "In Germany, members of the Bundestag make the big decisions," she notes. "If you compare it with France, only the president says, 'Let's go.'"

### "Now we have the ability to pressure our Member States to think as Europeans"

Yet threats transcend borders. Military mobility offers a telling example (*see photo above*). Moving troops and equipment from the ports of Rotterdam or Antwerp to NATO's eastern flank still involves navigating a labyrinth of administrative procedures, regulations and declarations, something

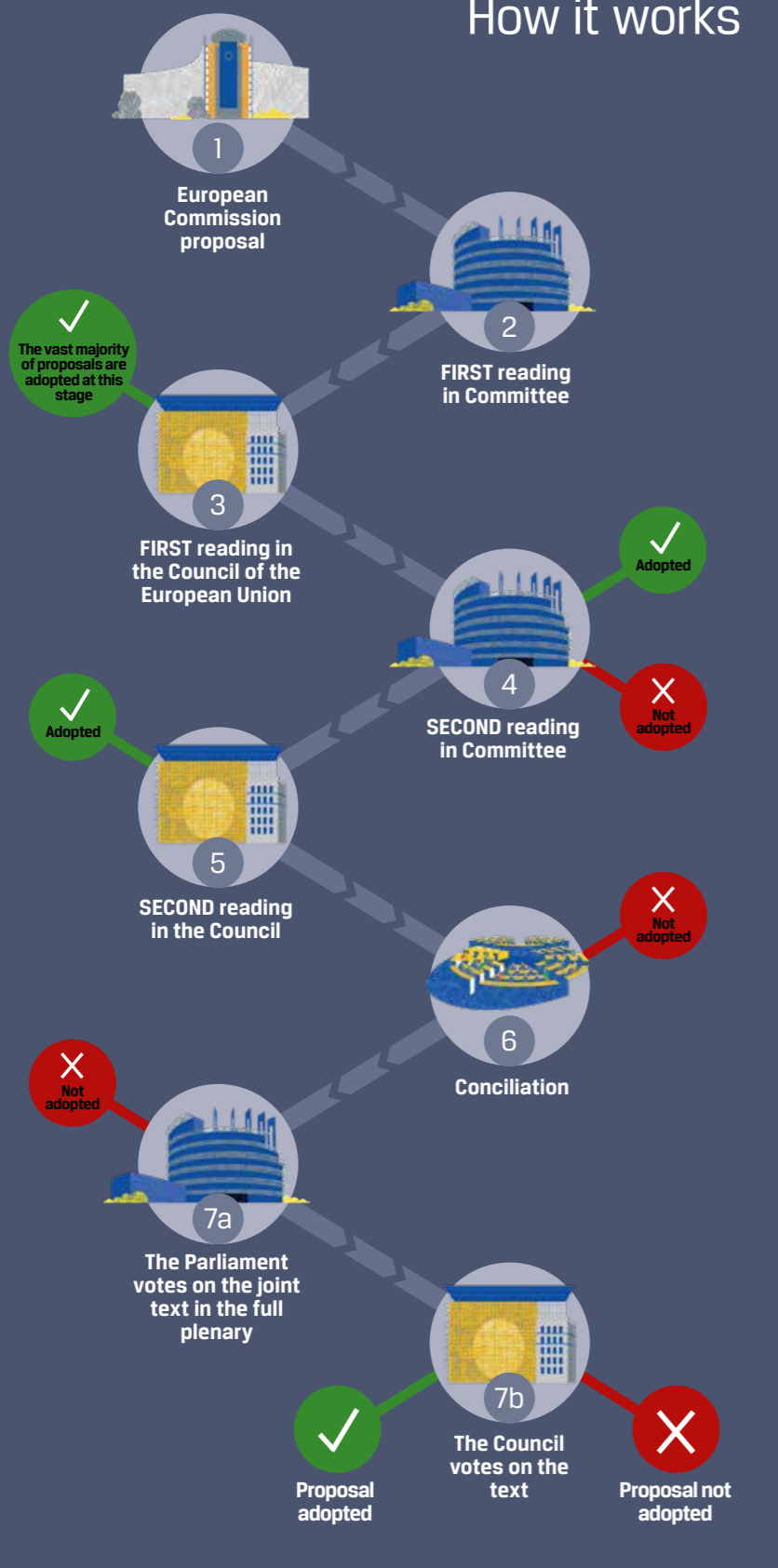
the European Defence Agency, the European Commission and the European Parliament are working to improve. "As you move across the EU, border after border, you face hurdle after hurdle," she says.

### Go beyond

Perhaps given her place in Brussels, it comes as no surprise to hear Strack-Zimmermann's views. Deaf to the pleas of EU policymakers, governments continue to protect their domestic defence industries. "Germany, France, Italy, Poland – they all have big military industries," she says. "They protect their own. I understand that. They create a lot of jobs in their own country. But the thing is that we really have to think European."

Not German. Not French. Not even narrowly European Union. "We have to protect this whole continent," she says, →

## Ordinary legislative procedure – the European Parliament How it works



explicitly including Britain and Norway in that vision. "We really have to open our minds."

Ukraine too must be part of this new Europeanness. Ukraine has become Europe's most important laboratory for understanding modern warfare. "It's a drone war, but also a cyber war, a hybrid war," she says.

Repeated visits to Ukraine have left a deep impression. What stands out is not just the country's resilience but its speed of innovation. "They are very young, very tough," she says of Ukraine's defence innovators. She contrasts how EU policymakers often discuss acquiring millions of drones – as if stockpiles alone can solve future security challenges.

### Me and you, U.S. and them

Innovation, in Strack-Zimmermann's telling, cannot be separated from industrial strategy. Investments in defence generate civilian benefits, from cybersecurity to advanced manufacturing. She points to German car companies such as Mercedes-Benz and Volkswagen entering military supply chains – an idea that would have seemed implausible only a few years ago. "Without military research, we would never have the internet, GPS, or even the microwave," she says.

Yet even as Europe debates defence unions, military mobility, and industrial policy, another transformation looms over almost every conversation in Brussels: the United States.

For decades, European leaders spoke of strategic autonomy. U.S. President Donald Trump's return to the White House has made the concept more urgent. Strack-Zimmermann is careful not to frame the shift as a rupture. Europe still needs the United States. NATO remains indispensable. U.S. military capabilities remain unmatched.

But she also believes Europe ignored repeated warnings from successive U.S. administrations. "For 20 years, every president told us very often, very clearly: you have to do more," she says. "Nobody did."

Trump, in her view, did not create the problem. He merely accelerated Europe's reckoning with it. "Our readiness programme is out beyond 2030 – to become more independent," she says. Not independent in the sense of separation, but capable of carrying a greater share of responsibility. "The U.S. needs the EU, and we need them," she says. "We are colleagues. We are in NATO together." ❏



Marie-Agnes Strack-Zimmermann chairs a meeting of the SEDE Committee in Brussels on 25 June 2025, during which André Denk, Chief Executive of EDA, briefs members following an Agency Ministerial Steering Board meeting.

## How the European Parliament's Security and Defence Committee works

### Q: Why does the EU now have a full Security and Defence Committee?

The upgrade reflects a broader shift in the EU towards a stronger focus on defence following Russia's full-scale invasion of Ukraine in 2022. Political pressure is increasing for European countries to cooperate closely on capabilities, procurement and industrial production. The change follows the Versailles Declaration, in which EU Heads of State and Government said that EU institutions should play a larger role in helping the bloc take greater responsibility for its own security.

The Committee's creation in 2024 was also linked to wider institutional changes, including the appointment of a European Commissioner for Defence and Space and a growing role for the European Commission in defence-related legislation and programmes. The Parliament wanted to signal political support for that shift and strengthen its own role in the process. Negotiations over the Committee's mandate took several months because other parliamentary committees were concerned about losing influence over defence-related work.

### Q: What changed when it became a full Committee?

The main change was institutional power. As a subcommittee, it was largely a forum for discussion and scrutiny. Members

held debates, invited senior officials and discussed security developments, but the body had no legislative or budgetary authority. As a full committee, it now has a formal role in shaping laws and participating in the EU budgetary process.

The Committee works on defence legislation proposed by the European Commission and negotiates with the Council of the European Union – the EU governments – during the legislative process. It also contributes to annual budget discussions and to negotiations over the EU's long-term budget framework. The Committee also expanded in size, growing to 43 full members from 30.

### "As a full committee, it now has a formal role in shaping laws and participating in the EU budgetary process"

### Q: How does the Committee operate in practice?

The Committee usually meets monthly, often over two days, with additional meetings organised when security developments require them. Many sessions take place behind closed doors because of the sensitivity of matters.

It conducts visits in the EU and abroad. Visits have increasingly centred on strategic partners such as Britain, Canada and Japan, as well as defence industrial investment inside the EU. Members use information gathered during those visits to shape legislative amendments, reports and discussions.

### Q: What does the Committee specifically do?

The Committee performs several functions simultaneously:

- It scrutinises the EU's Common Security and Defence Policy and follows discussions taking place among Member States and within the Council.
- At the same time, it acts as a legislator, alongside the Council, on Commission proposals related to defence industry programmes, procurement, military mobility and other initiatives.
- The Committee also produces own-initiative reports and formal opinions designed to shape the political direction of EU defence policy. These reports identify problems or priorities before legislation is proposed. →

- The Committee has a role in the EU's annual budget. It can propose pilot projects and is advocating for defence-related programmes.
- The Committee is helping to design the EU's next long-term budget, the Multiannual Financial Framework (MFF), in areas related to defence.

Recent work has included reports on barriers to the defence single market (*see next page*) and on drones, as well as legislative work on the European defence industry programme and defence simplification measures.

Members also monitor how the Commission implements broader defence strategies and roadmaps.

**Q: How does the legislative process work inside the Committee?**

When the European Commission presents a legislative proposal, the Committee begins discussions through appointed rapporteurs, or lead MEPs. Members then submit amendments, debate them and vote on a final position.

The Committee subsequently asks the full Parliament for a mandate to begin

negotiations with the Commission and the Council, known as trilogues. The Committee's adopted position becomes Parliament's negotiating mandate in those talks.

The Committee also contributes opinions to other parliamentary committees handling broader programmes with defence components, such as competitiveness funding or the Connecting Europe Facility. Recent reforms to Parliament's rules strengthened the authority of such opinions.

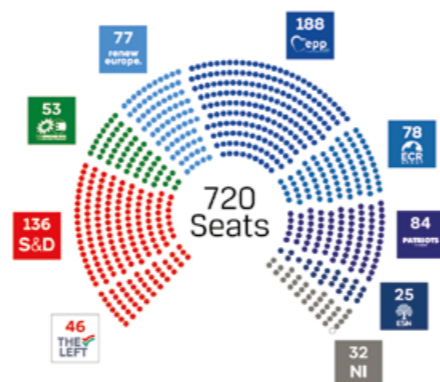
**Q: How politically united is the Committee?**

Despite political fragmentation in Europe, the Committee works for consensus on defence issues.

- The centre-right European People's Party, the centre-left Socialists and Democrats, and the centrist Renew Europe generally work closely together inside the Committee.
- They look for support from members from the left-wing Greens, the right-wing European Conservatives and Reformists, and parts of the far-right Patriots for Europe.
- Committee officials say extreme positions rarely influence legislative outcomes. As a result, Committee reports and legislative positions usually pass with comfortable majorities both inside the Committee and later in the full Parliament.

Officials say this broad alignment has helped create a relatively coherent parliamentary position on defence policy. [K](#)

**European Parliament 2024-2029**



Alice Rufo, Deputy Minister to the Minister of the Armed Forces and Veterans Affairs of France, addresses the SEDE Committee during an exchange of views on French nuclear doctrine and European security in Brussels on 22 June 2026.



French Foreign Minister Robert Schuman signs the Treaty of Paris establishing the European Coal and Steel Community in Paris, France, on 18 April 1951.

**"We need to be able to defend our European continent, because nobody else will"**



© European Parliament

**The cost of fragmentation**

*Tobias Cremer – making the case for a single European defence market*

Despite lacking any armaments of its own, the Security and Defence Committee can still fire up a debate. One such salvo comes from Tobias Cremer, who advocates for a fully integrated internal market for defence. "We are asking some uncomfortable questions," says Cremer, a German MEP from the centre-left Socialists and Democrats. "Is it right that we pay a 30% premium on defence products in the EU because our national markets are so fragmented? That's taxpayer money."

**Holy grail**

A single EU market for defence products would mean breaking down the barriers that drive up costs between Member States. That could include simplifying licensing laws and certification rules or allowing countries to recognise each other's security clearances to promote intra-EU transfers. For Cremer, the rapporteur – or lead MEP – on the Parliament's first own-initiative report on the issue, the debate goes beyond technical reforms. It is about asking what it is to have a common market.

"I think the Committee has a role to play here because we have the freedom to speak, we have the expertise, and we can go into the detail where others cannot."

It is already producing results. The European Parliament adopted Cremer's report 'Tackling barriers to the single market for defence' in March 2026 by 393 votes to 169, with 67 abstentions. The European Commission is expected to come forward with formal policy proposals for Member States.

The argument echoes the Defence Readiness 2030 agenda, which calls for a single defence market. Despite rising spending,

buying nationally remains the norm and the EU continues to rely heavily on suppliers outside the bloc. Supporters argue that greater integration would strengthen the EU, make supply chains more resilient and improve the EU's ability to respond to future threats.

That could be good for NATO too, Cremer says.

**War and peace**

Fewer national barriers could unlock additional investment and innovation, allowing the European defence industry to develop on a continental scale comparable to that of the United States.

"The EU's problem is not that we don't have the money. Our problem is that we haven't thought about creating the industrial ecosystem. We don't have the industrial base, we actually can't deliver what is needed, we can't go to scale as easily, and that's because we've neglected the industrial part of defence," Cremer says.

But can it be done? "When the European Coal and Steel Community was founded back in the 1950s, people didn't do that worrying about national sovereignty; they did it precisely for that reason: to bind France and Germany together in the name of security." For Cremer, European integration needs to be about war and peace again.

"We should have trust in one another once again, to dare go a step further when it comes to integration. We need to be able to defend our European continent, because nobody else will."

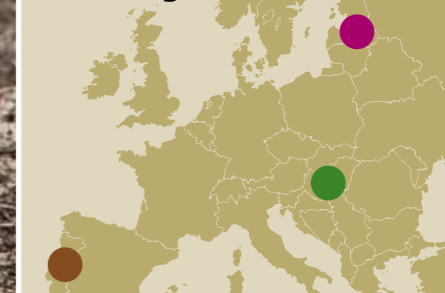
# Not a single drone academy, but a European training network

Known for its multinational helicopter training programme from 2009 to 2024, the European Defence Agency (EDA) is now turning its attention to drone warfare. Latvia hosted the first advanced course for remote pilots in June 2026. *European Defence Matters* outlines why it came about, and how the exercises in the country's Selonia military training area took off.



Drone pilots from 14 Member States trained on first-person view (FPV) tactics from 31 May to 5 June 2026 in the first EU-wide course on advanced UAS strike and interception operations.

## EDA-coordinated EU drone training takes flight



- **Portugal:** opens its national Titan Sky exercise to other EU members, with drone deployments in maritime and land close-to-real life scenarios, including cross border operations, *May 2026*.
- **Latvia:** hosts advanced FPV strike-drone training based on Ukrainian experience, *May - June 2026*.
- **Finland:** to host courses on reusable, light bomber drones, *August - September 2026*.
- **Hungary:** to host foundational FPV instruction, *October 2026*.

**T**he letter to EDA from the Latvian Ministry of Defence arrived on what was just another rainy day in Brussels. Yet to Agency officials working under grey skies in Brussels, in March 2026, it was a ray of sunshine. It was an offer: Latvia would host the first EU training course for Unmanned Aircraft Systems (UAS) remote pilots. Officials on both sides had been coordinating for weeks, retooling a European response to a revolution in warfare that some governments had spent several years playing down.

For João Caetano, EDA Project Officer UAS Programmes, the Latvian letter also represented something larger. It marked the moment when Europe's defence establishment finally began to grasp that drones were not a passing fascination from the war in Ukraine. "When I joined the Agency, we were already heavily engaged with the situation in Ukraine," Caetano says. "At that point, we were about six or seven months into the war, and there was very little activity around unmanned systems."

Inside Ministries of Defence, drones were often still treated as peripheral technology. Member States, after all, possessed sophisticated air forces, naval fleets, and even if not at their maximum levels, significant stocks of conventional weapons. Against that backdrop, small, unmanned aircraft seemed unserious. "The perception was that drones were still considered almost like a civilian thing," Caetano says. "Something that will deliver your food in the future."

Perhaps understandably, the European focus in 2022 was elsewhere. The war had exposed shortages in artillery ammunition, especially 155mm shells, the lack of readiness of troops, ageing fleets, heavy reliance on U.S. intelligence and the need to rush financial support to Kyiv.

What changed minds was Ukraine's innovation under pressure – which today has begun to give Kyiv an edge over Moscow on the battlefield. Unable to match Russia shell for shell, and lacking sufficient aircraft, armour, and conventional firepower, Ukrainian forces began deploying whatever unmanned systems they could assemble or acquire. Cheap commercial drones became reconnaissance platforms. Modified hobbyist aircraft carried explosives. Systems were built

locally from components sourced internationally. What mattered was not elegance, but adaptability.

In 2025 EDA had an opportunity to see the Latvian National Guard training using drones in Latvia. "It was a wakeup call," says Stephen O'Sullivan, Project Officer UAS Airspace Integration Research at EDA. "Those closest to the Russian threat were advancing their UAS capabilities a lot faster than those in western Europe. That is when EDA started to bring the concept of a UAS training programme to the Member States."

### Money, yes. But how to spend it?

The logic was brutally simple. Tanks costing millions of euros could be destroyed by systems assembled for a fraction of the price. Drones allowed operators to strike without exposing themselves directly to enemy fire. They also changed the tempo of movement.

Of course, France had operated Intelligence, Surveillance and Reconnaissance (ISR) platforms

for decades. Germany, the Netherlands, Luxembourg and Ireland fielded systems such as ScanEagle, Integrator and Orbiter. But these fleets were small, relatively expensive, and often dependent

on non-European suppliers. Ground control stations frequently lacked compatibility with NATO data links. Communications relied on non-military frequencies. Operators required extensive technical expertise. "We did not really see significant, large-scale integration of unmanned systems into European armed forces until 2025," Caetano said.

The delay was partly cultural. Armed forces built around conventional platforms struggled to incorporate technologies that evolved at software speed. Procurement systems designed for fighter jets and armoured vehicles – platforms intended to remain in service for decades – would be too slow for technologies outdated within months. →



Organised by EDA and the Latvian Armed Forces, the exercise was a step towards an EU military drone training network.

difficult for armed forces in this (less than) peaceful time in the EU.

That gap in training became the opening for Caetano and the small team inside the Agency, including EDA's O'Sullivan. "We have positioned ourselves as an enabler," O'Sullivan said. "We are specifically targeting areas such as training, interoperability, facilities and support structures."

The Agency already had a model to draw from. From 2009 to 2024, EDA had made its mark leading multinational helicopter training activities, fostering cooperation among European nations and achieving substantial advancements in helicopter capabilities. Over the years, those exercises played a crucial role in honing the skills of hundreds of crews and thousands of other military personnel, ensuring their readiness for multinational operations. What's more, between 2011 and 2017, EDA developed a fixed-wing programme and created the European Tactical Airlift Centre.

#### EDA rings the school bell

For the new drone initiative, the approach has been both methodical and improvised. Expertise across the EU remains fragmented. In many defence ministries, only a handful of people possess meaningful experience with drones, and most were already overwhelmed by other responsibilities.

So the Agency has pulled together expertise scattered across multiple directorates: airworthiness specialists, airspace-integration experts, training officials, taskers and operational planners and participants from the Autonomous Systems Community of Interest. Rather than attempting to reinvent doctrine – already handled by

For years, broad European defence frameworks spread attention across everything from maritime security to space systems. Industry lacked precise guidance about where investment should flow. Only recently have more focused defence programmes and funding mechanisms begun to emerge. The contrast with Ukraine was stark. Ukrainian engineers assembled systems domestically using components sourced globally, adapting constantly under battlefield pressure.

#### Helicopter training: replicate the success?

Training posed an even deeper problem. Unlike artillery or rifles, drones demand specialised operators capable of understanding communications, meteorology, airspace management, radio-frequency environments, explosives and electronic warfare. Yet the EU had almost no unified training structure for unmanned systems. Some smaller Member States lacked even basic instructor capacity. Manufacturers could provide introductory instruction, but not operational-level preparation for combat environments, and accessing the airspace was still

NATO and national militaries – EDA has concentrated on the practical side to deliver tangible benefits to its Member States.

To build support for the training network, the first symposium on UAS was held in December 2024. More than 120 participants from 20 Member States attended. "That created a solid base of stakeholders," Caetano said. From there, momentum accelerated rapidly. A year later, at the next symposium in Tallinn, Member States agreed to pursue four major projects:

- A decentralised European training network;
- Common training syllabi;
- Collaborative interoperability for UAS Exercises frameworks;
- A structured process for extracting lessons from contemporary conflicts.

The goal is not a single drone academy, but a distributed ecosystem with decentralised execution, assuring no single point of failure or dependency.

As outlined in its breakthrough letter in March 2026, Latvia offered advanced first-person view (FPV) strike-drone training based on Ukrainian

**"The perception was that drones were still considered almost like a civilian thing. Something that will deliver your food in the future"**

battlefield experience for May. Finland has now proposed courses on reusable 'light bomber' drones. Hungary will contribute foundational FPV instruction. Portugal hosted the first UAS-centric exercise, the 'Titan Sky 26' that also took place in May. This comprised 13 European states, involving operational drone deployments across maritime and cross-border scenarios and making it the first European multinational drill of its kind. Taken together, the programmes show EDA's rapid adaptation to today's challenges, delivering benefits for Member States.

Somewhere between the artillery shortages of 2022 and the drone-training networks of 2026, Member States realised that unmanned warfare was not something for the future. It was already here and the EU needed to work together. Currently there are 16 nations involved in the UAS training in Latvia, including Ukrainian drone instructors. <

## What do they learn?

Remote pilots taking part in new multinational drone training programmes will gain critical lessons in interoperability, tactics and communication between air and ground assets, EDA believes.

The training initiatives, linked to a wider network of European drone training centres and exercises, aim to develop drones training capability and share capacity within the Member States, and to improve coordination between small tactical drones and larger ISR aircraft.

"First of all, pilots learn interoperability," says Viktor Bryaskov, EDA Project Officer Fixed Wing, involved in the programme. "On the drone market you have various types of drones flying high, low and at various speeds. Some are equipped for ISR missions, others for strike missions. They can learn tactics, techniques, procedures, and airspace integration across a wide range of drone types."

EDA believes that one of the main challenges is the transfer of ISR information between drone

operators, air traffic controllers and other airborne assets such as helicopters and aircraft.

"Transferring information from an ISR drone to ground troops through secured communication channels is relatively easy, but to other air assets not so much," Bryaskov says. "Once information moves from digital systems into voice communication, you start losing details and creating gaps and misunderstandings."

Portugal's Titan Sky highlighted gaps in standard aviation phraseology when applied to drone operations, particularly when operators needed to relay coordinates or detailed observations rapidly. The programmes aim to integrate lessons from Latvia's small-drone training centre with larger ISR drone exercises.

ISR drones focus on information superiority and target identification, while small tactical drones can then be directed to strike targets identified from the air. One possible training scenario is that "the ISR drone can locate the target, and then smaller drones can fly to the target and strike it," Bryaskov says.



Static and moving vehicles serve as targets during first-person view (FPV) drone pilot training, May-June 2026.

## EDA's drone training in Latvia - A first-person view

*European Defence Matters* reports from the final day of the first EU-wide military drone course in Latvia, gathering pilots from 14 European countries.

Strong wind is the first thing that hits you when you enter the area. It constantly stirs the dust from the ground, stinging the eyes. The only sound is an electric hum that comes from a drone taking off. It is early June in the middle of Latvia and the biggest military training ground in the Baltics is whirring.

For the trainees, the week has been one of little sleep. Last night training continued until after two o'clock in the morning, as participants tested thermal imaging systems, operating in complete darkness. The purpose of the training is to simulate a realistic operational environment, often in uncertain and unpredictable scenarios. "These are the battlefield conditions. We train as we fight and fight as we train," says a pilot from Ireland.



Once a target is identified, there is only one thing left to do: strike.

Participants sleep in army tents, four people in each. The main tent provides electricity and serves as the only designated space for charging devices. Meals arrive in portable refrigeration units.

The pilots come with varying levels of experience, which many of them view as an advantage. "We exchange a lot of opinions here,"



At the Selonia military area in Latvia, the course focused on a range of advanced training scenarios, allowing participants to prepare for realistic battlefield situations.



says a trainee from Czechia. A pilot from the Netherlands agrees. "We're like cooks who look into each other's kitchens," he says.

### 'Let's annoy the guys a bit'

The training course focuses on first-person view (FPV) drone operations, meaning that all unmanned aircraft systems are piloted directly by the participants themselves. "You need precision when you are operating the FPV drone, and you need to strike a weak point of the target. You need to be precise and go through small spaces," says a Czech trainee.

Back at home, he mostly pilots other systems, and he notes that FPV drone technology is not yet used in his national armed forces. That is why, the EDA-led training is so valuable.

Today's tasks are already set. The trainees are required to conduct exercises involving moving targets: camouflaged unmanned ground vehicles (UGV), traversing the field before disappearing into the nearby forest. The UGV operator remarks: "Let's annoy the guys a bit. I am going in the forest." His intention is clear, the dense pine cover masks the vehicle. For the drone operators, the slim, tall trees make it difficult to identify the vehicle and manoeuvre through the terrain.

In another scenario, participants train intercepting fixed-wing drones flying several hundred meters above the ground. While the task might seem easy enough – locate the target and engage – it proves to be more complex in practice. It requires precision, coordination, and constantly adjusting the drone under operational constraints. Not to mention the wind.

### Almost impossible... but not in Latvia

The drones do not always make it back safely to the launch pad. Human error, technical limitations, and unforeseen obstacles can disrupt a mission. Sometimes a drone crashes and can be repaired. A crash means a long walk across the field to retrieve the wreckage. When it happens, the coach pauses the training, and trainees tease the unlucky pilot. Yet, beneath the jokes they know their walk might come next.

"We build upon what we learned and then move into more advanced systems, equipment and tasks," says the Irish pilot. After five days, they are operating drones and the command-and-control system on their own. Still, the trainer is there to step in at any time.

"In this training area, we can conduct a wide range of exercises that are almost impossible in some other EU countries due to high population density and busy airspace," says Major Modris Kairišs, Head of the Latvian Autonomous Systems Competence Centre. "Latvia offers an opportunity to develop this kind of test range. This is also why we have a lot of unmanned aerial vehicle producers whose equipment we can use."



As the afternoon turns to evening, the wind shows no sign of easing. Another drone lifts off, tilts sharply and disappears towards the tree line. Around the launch area, pilots watch through their goggles in silence, making minute corrections with their thumbs. The military training is new, but the rhythm is familiar: observation, judgement, adaptation.

The trainees take home with them lessons that many of their armed forces are only beginning to absorb. The drones scattered across the training ground – some intact, some broken beyond repair – are relatively cheap to produce. But the knowledge tested here is not. In a clearing in rural Latvia, EDA is helping pilots prepare for a kind of warfare that has already reshaped the battlefields of Russia and Ukraine. ◀



## TEKEVER: "We are not building aircraft, we are building computers with wings"



**Ricardo Mendes** co-founded TEKEVER in Portugal in 2001. The drone-maker reached a billion-pound (€1.15 bln) 'unicorn' valuation in 2025, and now has 1,300 staff, including new factories in Britain's drone cluster in Swindon, and another in Cahors, France. Mendes talks to *European Defence Matters* about starting up without venture capital, moving from mobile banking systems into drones and the leap from the Channel to the Black Sea.

**It started with five computer scientists fresh out of university, and a conviction that sounded faintly absurd in 2001: one day everything would be connected, from watches to factories, even fridges. The dotcom bubble had just burst and artificial intelligence lived mostly in academic papers and science fiction. Portugal was hardly seen as a tech hub, best known for "football and fantastic beaches, great sun and great food," says TEKEVER's co-founder and CEO Ricardo Mendes.**

Still, the group emerging from the Technical University of Lisbon sensed the possibility of a new age. "Maybe it's the internet everywhere... Evernet," Mendes recalls thinking at the time. So, the company was named after 'Technologies for the Evernet': TEKEVER.

Today, Lisbon-based TEKEVER is one of the European Union's leading makers of Unmanned Aerial Systems (UAS). With some

1,300 staff and manufacturing capability in Portugal and operations in Britain and France, TEKEVER sells to, and has been transformed by, Ukraine.

A quarter of a century ago, with no venture capital ecosystem in Portugal, the early years of building TEKEVER were conventional and pragmatic. In cramped offices in Lisbon, and not linked to drones, TEKEVER worked on mobile banking systems when banking was still paper-heavy, as well as early workforce tools for utilities replacing clipboards. But by the late 2000s, the group's focus shifted. Two domains stood out: drones and space systems. The insight was not about aircraft, but intelligence.

"If you're removing a pilot from a plane, you're creating an intelligence problem," Mendes says. "In fact, we are not building aircraft, we are building computers with wings."

TEKEVER financed its shift through European research programmes and software revenue, moving north to build physical capability around Caldas da Rainha, while Lisbon supplied talent. The early drones forced contact with reality: armies, navies, maritime missions.

### Eyes over the sea

By 2015-16, the company was ready to commercialise its Intelligence, Surveillance, and Reconnaissance (ISR) drones. The model that emerged was a break from traditional defence thinking. TEKEVER would operate drones itself. "Not selling them," Mendes says. That meant becoming part aerospace company, part software platform, part operations centre.

Because flying unmanned systems over land was still heavily restricted due to the risks of crashes over villages, towns and cities, the seas became a

manageable testing ground for TEKEVER. The European Maritime Safety Agency became one of TEKEVER's first major customers, with the company operating surveillance missions over EU waters, monitoring shipping activity, pollution,

illegal fishing, migration flows, and search-and-rescue operations.

Then came Britain's interior ministry, needing surveillance over the English Channel. That relationship between TEKEVER and the UK Home Office would prove decisive. →



TEKEVER'S AR3 drone, capable of carrying a 5 kg payload, or up to 30 kg in vertical take-off and landing configuration, with endurance of up to 22 hours and a communications range of up to 230 km.



TEKEVER's most advanced medium-altitude AR5 is an advanced fixed-wing UAS designed for surveillance, patrol and search-and-rescue missions, with a 20-hour endurance and a 100 km/h cruise speed.

**From the Channel to the Black Sea**

When Russia invaded Ukraine in February 2022, drones were not yet universally regarded as the defining technology of the conflict (see EDM pages 22-27). Much of the world still viewed the war through

the traditional lens of artillery, armour and massed firepower. But inside parts of the British government, there was already growing recognition that unmanned systems would become central to the conflict. And British officials knew TEKEVER well.

"They approached us and said, look, we think that what you guys do, and the way you do it, could be very useful in Ukraine," Mendes says, even if TEKEVER itself was uncertain. "We said: look, our products are not prepared for a war zone," he adds.

TEKEVER began sending systems and teams to work with Ukraine. The company could not operate directly inside the battlespace, but with support from the British Ministry of Defence it recreated the same feedback architecture it had developed during maritime operations, only now with Ukrainian operators instead of its own personnel.

At first, the systems struggled. "In the beginning in Ukraine, our systems were not useful," Mendes says, "They weren't prepared for denied environments, no GPS, no comms."

**Finding a niche**

Yet the company's structure allowed adaptation at a speed unusual for defence manufacturing. Hardware changed. Software changed faster still. Communications systems hardened. Airframes adapted. TEKEVER's AR3 drone, Mendes says, underwent more than one hundred development cycles in its first years operating around Ukraine.

TEKEVER eventually found its niche: not in mass-produced systems but in

long-range ISR platforms conducting highly complex missions, particularly over the Black Sea. The systems were less disposable than the small quadcopters – UAVs propelled by four rotors – that have come to symbolise much of the war.

They fly for 16 or 20 hours at a time. They carry sophisticated payloads: radar, optical systems, infrared sensors, signals-intelligence suites, satellite communications. They operate without GPS, share data between multiple systems, and conduct electronic warfare tasks alongside reconnaissance missions. "When you hear Ukraine is producing millions of drones," he says, "it's those small, attritable platforms. What we do is very different."

But the core shift is not industrial scale – it is tempo. "What works today," Mendes says, "the enemy figures out tomorrow."

**'Profoundly European'**

Europe, however, remains structurally fragmented. Unlike the United States, it has no single procurement authority.

TEKEVER's own expansion across Europe reflects that reality. Unlike a Silicon Valley software company able to serve a continent from a single headquarters, defence firms dealing with sensitive systems, classified requirements, and sovereign military doctrines must embed themselves locally. The company increasingly operates as what Mendes calls a "profoundly European company": engineering teams, operational units, industrial partnerships and development capabilities spread across multiple countries rather than managed from a single national centre.

**"What works today, the enemy figures out tomorrow"**

That decentralisation is expensive. But Mendes says it is unavoidable. European armed forces may nominally buy similar capabilities, yet their operational cultures, security procedures, procurement preferences and technical requirements differ substantially. Building trust requires physical presence. So does handling sensitive work securely.

"We need to be present in several countries, develop the local national economy, but at the same time contribute to a European-wide capability." European programmes can help early on, connecting universities and firms across borders, but Mendes worries they now move too slowly. "If you're waiting six months for funding," he says, "it may be obsolete before it starts."

The tension runs through nearly every contemporary European defence initiative. Brussels increasingly recognises the dangers of dependence on external suppliers, particularly as doubts grow about the long-term reliability of American political commitments. The Security Action for Europe (SAFE) programme – a €150 billion lending scheme to support joint defence procurement – reflects that shift towards strengthening European industrial capacity.

Still, the underlying belief has not changed since 2001. "The future is a network of connected systems," Mendes says. "That was always our hunch."

**TEKEVER at a glance**

> **CEO:** Ricardo Mendes

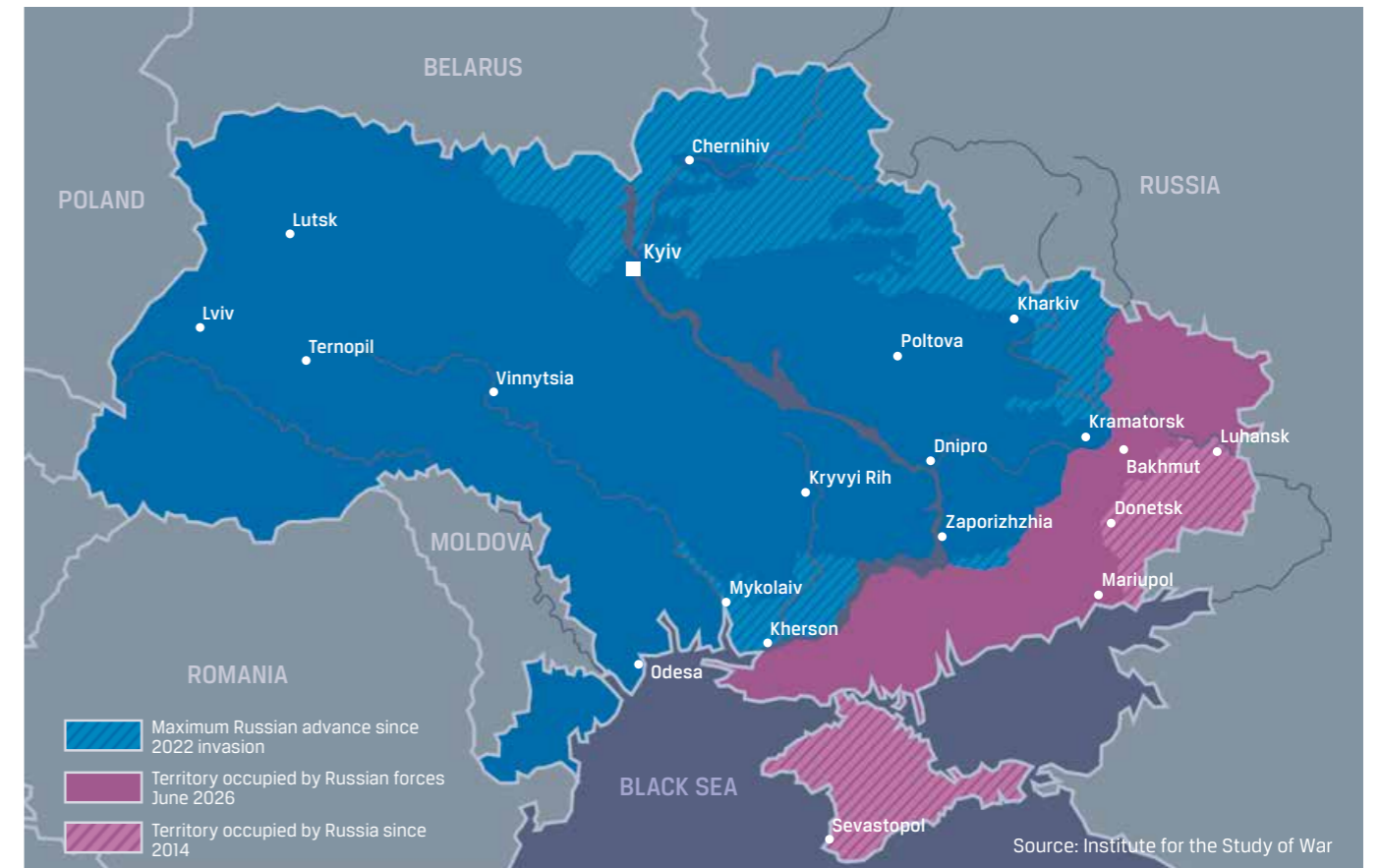
> **Specialisation:** Unmanned aerial systems (UAS), intelligence, surveillance and reconnaissance (ISR), AI and autonomous systems for defence and security, satellite systems, digital transformation services

> **Product:** AR3 and AR5 drones; unmanned aerial systems; sensor payloads (radar, optical, infrared); signals intelligence and satellite communications systems; AI analytics platforms; TEKEVER Digital services; TEKEVER Space systems

> **Production:** Development and manufacturing in Portugal, with operations in Britain and France; strong in-house R&D; modular system design; delivery via direct sales or managed services

> **Partnerships:** European Maritime Safety Agency; UK Home Office; British Ministry of Defence; Ukrainian operators; European research programmes; international investors

> **Developments:** Expanded into drones and space systems in the late 2000s; shifted to ISR drone operations model in 2015-16; maritime surveillance with EU and UK authorities; deployment in Ukraine driving rapid iteration; AR3 evolved through 100+ updates; adaptation to GPS- and communications-denied environments; expansion into long-range ISR missions; growth into a broader dual-use technology group across Europe.



The control of terrain in Ukraine in June 2026.

Source: Institute for the Study of War



**Alessandro Marrone** is Head of the Defence, Security and Space Programme at the Istituto Affari Internazionali. He also serves on the academic advisory board of the NATO Defense College, and is a member of the Armament Industry European Research Group and the Centro Studi Militari Aerospaziali. He speaks to *European Defence Matters* about rising defence spending, whether it will improve EU cooperation, Italy's defence industrial policy and Rome's balancing act between rearmament and fiscal constraints.

**EDM: Do you think the European Union is now moving towards strategic autonomy?**

I have mixed feelings. For many years, one of the main arguments in favour of EU cooperation was economic: defence budgets were stagnating or shrinking, and no single EU country could afford ambitious capability development alone. Today, however, rising defence budgets in EU countries are giving governments greater confidence that they can achieve results nationally. In a few cases this may be true; in many others it may be an illusion, or simply less efficient than cooperation.

I fear there may be a tendency towards more national programmes because governments now have greater national resources available and thus think they can avoid multilateral cooperation carrying transaction costs: lengthy negotiations, compromises and delays. This risks producing more national, rather than European, strategic autonomy. Just look at what happened with the end of the Future Combat Air System – the trilateral

cooperation between France, Germany and Spain.

But even with larger national budgets, EU cooperation still offers economies of scale, interoperability, shared logistics, training, maintenance, repair and upgrade. What's more, the changes brought by Russia's war against Ukraine and by the Trump administration are profound and long term. They are pushing some political leaders and public opinion to reconsider the need for greater European strategic autonomy.

**EDM: Does less trust in the United States automatically translate into more trust in EU integration?**

No. The key question is whether EU leaders can make the case that today's security environment requires more European strategic autonomy. This needs to be a pragmatic and realistic discussion, looking case by case at whether bilateral, trilateral, regional, mini-lateral or EU-wide solutions are best.



**"Military, technological and industrial integration also binds Europeans together and helps preserve peace and stability within Europe itself"**

(Far left) An Italian Navy helicopter hovers over an Italian Navy submarine, February 2026.

(Left) A SAMP/T air defence system has been deployed by France at Capu Midia in Romania since 2022.

There is also a broader point. Defence integration is not only about economics, deterrence, or relations with Washington. Military, technological and industrial integration also binds Europeans together and helps preserve peace and stability within Europe itself. If countries move towards purely national programmes, procurement, logistics, training and maintenance, defence policy becomes renationalised. That weakens the bonds holding European countries together.

**EDM: So in a sense, we're at a crossroads?**

Yes. Europe's rearmament is real and ongoing. The question is whether it will lead mainly to stronger national autonomy or to stronger European cooperation and therefore greater European autonomy. The trend towards rearmament will continue, although at different speeds in different countries. But it remains unclear whether this process will strengthen European integration or reinforce national approaches, with implications for European cohesion as a whole. The last point should not be underestimated. We often take European peace and integration for granted, but it has really only existed for the last 80 years in western Europe, and much less in eastern Europe and the Balkans, in a continent with thousands of years of troubled history.

**EDM: How is defence cooperation viewed in Rome today?**

Italy takes a very pragmatic approach. Bilateral and ad hoc cooperation among small groups of countries is often preferred because negotiations are simpler and faster, both operationally and industrially. At the multilateral level, NATO remains the main reference point for force posture, doctrine, and standards.

At EU level, there is strong interest in the European Defence Fund, and in the future

in the Multiannual Financial Framework, because of EU funding and because it helps internationalise supply chains, foster networks, and support the move from research and development to testing and eventually to market.

Italy has traditionally been more comfortable with intergovernmental frameworks, including through the European Defence Agency and Permanent Structured Cooperation (PESCO). Rome has indeed strongly supported PESCO in its early phases, led several projects and participated in many others.

**EDM: Turning to spending, how is Italy balancing rising defence budgets with debt pressures?**

Italy's defence spending really began to increase from 2018 onwards, gradually at first. Then there was a leap in 2025, notably because of the pressure from the Trump administration. Italy reached 2% of GDP in defence spending last year.

From that baseline, Italy signed up to NATO's 3.5% target. In my view, this is very ambitious, especially considering Italy's high public debt. Since 2023, this government has been keen to reduce both the annual deficit and the overall debt stock, pursuing a fiscally conservative approach.

Against this backdrop, in 2025 Italy's key decision was to request €14.9 billion of loans from the SAFE programme (see EDM pages 43). This allows Rome to significantly increase the investment portion of its defence budget. The stated aim is to reach 2.5% of GDP by 2030. Yet the amount of Italian SAFE loans has been reconsidered in recent months because of the higher priority to mitigate the negative economic effects of the U.S.-Israeli war against Iran. My view is that Italy should use SAFE as a bridge while preparing structurally to spend more on defence after the EU programme ends.

**EDM: And where are the main capability gaps now?**

Italy has managed to maintain a relatively balanced military, even during the years when the focus was mainly on peacekeeping and counterterrorism operations. The Air Force progressed with the F-35; the Navy modernised through submarines, frigates, and the carrier strike groups. The Army, however, suffered more from the focus on low-intensity conflict and lost capabilities in heavy brigades, long-range fires, missile defence, and ammunition stocks. Much of the new post-2022 spending focuses on these gaps, but funding for established air and naval programmes continue too, as the investments are distributed across many programmes. [▶](#)

**Italy's key defence programmes**

**Army**

- Main battle tanks
- Armoured vehicle family
- Artillery systems
- Attack helicopters

**Air Force**

- Acquisition of 24 Eurofighter aircraft
- At least €8.8 billion allocated to the research and development phase of the Italy-Britain-Japan sixth-generation fighter aircraft programme, the Global Combat Air Programme (GCAP)

**Navy**

- Two FREMM multi-mission frigates
- Additional submarines

**Integrated Air and Missile Defence**

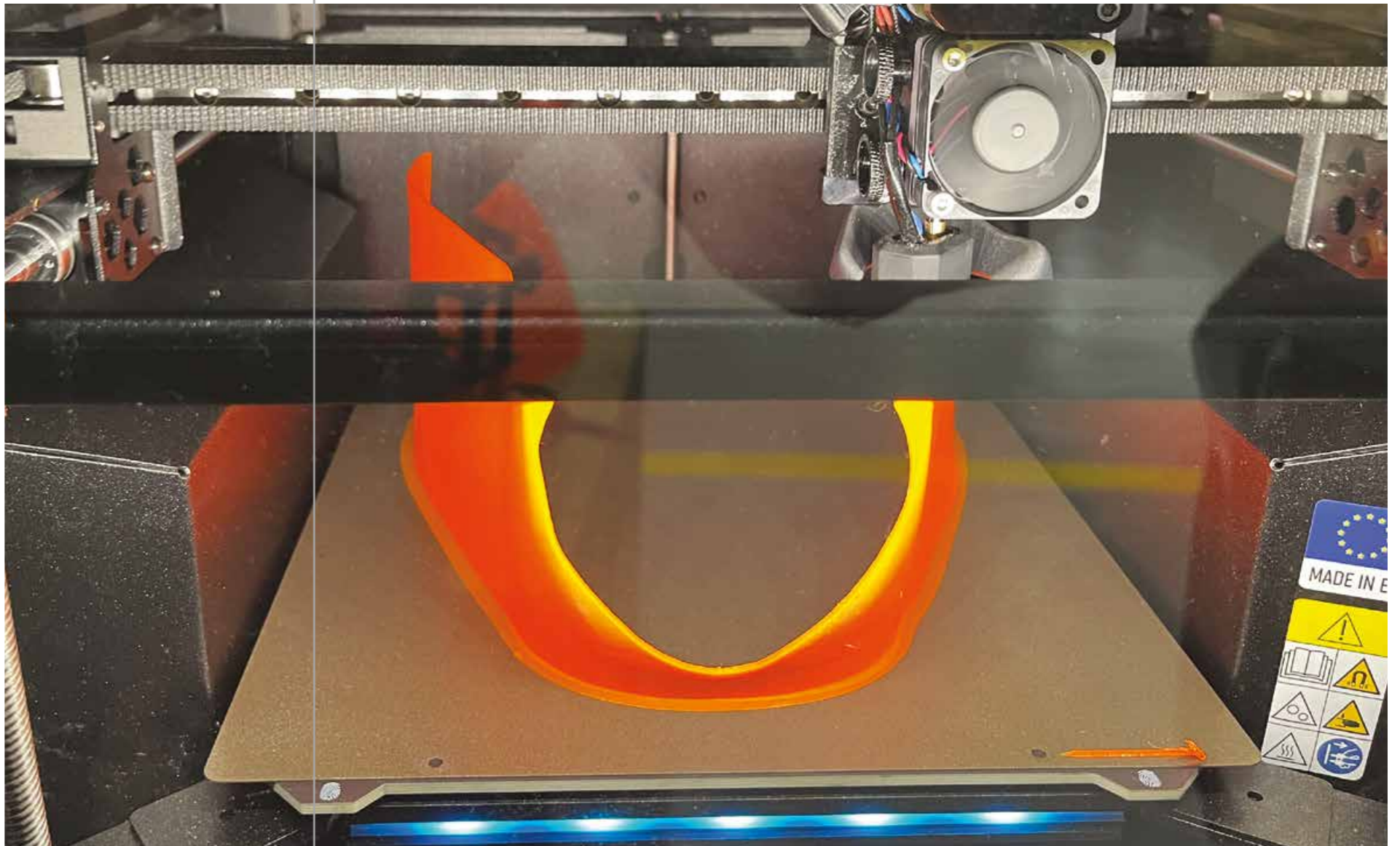
- Procurement of additional SAMP/T air and missile defence systems
- Strengthening of national air and missile defence capabilities



An operator from the Polish Armed Forces digitally scans a damaged original part to print a replacement during a demonstration at Albacete air base, Spain, March 2026.

> ADDITIVE MANUFACTURING

# #AM lovers: creating a military community layer by layer



A 3D printer made by Czechia's PRUSA produces drone parts during a demonstration in Albacete air base, Spain, March 2026. PRUSA's printers for military use can work offline to avoid cyber security risks or data collection.

Additive manufacturing, better known as 3D printing, is the process of creating objects layer by layer. In early 2023, the European Defence Agency (EDA) began a new initiative to build a European community to adopt additive manufacturing for military logistics and support, called *AM Village*. *European Defence Matters* visits the latest iteration of AM Village at the Albacete air base in southeastern Spain, to find out more.

**I**n the early morning cold, the aircraft hangar is almost monastic. Beyond a heavy metal door, rows of military-grade 3D printers sit ready for action. The air smells faintly of machine oil and dust carried from the surrounding plain. The silence is a reminder that the third edition of EDA's AM Village is nothing without its community.

But when the soldiers, engineers and experts arrive just an hour later, there seems little denying that this is one of Europe's most visible demonstrations of how new technologies are being integrated into defence capabilities.

In the hangar, machines buzz as robotic arms sweep through programmed routines. Uniformed men and women with insignia from all over the European Union, Norway, Britain and Canada crowd the production floor, inspecting drone fuselages and

weapon components emerging from sealed chambers.

"What makes this village special is not only the technology," says Martin Huber, EDA's Project Officer Logistics and Additive Manufacturing, who came up with the idea of creating a community around the technology. "This is about people working together to deliver concrete solutions for military needs," says Huber, whose passion for the initiative led him to create the social media hashtag now widely used in the community: *#AMlovers*.

**Take me to your build plate**

Warfare has always demanded rapid technological change. Once again, across land, sea, air, space and cyberspace, new technologies are reshaping how armed forces operate, sustain themselves and prepare for future conflicts. Artificial

intelligence, cybersecurity, robotics, autonomous systems and advanced satellites often dominate conferences and conversations.

What makes additive manufacturing so significant for defence is not simply the technology itself, but the way it changes the logic of supply chains. The ability to produce a complex precision component in hours rather than weeks, and at a location of choice rather than in a distant factory, has implications for the logistic supply chain and for operational readiness. It also allows sensitive manufacturing knowledge to remain controlled within a limited group of individuals, an increasingly important consideration today.

"We can now produce spare parts near the front. No company can give you the parts so fast," says a soldier with Germany's Bundeswehr. From polymers and composites to carbon, titanium, aluminium and metal materials, additive manufacturing

**"This is the most valuable technology to bring to the field. You can repair anything you didn't expect to break, anything that you need to complete the mission"**

technologies provide flexibility that can support rapid repairs and spare parts during operations while improving operational readiness. "We can print drone parts in the back of a car, in very cold areas, with materials that are resistant to heat and chemicals, all within an hour."

Better still, components for older military vehicles that are no longer commercially available can now be reproduced on demand and to precise specifications, helping maintain operational capability while reducing dependence on long procurement timelines.

While common in medical devices for some time, 3D printing in defence did not take off as quickly in Europe as in the United States. Today, it still must penetrate the bureaucracy that limits uptake. But its potential to produce functional, mission-critical parts for some of the world's most demanding operational settings is there, says David Wilckens, business development manager at Germany-based Nikon SLM Solutions. The company's clients include Airbus, Saab and Rolls-Royce, as well as U.S. defence contractor Lockheed Martin. It takes five days to produce a 1.5-metre tall jet →



Soldiers gather outside the main hangar during the AM Village in Albacete, March 2026.

## Why the AM Village? Sharing technology at human scale

Unique within the European Union, the AM Village forms part of broader European efforts to turn emerging technologies into operational military capabilities quickly. Organised by EDA, the event reflects one of the agency's core ambitions: creating a space where Member States, armed forces, industry and academia can collaborate, experiment and accelerate innovation together.

The event combines expert briefings, workshops, live demonstrations and practical implementation exercises to create an environment shaped as much by strategic discussion as by technology itself. Additive manufacturing, organisers argue, only improves military effectiveness when it is integrated into wider logistics systems, industrial production networks and regulatory frameworks.

"This is a huge opportunity to be in touch with the military. We come to get feedback on our products from the customers," says Jiri Prusa of Czechia's Prusa Research, one of Europe's biggest producers of 3D printers. "Original Prusa printers are already used by most of the armies of NATO countries," he says.

That emphasis on integration has shaped the initiative from the beginning. The origins of the Additive Manufacturing Village lie in earlier EDA workshops aimed at identifying suitable technologies and materials for military use, developing common standards for deployable additive manufacturing, and strengthening cooperation between armed forces and industry.

- The first major capability-development workshop took place in 2023 in Ede, the Netherlands, bringing together nine EU armed forces, 40 companies and around 220 participants.
- A year later, the second edition in Tournai, Belgium, expanded to 12 EU armed forces, 55 enterprises and 380 participants.
- By 2026, the event in Albacete, Spain, welcomed 15 EU armed forces, more than 160 enterprises and roughly 800 participants, reflecting recognition of additive manufacturing's operational value.

engine used in missiles systems. "That is actually quite quick," he says, noting the vast reduction in the number of components needed. A 3D-printed part can be a single piece.

### Lessons from Ukraine: don't get too close

The technology also offers clear advantages in deployed operations. Structures such as field fortifications or bridging elements can potentially be produced closer to where they are needed, reducing the logistical burden associated with transporting pre-manufactured materials into theatre. On military platforms themselves, additively manufactured parts can achieve the same structural and integrity requirements as conventionally manufactured components while using less raw material.

Oslo-based Fieldmade is one example. Inside its container at the AM Village is its 'Nomad' microfactory, able to make vehicle parts, cannon parts and scan damaged parts. As with many 3D-printed products, the spare parts are manufactured using digital production files sent directly and securely from the original equipment manufacturer. But sometimes success can be as simple as a missing door handle, says Christian Dunn Norberg, the company's founder. "This is the most valuable technology to bring to the field because you can repair anything you didn't expect to break, anything that you need to complete the mission," Norberg says.

Lieutenant Colonel Oleksandr Polishchuk of the Ukrainian Armed Forces cautions that in a full-scale war such as Russia's illegal invasion of Ukraine, being too close to the frontline can be a liability. Still, the possibility of manufacturing critical parts closer to the point of need does keep operations going, he says. "Today, 3D printing has an irreplaceable place in the production of drones and related components, when it's necessary to respond to changing conditions on the battlefield and the actions of the enemy," he says. He points to Ukraine's decision to teach 3D printing at higher military educational institutions, allowing cadets to independently produce components for Unmanned Aerial Vehicles (UAVs).

### 'Not a sales event'

Several European countries, including France, Germany and the Netherlands, have already pioneered additive manufacturing during operations in Mali and Afghanistan.



An operator from Portugal's research institute Inegi uses 3D printing to repair a vehicle part, Albacete air base, March 2026.

Yet adoption across European armed forces remains uneven. One of the principal obstacles lies in qualification and certification requirements, and the contractual reflection of additive manufacturing in Original Equipment Manufacturer (OEM) service and spare part contracts with armed forces. These complicate broader military integration. Many armed forces are still at relatively early stages of experimentation, while others remain focused primarily on research and academic development.

For that reason, the AM Village functions as a forum where armed forces and industry can exchange experience, refine operational use cases and discuss common approaches



Spain's King Felipe VI visits AM Village and meets EDA's chief executive on 18 March, 2026.

**"This is the most valuable technology to bring to the field. You can repair anything you didn't expect to break, anything that you need to complete the mission"**

to standards and certification. "This is not a sales event," EDA's Huber says. Military personnel bring operational perspectives and identify practical challenges, while industry representatives place emerging technologies into context, explaining their maturity, limitations and possible applications.

"AM Village brings a lot of knowledge and the difficulties that militaries face," said João Matos, a product development engineer at Portugal's INEGI research institute, whose 3D printer container is designed to run on about the same energy used by four electric heaters. "We also want to show the industry what is possible." [K](#)

### At a glance: Additive manufacturing in the EU military

#### > What is it?

Additive manufacturing, or 3D printing, creates objects layer by layer using materials such as polymers, titanium, aluminium, carbon composites and metal powders.

#### > Why does it matter for defence?

It allows armed forces to produce spare parts and components rapidly, closer to where they are needed, reducing dependence on long supply chains and external manufacturers. Critical parts can be produced in hours rather than weeks, improving operational readiness and reducing downtime during deployments.

#### > Frontline applications

Military personnel can manufacture drone parts, vehicle components, weapon parts and repair items in mobile or field-deployable facilities.

#### > Supporting older equipment

Additive manufacturing enables armed forces to reproduce obsolete or out-of-production parts for ageing military platforms.

#### > Security benefits

Digital production files can be securely transferred directly from original manufacturers, helping protect sensitive manufacturing data.

#### > Obstacles remain

Wider European adoption is slowed by differing national regulations, certification systems and standards across armed forces.

#### > The role of the AM Village

Organised by EDA, the AM Village brings together military users, industry and researchers to test technologies, exchange operational experience and develop common standards.

› MARITIME SURVEILLANCE (MARSUR)

Since 2005, the European Defence Agency (EDA) has been developing MARSUR, a federated EU maritime surveillance network designed to complement, but operate separately from, NATO. Progress towards that goal has been slow, until now. *European Defence Matters* visits the master node – the main data centre for MARSUR – at the EU Satellite Centre (SatCen) near Madrid, to see testing on a version designed to lead the way towards secure classified data sharing.

# Towards a fuller picture – the EU's classified network of the seas

The images on our computer and smartphone screens have become unexpectedly familiar. As the world's media followed the war in Iran, tanker avatars sat either side of the Strait of Hormuz as coloured arrows and dots. These were commercial pictures showing vessels loitering in tight circles as insurers and shipowners waited for de-escalation. Everyone was suddenly watching the sea. Or rather, everyone was watching the unclassified sea.

The maps online show only part of the story, of merchant traffic based on publicly available transponder data and commercial satellite feeds. It is enough to convey disruption, but not enough to reveal what navies actually know.

Behind those commercial maps, an EDA-led project has been accelerating towards something more consequential: the creation of a classified European maritime surveillance network capable of producing what officials call a recognised maritime picture – a shared, real-time understanding of the sea that includes not only commercial shipping but also military movements, hostile tracks, shadow fleets and friendly forces. The project, run by EDA, is known as MARSUR, short for Maritime Surveillance.

After years of fluctuating ambition and experimentation, it is suddenly close, transformed by geopolitical shock: Donald

Trump's two U.S. presidencies, Russia's invasion of Ukraine, and now war in the Middle East. "At EU level we always missed this European recognised maritime picture, which NATO has," says Gianluigi Lanzalaco, EDA Project Officer Maritime Capabilities Support, an Italian naval commander who previously worked at Allied Maritime Command near London, the central command of all NATO maritime forces.


**NATO paradox**

For decades, Europe has been able to rely on NATO's maritime picture, which is underpinned by American intelligence and surveillance capabilities, even if Europeans contribute significantly to it. But as the United States urges European allies to take greater responsibility for their own security and Trump has threatened to pull out of the alliance, Europeans have begun to accelerate work on MARSUR.

The MARSUR picture is built from national contributions, drawing on data from various sources, such as coastal radars, satellites, communication systems, and command and control centres, which is then shared, enriched, and integrated through the MARSUR network.

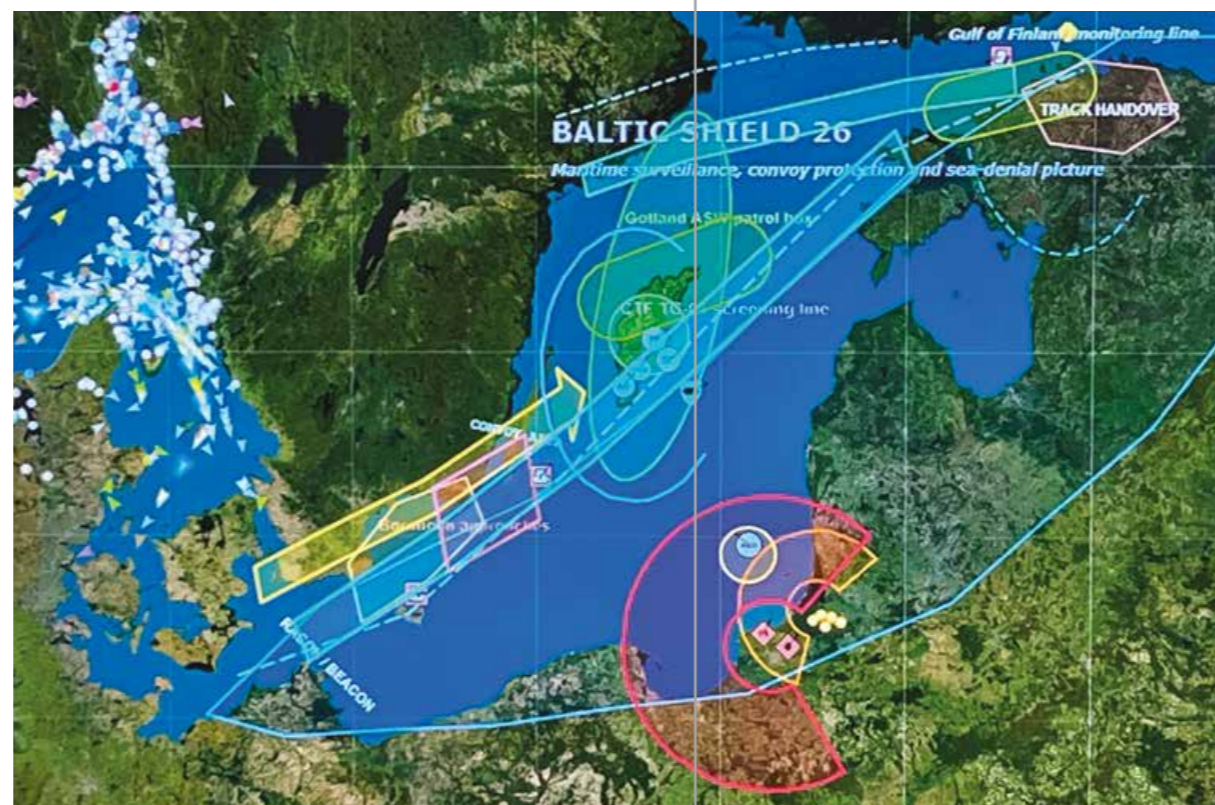
"The point is not to show every single vessel on all the seas, although we could do that," says Timo Christophe, a German

seconded national expert working at the EU Satellite Centre, which is the master node for MARSUR. "It is to be able to spot anomalies, suspicious traffic or vessels in difficulty, and share that information across our navies."



**MARSUR can overcome adversaries' efforts to go undetected**

- DARK VESSEL**  
A ship that deliberately turns off or manipulates its tracking systems to avoid detection.
- SPOOFING**  
The deliberate broadcasting of false positional data by a vessel, making it appear in a different location or under a different identity than its actual position.
- SHIP-TO-SHIP TRANSFER**  
When two vessels sail side-by-side to allow the illicit movement of cargo typically oil or other fuel, between them. This is often used to obscure the origin of cargo in cases involving sanctions' evasion or shadow fleets.



A photo taken during testing of MARSUR software shows the user interface, integrating vessel tracks, surveillance zones, operational overlays and planning in NATO Vector Graphics (NVG) format in the Baltic Sea, May 2026.



Illustration of maritime surveillance and helicopter operations, reflecting the type of coordinated activities supported by MARSUR to enhance situational awareness and operational collaboration at sea.

"Certainly the war in Ukraine has sharpened the interest of EU Member States in MARSUR," Lanzalaco says. "Romania has an active node," he says. "Cyprus and Greece too. Bulgaria is setting up its node."

For now, however, the network among EU navies can only be made up of lightly protected information. Information is encrypted up to 'EU Restricted' level, not the level of 'EU Secret'. In the absence of a dedicated, classified EU-level capability, EU missions – Irini in the Mediterranean, Aspides in the Red Sea, and Atalanta off the Horn of Africa – rely on the communication and information systems provided by host nations.

So today, MARSUR cannot provide a secure network through which navies can talk to each other and share sensitive information. That matters enormously. Without a classified layer, European navies cannot safely inject the location of their own ships, patrol aircraft or operational deployments into the system. To do so would risk exposing them to interception, cyber compromise and could even expose their own forces to becoming targets.

**Upgrade by 2028**

The challenge is not simply political or financial. It is also technical. Software must survive penetration testing. Networks require encrypted gateways, crypto devices and cross-domain solutions capable of preventing classified information from leaking into lower-security civilian systems. One malfunctioning filter could accidentally expose sensitive operational data.

Yet for the first time, the money and political momentum appear aligned. Germany has submitted a proposal as a European Defence Project of Common Interest (see EDM pages 12-15) to upgrade MARSUR to EU Secret classification. The funding request – roughly €10 million – will

modernise 18 network nodes, integrate the system with the European External Action Service's secure operational network, and enable a genuinely classified European maritime picture.

Once approved by the European Council later this year, work will begin in 2027, with a fully classified network operational by 2028. Commanders who spoke to *European Defence Matters* say they are fully committed and specifically demanding the classified layer. In February 2025, at Irini's Operational Headquarters in Rome, →

**MARSUR OR MARSUR III?**

- MARSUR dates back to 2005, when Ministers of Defence tasked EDA to develop a maritime network based on existing EU naval information-sharing systems.
- By 2011, the first version of the system had been developed and delivered to Member States.
- In parallel, the MARSUR Community brought together 23 nations committed to sharing maritime information and advancing technology, with the support of EDA and SatCen.
- Building on this progress, 16 of the 23 MARSUR nations chose to advance to a next-generation capability enabling automated information exchange. It is called MARSUR III.
- The MARSUR III network is a decentralised, peer-to-peer architecture linking national Maritime Operations Centres, EU Operational Headquarters and SatCen nodes through protected networks.

In April 2025, MARSUR achieved full interoperability with NATO systems, a milestone that would once have seemed paradoxical: the EU building autonomy through deeper technical integration with the alliance it relies on. "But the majority of the data belongs to NATO," EDA's Lanzalaco says.

**"The war in Ukraine has sharpened the interest of EU Member States in MARSUR"**

**Still not 'EU Secret'**

The war in Ukraine and the Black Sea conflict have also transformed maritime awareness beyond a niche naval concern. Russian submarine movements, sabotage of undersea infrastructure and the weaponisation of commercial shipping routes have all underscored the importance of surveillance.

Part of the momentum stems from a recognition that Europe's maritime vulnerabilities extend beyond warships. Undersea cables, offshore energy infrastructure, pipelines and ports, and supply chains have all become strategic targets or potential leverage points. Maritime surveillance increasingly overlaps with economic security.



A photo taken during MARSUR software-testing shows the maritime traffic picture in the Mediterranean on a day in May 2026, reflecting real-time vessel tracking and situational awareness.

MARSUR tested its performance in countering illegal arms trafficking to and from Libya and disrupting human trafficking networks.

The demonstration confirmed the ability to fuse real-time data from ships, national command centres, radars and satellite stations into a single coherent recognised maritime picture. It also proved its value in protecting critical seabed and underwater infrastructure, issuing alerts when vessels behaved suspiciously over sensitive areas such as pipelines or cables.

Earlier versions of the MARSUR operating software suffered from technical limitations. The latest and third phase, MARSUR III, changed that. "Finally, Member States will have a powerful new-generation tool," Lanzalaco says. Over two days in May at the EU Satellite Centre, navies from countries including Portugal, Italy, Ireland and Poland tested the new software developed by Spanish technology group GMV.

#### Search for an HQ

Ownership matters because the ultimate ambition extends beyond information-sharing between navies.

What Europe still lacks is the institutional authority to run such a network continuously. "What we need, in my opinion, is a 24/7 central command," Lanzalaco says. Existing EU operational headquarters are too fragmented or temporary. NATO already possesses such structures, but the EU does not. Which brings the situation back, inevitably, to geopolitics.

The unclassified maritime maps viewed by millions during the Hormuz crisis reveal a world growing more dangerous, congested and contested. They also reveal the EU's dependence on systems built elsewhere, often by an ally whose long-term reliability can no longer be taken for granted.

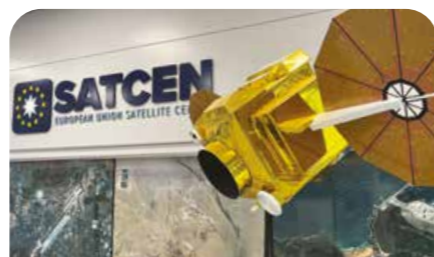
The public can see the tankers. MARSUR is about allowing European navies to see everything else. [K](#)

## Crucial for non-NATO EU countries

"For Ireland, we don't really have a system to talk to other EU navies, many of which are in NATO. Ireland is not," says Irish Naval Commander Owen Smith. MARSUR, once it reaches EU Secret level, will allow faster transmission of information on vessels of interest and improve situational awareness across different regions.

"MARSUR is a means of contacting other maritime centres," Smith says. "If you see a vessel of interest passing through your area, you can alert anyone who's interested, for example the next area of transit," Smith says. "Let's say a vessel was coming out of the Mediterranean and then into the English Channel, you can pass that onto the Spanish and the French, and then they would add their own bit of information. Everyone could see that."

Moving to EU Secret will make all the difference, Smith says. "Navies will really come to rely on MARSUR, people will talk through it," he says.

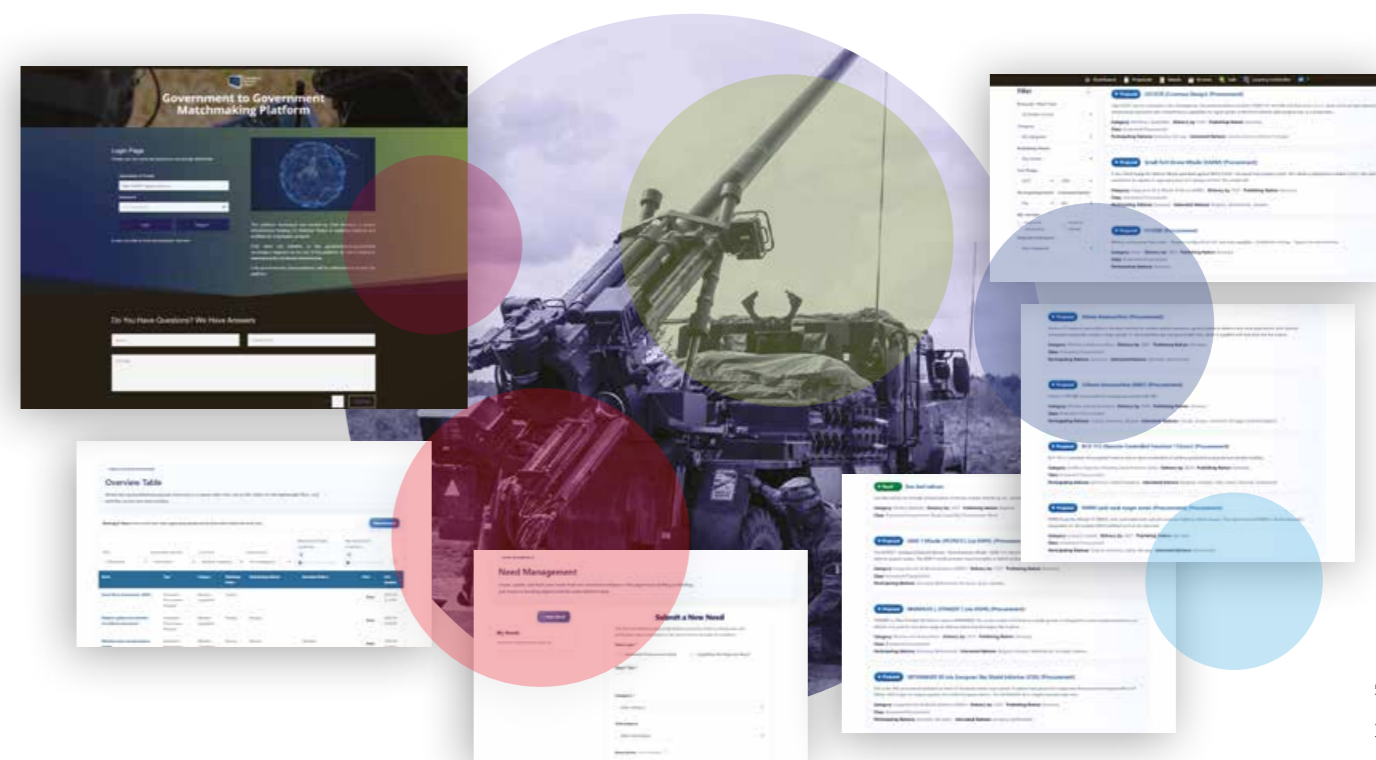


### Why the EU Satellite Centre?

- The European Union Satellite Centre (SatCen) has supported MARSUR since 2008, contributing expertise in satellite imagery analysis to strengthen maritime situational awareness among EU Member States and Norway.
- SatCen formally joined the MARSUR Users network in May 2017, enabling it to share information voluntarily and request operational maritime data directly from Member States' navies.
- SatCen is the master node for MARSUR.
- Cooperation expanded further in 2024, when SatCen and EDA signed an agreement to enhance situational awareness in line with the EU Maritime Security Strategy.
- SatCen has an office in Brussels.

### What is MARSUR?

- > MARSUR is a European maritime surveillance network, led by EDA, using software to connect national operations centres through secure systems.
- > The platform combines data from ships, national surveillance systems, coastal radars and satellites into a single real-time maritime picture covering both surface and underwater activity.
- > A new EU Secret layer will allow the secure exchange of classified maritime intelligence and tracks.
- > The system should strengthen Europe's maritime border security, protection of critical infrastructure and response to maritime threats.
- > Real-time information sharing improves operational coordination and speeds up decision-making during maritime operations.
- > MARSUR will be made up of 18 nodes. Nodes are national data hubs that connect national maritime operations centres to the MARSUR network.



### > GOVERNMENT-TO-GOVERNMENT PLATFORM

# Meaningful connections. EDA offers premium matchmaking – *just not the romantic kind*

In 2025, the European Defence Agency (EDA) stepped in at short notice to create a temporary online matchmaking website for EU Member States. EDA's Government-to-Government Platform (G2G) allows Member States to publish their military needs, as well as proposals for multilateral projects. In December, the G2G platform became permanent, and increasingly popular. *European Defence Matters* finds out why.

**I**n the late spring of 2025, during a meeting in Paris, national armament directors across the European Union found themselves circling the same problem. A new funding and cooperation framework had been set in motion – the EU's SAFE (Security Action for Europe) loan instrument – requiring countries to find a partner to access funds to buy military equipment or develop capabilities. Yet there was no secure, structured mechanism through which EU governments could see what others had in stock or identify where cooperation might emerge in a timely manner.

From that gap, a simple request emerged, directed at EDA: could someone build a web application to improve visibility between governments?

What followed was the EDA Government-to-Government Matchmaking Platform, developed fully in-house and hosted by the Agency. From the outset, its purpose was tightly defined. EDA would provide secure infrastructure helping connect Member States

and a limited number of partner countries with mature bilateral and multilateral cooperation projects. The Agency would not participate in those projects, nor shape their outcomes.

- Today the platform has more than 400 published proposals
- More than 50 published needs
- Most days see usage of more than 100 users of the 500-strong community
- So far, use of the platform has led to over 100 instances in which projects have attracted additional interest and even direct participation

"G2G is not just a portal; it is a layer for collaborative defence. Every action, from declaring interest to requesting information and updating proposals, is tracked in one workflow, reducing email dependency and keeping records synchronised in real time," says EDA IT engineer Rami Fetyani, who built the platform and continues developing its features (see *G2G Talk on page 43*). →



French AMX-10s take part in tank training in 2025 in Latvia. One of the G2G platform's advantages is that it allows smaller countries to see what bigger partners such as France are planning to acquire and potentially join them.

## Looking for a partner in a hostile world of high demand? G2G could find your match

Any search tends to start with the obvious matchmakers' favourites – the ones that attract attention quickly and rarely stay single for long. Howitzers are very much that type: confident, sought-after, and usually spoken for early. Right beside it, the deep strike programme – covering land- and naval-based cruise missiles – carries the aura of a serious long-term commitment, the kind that draws deliberate, high-stakes interest rather than casual glances.

A little further down the list are the quieter ones. The **Software Platform for C4ISR Systems** fits neatly here: not showy, but deeply relied upon, and increasingly seen as essential for anything to function smoothly.

Then comes the more dynamic middle ground – where compatibility is broader, and pairings shift depending on need. The **TACTICAL Unmanned Systems** package moves quickly through consideration, adapting as expectations evolve. In the same circle sit the light utility and armoured vehicles, dependable, flexible types, often

forming the backbone of a broader arrangement.

Out at sea, the atmosphere becomes more selective. The **Maritime Mine Countermeasure System** and **Mine Hunters** are highly specialised matches – not for everyone, but deeply valued by those who understand the fit. The **NEAR FUTURE SUBMARINE**, meanwhile, feels like a longer conversation already underway, attracting early interest from those thinking well beyond the immediate horizon.

**Railway tank platforms** and **mobile railway ramps** are less about charm and more about reliability – the kind of steady presence that only reveals its importance when everything needs to move together. At the more sensitive end, **Anti-tank mines** remain the most carefully considered – always acknowledged, often debated, and never entirely out of the conversation.

As in any matchmaking setting, the pattern is less about who is available, and more about where the strongest connections quietly begin to form.

### All your dreams fulfilled

Any passing comparison to amorous matchmaking sites is not entirely misplaced. Traditional matchmakers do not dictate relationships; they help identify compatible partners, making trusted introductions possible. In much the same way, the EDA G2G Platform allows governments to identify overlapping interests, shared requirements and compatible timelines.

Participation remains voluntary, led by Member States and shaped by national priorities and industrial considerations. Access is strict: only government representatives can use the platform, and industry is excluded by design. "This is not a commercial marketplace, but a controlled intergovernmental space," says Georgi Georgiev, EDA Project Officer Programme Coordination, who gave guidance to Fetyani on the operational requirements and outlook of the platform and administers its day-to-day use.

With those boundaries established in June 2025, Fetyani was given an unusually direct mandate: build a user-friendly solution fast. Within roughly a week, the first version emerged, based on user requirements drafted initially on paper and through rapid exchanges about what governments needed in practice:

- One function should allow a government to publish an existing procurement or development contract and open it to participation by other

governments, meaning a national arrangement could be extended into a multinational one without redesigning the underlying contract;

- The second function would work in reverse, allowing governments to publish a need – an intended procurement not yet contracted – and signal interest in forming a joint approach.

### Identifying cooperation

From the beginning, governance was designed to preserve trust in a sensitive environment. Every publication and every user request is subject to human oversight. Nothing appears in the system without review.

Georgiev and colleagues check entries for clarity, correct classification, and consistency with agreed Priority Capability Areas (see EDM pages 12-15). The platform's classification framework is aligned with European strategic priorities, ensuring that projects can be understood in a shared policy language.

Once deployed, the platform began to be used immediately. Governments started publishing offers and needs, and for the first time, procurement intentions could be seen in a single place rather than dispersed across bilateral channels. Each entry typically includes a title, category, capability area, short description, scope and specific conditions. Additional fields capture participating governments, expressions of interest and timelines.

Usage has revealed a subtle but important shift. Some administrations began identifying cooperation opportunities earlier than they had under previous arrangements. Others have used the platform to extend existing contracts, turning national procurement into shared initiatives with minimal additional friction.

### 'Opening the door'

During its initial operational phase, which was designed for SAFE and ended

Greek frigate HS Psara sails on the Mediterranean Sea during NATO's Exercise Dynamic Manta, February 2023.



## What is SAFE?


SAFE, or Security Action for Europe, is the EU's joint borrowing instrument for defence investment. The European Commission will provide up to €150 billion in long-term loans for urgent, large-scale defence procurement. The goal is to strengthen Europe's defence industrial base and support joint purchases of military equipment.

By using EU-backed loans, Member States can access cheaper financing for defence spending. But the loans are not grants. Member States using the scheme will have to pay back the money.

In November 2025, the EDA G2G platform was made accessible to all 27 EU Member States as well as to a limited number of partner countries under specific arrangements. Today, arrangements vary: some partners can publish and participate fully, while others are limited to viewing information and initiating external bilateral contact outside the system.

## "Every action is tracked in one workflow, reducing email dependency and keeping records synchronised in real time"

The platform is now a permanent service, reopening almost immediately in December 2025. A set of technical enhancements and new functionalities were added earlier in 2026, and listings are now given defined validity periods to ensure information remains current rather than outdated.

Today, the platform has settled into something practical: a quiet but genuinely useful coordination tool. "It is not there to replace procurement systems or pull decision-making into one central hub," says Georgiev. "What it does is give governments visibility, helping them spot overlapping plans earlier and opening the door to more cooperation." 



## G2G Talk to me, baby

Within the portal, G2G Talk is a new capability designed to let users query proposal-and-needs data in natural language rather than fixed keywords, enabling what developers describe as "talking to your data."

"G2G Talk reimagines platform search as a natural conversation. Powered by AI agents and models, it goes beyond keyword queries to understand user intent, retrieve relevant data, and help users ask operational questions in plain language," says EDA's Rami Fetyani.

The system is built on an indexed data layer and an AI interpretation engine that translates user intent into structured logic. Instead of manually navigating fields and filters, users can describe requirements directly, for example, identifying proposals with at least two participating countries and a minimum number of interested members. Results are returned as research-style responses with cited sources and traceable references to underlying records, rather than static list outputs. This gives users readable analytical answers while preserving evidence and auditability.

The interface is closely linked to existing proposal components, including indicators and criteria, allowing complex queries to be expressed in everyday terms while remaining grounded in structured platform data. The system allows for follow-up questions and refinements based on earlier answers.

> BRAVETECH EU

The European Defence Agency (EDA), through its Hub for EU Defence Innovation (HEDI), will implement testing, evaluation and experimentation in BraveTech EU, a joint EU-Ukraine initiative to speed up military innovation. Military experts from EDA, Member States and Ukraine, as well as officials at the European Commission, will look at areas such as air defence, battlefield networks and communications, autonomous systems and electronic warfare. *European Defence Matters* lays out the details.

# Innovation favours the brave. EDA is taking a major role in how the EU learns from Ukraine's battlefields

**U**nder an agreement with the European Commission, EDA is overseeing the experimentation phase of BraveTech EU, a €35 million programme focused on testing and developing defence innovation under scenarios modelled on conditions faced by Ukrainian forces.

The programme links Ukraine's Bravel defence technology platform with EU initiatives including the European Defence Fund (EDF) and the EU Defence Innovation Scheme (EUDIS). The EU can learn a lot from Kyiv, EDA believes. Ukraine has increased total defence production thirty-five-fold since the start of Russia's war of aggression in February 2022, especially in areas such as drones and electronic warfare, according to Commission data.

"The future of defence innovation will belong to those who can learn, adapt and deploy at speed," says Federica Valente, Manager of The Hub for European Defence Innovation. "BraveTech EU embodies this principle by connecting Europe's technological strengths with Ukraine's unparalleled experience of innovation under pressure," she says. It creates a unique

platform to accelerate the development and adoption of the capabilities that armed forces need, Valente adds.

The agreement marks an expansion of EDA's role in European defence innovation and builds on the Agency's growing track record in managing projects funded through the EDF. Since 2021, the European Commission has entrusted EDA with the management of 63 EDF-related projects worth a combined €360.5 million, positioning



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the Agency as a coordinator of multinational defence research, experimentation and capability development across Europe.

That experience played a major role in the decision to hand EDA responsibility of the experimentation phase of BraveTech EU. The Agency has increasingly focused on connecting disruptive innovations with real operational needs through HEDI, particularly using its Operational Experimentation (OPEX) model.

Ukrainian drones on display. Ukraine launched Bravel, a government-backed defence technology cluster, in April 2023 to accelerate the development, testing and deployment of military innovations for its armed forces.



The Altus ATLAS 8, a heavy-lift multi-copter drone that can carry small cargo, is shown during EDA's operational experimentation campaign in Italy in 2025.

**DefTechForge**

For Michal Wiercinski, Deputy Director at EDA's Research, Technology and Innovation Directorate, BraveTech EU is unprecedented in scale. It brings together multiple campaigns aimed at identifying the most promising solutions to address threats and challenges stemming directly from the field in Ukraine. "BraveTech EU represents a step forward for EDA and Member States, both in ambition and delivery," Wiercinski says.

Under BraveTech EU, EDA will organise test, evaluation and experimentation



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Bravel runs an annual competition for defence startups known as Battle Proven.

**"The future of defence innovation will belong to those who can learn, adapt and deploy at speed"**

campaigns across Member States and countries associated with the EDF for technologies selected during the programme's first phase, known as DefTechForge.

The DefTechForge strand is led by the Commission's Directorate-General for Defence Industry and Space and managed by a consortium including Civitta, Starburst Accelerator and Darkstar. It focuses on identifying promising technologies proposed by EU and Ukrainian startups, small companies and innovators. Rather than being a closed first phase, the DefTechForges are expected to continue on a recurring basis, channelled into EDA-led activities.

**Part of Defence Readiness 2030**

This rolling model is intended to ensure that BraveTech EU does not depend on a single cohort of innovators, but can

continuously absorb new solutions, expose them to military assessment and generate evidence for possible maturation, integration or procurement pathways.

Ukraine's wartime innovation ecosystem is an increasingly important source of practical military expertise. Ukraine has rapidly expanded domestic defence production and developed an agile network linking armed forces, government agencies and private technology firms. BraveTech EU acts both as support for Ukraine and as an investment in Europe's defence industrial and technological base.

BraveTech EU is expected to run for 42 months and will include rapid cycles, military testing exercises and challenge-driven operational trials based on battlefield requirements drawn directly from Ukraine. Implementation is already under way, with the first field-testing campaigns expected later in 2026 in cooperation with Ukrainian partners. The initiative forms part of the EU's broader Defence Readiness 2030, as the Russian threat reshapes security across the continent. [▶](#)



André Denk and Anders Sjöborg at the EDA Ministerial Steering Board meeting, May 2026.

## Chronicle of a **threat foretold**: Sjöborg on the end of Sweden's 'strategic timeout'



**Anders Sjöborg** has taken up the role of Deputy Chief Executive at the European Defence Agency (EDA). A former judge who later moved into defence, he brings more than 30 years of legal and procurement experience from the Swedish Defence Materiel Administration (FMV), the government agency responsible for acquiring and developing equipment and services for the Swedish Armed Forces, as well as government-to-government defence exports.

**F**ew officials have lived the slow but radical change in national defence as Anders Sjöborg. When he entered Sweden's defence establishment in the mid-1990s as legal counsel, politicians openly questioned whether the country needed armed forces at all. By the time he left to join EDA three decades later, Sweden had become a NATO ally, defence spending was surging and EU governments were rebuilding the military capabilities they had so neglected.

"I was once told there were no national security interests left for Sweden, except for open borders and free trade," Sjöborg says.

The Soviet Union had collapsed. EU integration was advancing. Across much of western Europe, defence spending was cut and the EU focused on missions abroad. Despite the wars in Iraq and Afghanistan, and Russian President Vladimir Putin's now-infamous speech at the Munich Security Conference in 2007, the U.S.-led international order seemed in rude health.

The survival of Sweden's defence industry – producer of Gripen fighter

aircraft, submarines and the CV90 combat vehicle – was justified on economic grounds as a source of employment and exports. The mindset was hardly unique to Sweden, Sjöborg says. Germany lived through a similar debate.

### Utopia ... interrupted

Within Sweden's defence institutions, however, doubts were beginning to surface. "After Putin's Munich speech, we started to realise that things were going in the wrong direction."

Russia's invasion of Georgia in 2008 deepened those concerns. Sjöborg and his Nordic colleagues began trying to persuade politicians that Europe's assumptions about security required reassessment. But what followed Russia's illegal annexation of Crimea in 2014 was not a sudden rearmament in Sweden, but a struggle to preserve capabilities while convincing wider society that the security environment had fundamentally changed. "We were still debating whether

to downsize parts of our defence system as late as 2015 to 2020."

Meanwhile, Sjöborg's own responsibilities expanded. At FMV, he accumulated roles spanning security, cyber, intelligence, defence exports and special forces procurement. His expanding portfolio reflected Sweden's broader awakening. Security concerns once considered peripheral moved steadily towards the centre of government.

Acceleration came only in the years before Russia's full scale invasion of Ukraine in February 2022. It shattered assumptions that had survived even after Crimea. It also transformed Swedish politics with remarkable speed.

### Knocking on NATO's door

No change was more striking than that within the Social Democratic Party. For decades, military non-alignment had been a cornerstone of its identity. NATO membership was viewed not simply as undesirable but as fundamentally incompatible with Sweden's neutral tradition. As late as the winter of 2021/2022, the government insisted there was "no chance" of Swedish NATO membership. Months later, the party had reversed course, as the combination of Russia's aggression and Finland's decision to join NATO proved irresistible.

The experience has left Sjöborg not only more committed to European security but aware of how political systems absorb, or resist, expert advice. Swedish political leaders often preferred a different interpretation of events during the country's so-called strategic timeout – the post-Cold War period where many politicians and intellectuals believed that free trade and open markets were leading to a kind of eternal world peace. "They seemed to say: 'we want the world to be how we would like it to be, not as it is actually developing.'"

Again, he sees echoes of Germany's experience, where assumptions formed in that era proved difficult to abandon even as evidence of Russian revanchism accumulated. Not that Sjöborg is happy about the return of war to Europe. He describes himself as pragmatic. "It's a sad development, but we need to preserve our society. Defence is a core task."

### Don't go it alone

Today, Sjöborg finds himself confronting the next phase of Europe's



The Gripen is a multirole fighter aircraft manufactured by the Swedish aerospace and defence company Saab AB. The new Gripen E features advanced electronic warfare systems.

defence transformation. As EDA's new Deputy Chief Executive, Sjöborg's answer begins with a simple proposition: the EU's traditional separation between civilian and military spheres no longer reflects reality.

**"We really need each other as Europeans. We need to cooperate, we need to listen to each other"**

"It's becoming increasingly irrelevant." Defence, he argues, now touches everything from industrial policy and digital infrastructure to financial and environmental legislation. The challenge is not merely spending more money but thinking more coherently.

Again and again, he returns to the same idea: integration. National governments, EU institutions, armed forces and industry must work together more closely. The old compartmentalised approach, with ministries and organisations operating in isolation, is no longer sufficient. "That will no longer work."

The EU's strength, he believes, will depend less on any single weapon system than on its ability to overcome fragmentation and build a genuinely shared strategic culture. Recognising that is difficult. Acting on it is harder still. "We really need each other as Europeans," Sjöborg says. "We need to cooperate, we need to listen to each other. Because countries, organisations, even departments can get things wrong when they try to go it alone. Sweden is no exception."

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