STUDY

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European Defence Projects of Common Interest: From concept to practice

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ABSTRACT

The development of European Defence Projects of Common Interest (EDPCIs) represents a decisive step towards strengthening the EU's crisis response, economic competitiveness and strategic autonomy. EDPCIs aim to overcome fragmented national defence efforts by promoting joint development, production and procurement of key military capabilities, enhancing the EU's governance structure for defence investment. While earlier frameworks like the EDF, PESCO and CARD have achieved limited integration, EDPCIs could enable large-scale collaboration by pooling demand, streamlining supply chains and reinforcing the European Defence Technological and Industrial Base. Proposed flagship projects such as the Drone Initiative, Eastern Flank Watch, Air Shield, and Space Shield address urgent needs but face challenges of funding, technology gaps and diverging national planning cycles. Other potential EDPCIs, such as a Cyber Defence Shield, a Combat Cloud, Military Mobility Network or EU Command and Control could expand into critical enabler domains but also depend on balancing EU-level regulation and intergovernmental ownership and ensuring sustained financial and political backing. This study recommends a coherent governance framework, harmonised standards and inclusive industrial participation to sustain innovation. Ultimately, success will hinge on EDPCIs' capacity to deliver credible capabilities and advance Europe's goal of a resilient, autonomous and integrated defence posture.

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Executive summary

The European Union's (EU) steps towards developing '*European Defence Projects of Common Interest*' (EDPCIs) mark a decisive moment in Union efforts to respond to crises, boost economic competitiveness, strengthen the European Defence Technological and Industrial Base (EDTIB) and enhance the EU's strategic autonomy. Against the backdrop of Russia's continued war on Ukraine and transatlantic uncertainties, EDPCIs seek to move the Union beyond fragmented capability and procurement efforts and towards the joint development, production and procurement of strategic military capacities, as well as enhancing its governance structure for defence investments. If successfully developed, EDPCIs could redefine how Europe conceives of defence integration: less as a coordination exercise among sovereign states, as it largely remains today, and more as an industrial and technological project of European sovereignty.

The study shows that while the European Defence Fund (EDF), Permanent Structured Cooperation (PESCO) and the Coordinated Annual Review on Defence (CARD) have yielded incremental progress, none have yet produced the scale of cooperation required to close Europe's capability gaps. EDPCIs, drawing inspiration from the Union's experience with Important Projects of Common European Interest (IPCEIs), offer a way to aggregate demand, rationalise supply chains and strengthen the EDTIB. Yet success will depend on how effectively the Union manages the interplay between supranational regulation and intergovernmental ownership, and on its ability to mobilise sustained financial and political commitment from Member States.

The study identifies both opportunities and risks. On the one hand, proposed flagships such as the *European Drone Defence Initiative*, *Eastern Flank Watch*, *European Air Shield* and *European Space Shield* respond to genuine operational needs and could generate significant industrial spillovers. On the other hand, their feasibility is constrained by uneven technological readiness, uncertain financing and the enduring divergence of national defence planning cycles. Other potential EDPCIs, such as a *Cyber Defence Shield*, a *Combat Cloud*, *Military Mobility Network or EU Command and Control (C2)*, illustrate how the EDPCI framework could expand into critical enabler domains, but they also reveal the complexity inherent in coordinating cross-border capability projects.

To mitigate these challenges, this study argues that the EU should anchor EDPCIs in a coherent governance structure based on a harmonisation of standards, effective procurement rules and realistic timelines. To this end, the study recognises that existing and future financing tools should be rationalised, especially if the EU wants to create a reinforcing positive dynamic between the EDF, EDIP, SAFE, European Investment Bank (EIB) sources and the EDPCIs. Industrial participation in EDPCIs should remain inclusive, encouraging SMEs and mid-caps to join cross-border consortia that diffuse innovation throughout the EDTIB. Above all, this study argues that EDPCIs must serve the Union's long-term objective of strategic autonomy by ensuring European design authority, secure supply chains and the retention of critical technologies within the Union.

The success of EDPCIs will ultimately be measured not by the number of projects launched, but by their ability to deliver credible capabilities, strengthen Europe's autonomy and underpin a more autonomous, resilient and integrated European defence posture.

1 Introduction

Brussels smells of gunpowder these days. Pushed by geopolitical shifts and a dramatically worsened threat landscape, EU Member States are spending more on their defence and they have agreed to meet more ambitious spending targets through NATO's new '5 % of GDP' agreement. Yet, accumulating national defence expenditures does not automatically contribute to a 'common defence' (Article 24(1) TEU) and does very little to improve 'European strategic autonomy' (Blockmans, 2025; Fiott, 2025a). To persuade public and private institutions to channel more funding to the Readiness 2030 Plan, i.e. beyond the EUR 150 bn Security Action for Europe (SAFE) loan instrument, and to the general budget of the EU under the next Multiannual Financial Framework (MFF), the European Commission and the High Representative (HR/VP) have proposed that concrete projects be developed that plug some of the most glaring capability gaps that Europe faces.

The task of filling military capability gaps in Europe is a long-standing one. From the earliest conception of the Common Security and Defence Policy (CSDP), and as stated in Article 42(3) TEU, the 'Member States shall undertake progressively to improve their military capabilities'. To this end, the EU has developed a range of military capability priority and development tools such as the Capability Development Plan (CDP), the Coordinated Annual Review on Defence (CARD) and Permanent Structured Cooperation (PESCO). Such tools have, so far, had mixed results. Nevertheless, the need to fill military capability gaps in the EU has taken on more urgency since Russia invaded Ukraine. The Versailles Declaration (2022) doubled down on the idea that the Union 'must resolutely invest more and better in defence capabilities and innovative technologies' (European Council, 2022: 4), a point echoed in the EU's Strategic Compass.

Ever since the first Trump presidency and Brexit, the EU has sought to boost European defence cooperation, not least in defence innovation through the European Defence Fund (EDF). This fund has already achieved some success in developing defence technologies and enhancing cooperation between firms and research institutes. However, ahead of the EU today are major questions related to military capabilities beyond innovation based on the idea of joint development and procurement. Cooperation in capability development is by no means a simple endeavour. There are only a handful of truly European capability projects that have made it to life, albeit with the familiar problems of cost and delivery overruns (e.g. Eurofighter, A400M, FREMM). So, Europeans are spending more on defence, but whether they can spend better or spend together in the future remains to be seen.

However, with the prevailing winds in the transatlantic relationship and the ongoing war in Ukraine, EU Member States appear committed to the idea of developing military capabilities together. While many capitals are used to acquiring military equipment from the United States, there is a growing sense that relying on Washington for equipment comes with political risks and Europeans are resolved that additional national defence expenditure should benefit their own defence industries. The challenge here is that very few EU Member States have the capacity to develop military capabilities from the early stages of R&D all the way to development and operationalisation. In this respect, steps are underway to ensure that at least some of the additional defence spending in Europe makes its way into collaborative capability projects. As stated in the EU Defence White Paper, 'developing large-scale, pan-European cooperation to address critical capability gaps in priority areas is a strategic necessity' (European Commission, 2025a: 6).

To this end, the Union is increasingly moving towards the idea of 'European Defence Projects of Common Interest' (EDPCIs) as a way to structure capability development efforts. Indeed, EDPCIs are not only conceived as a way for Member States to 'urgently pool their efforts' on capability development (European

Commission, 2025a: 3), but they are seen as an effort to prioritise among a suite of capability priorities identified in both EU and NATO contexts. The EU CDP from 2023 lists 22 priority capability gaps, the CARD report of 2024 ends up with 18 priorities for European capability collaboration and the 2025 Joint White Paper on Defence Readiness 2030 points to 7 specific gaps including air and missile defence; artillery systems; ammunition and missiles; (counter) drone systems; military mobility; Artificial Intelligence (AI), cyber, quantum and electronic warfare; and strategic enablers and critical infrastructure protection (European Defence Agency, 2024a; European Commission, 2025a: p. 7). Endorsing the proposals made by the Commission and the High Representative, the European Council of March 2025 called for 'an acceleration of work on all strands to decisively ramp up Europe's defence readiness within the next five years' (European Council, 2025).

In one sense, the EDPCIs would be the logical next step in moving from prioritisation to investment, development and operationalisation. EDPCIs could also be seen as a way to rationalise future spending within EU instruments such as SAFE or the EDIP. Such projects can also help reshape the European defence market by creating important value chains and increasing the competitiveness of the EU in the vital areas at the crossroads of defence, industry, research and development and innovation. As the Commission's 'Scoping Paper', prepared in advance of the informal EU leaders' meeting in Copenhagen on 1 October 2025, underlined: '[a]ggregating European demand will also enhance scale effects and support ongoing efforts to collectively secure and ramp-up key production nodes and supply chains' (European Commission, 2025b). The Joint Communication 'Preserving Peace – Defence Readiness Roadmap 2030' (henceforth, 'Readiness Roadmap') released on 16 October 2025 only underlined the need to urgently address the competitiveness of the European defence sector.

However, we should acknowledge that a specific framework enabling the creation of 'important projects of common European interest' has been in place for the past 20 years. The success rate of development and implementation of such projects — mainly in cross-border energy infrastructure, batteries, hydrogen and electrolysers, environmental protection, support for microelectronics development and communication technologies — has been mixed (see Section 3). For EDPCIs to be created, and, more importantly, to be successful, there will be a need to create coalitions of EU Member States that are interested in defence industrial collaboration and that align on the most pressing military requirements. Such an assumption, however, bucks the trend of the past few decades in Europe, where military capability collaboration has been sluggish, costly and underwhelming. Accordingly, this study focuses on the potential role of EDPCIs and examines in which capability areas and projects EU funding for EDPCIs could be most promising. More concretely, the study asks what capability gaps can be best filled by EDPCIs benefitting from EU funding to meet both short-term needs and longer-term ambitions to strengthen the European Defence Technological and Industrial Base (EDTIB).

To provide an answer to this double-barrelled question, this study is organised into five main sections. Following this introduction, Section 3 of the study conceptualises the experience of important European projects of common interest (IPCEIs), and it applies the lessons learned from IPCEIs to the EDPCIs. Section 4 analyses the legal foundations of EDPCIs and it also assesses the selection criteria for flagship projects. Section 5 looks specifically at the present and future financing mechanisms for EU defence projects, and it specifically analyses the role of EDIP. Section 6 analyses the four projects already proposed by the Commission, and as outlined in the Readiness Roadmap, such as the 'Eastern Flank Watch', the 'European Drone Defence Initiative', the 'European Air Shield' and the 'European Space Shield'. We critically assess each of these proposed EDPCIs and provide feedback on their feasibility and impact for European

defence. Section 7 then offers readers additional ideas for potential EDPCIs, including a 'Cyber Defence Shield', a 'Combat Cloud', 'Military Mobility' and EU 'Command and Control' (C2). The idea here is to provoke reflection beyond the four projects already outlined by the Commission in September 2025 and the October 2025 Readiness Roadmap. Finally, the study ends with some concluding thoughts and specific recommendations for the Union to consider as it embarks on the development of EDPCIs.

The study has been conducted on the basis of desk research against the backdrop of a rapidly evolving political debate. This made access to documents even more challenging than normal in the area of defence policy research. To fill in the blank spaces, the authors have complemented their desk research with a handful of interviews (see Annex). The study takes an interdisciplinary approach to the strategic, legal, financial, economic and operational aspects of the initiation and implementation of EDPCIs.

2 Conceptualisation of and experience with European projects of common interest

While an official definition does not exist, 'important projects of common European interest' (IPCEIs) have been a long-standing feature of European policymaking, referenced in Article 107(3)(b) TEU as potential recipients of state aid which may be considered compatible with the single market. The rationale for this derogation from the rules of state aid is that IPCEIs are public goods that may have significant spill-over effects on the single market and society. Because of the sizeable technological or financial risks involved and the intricate international cooperation required, such projects are often challenging to fund. This is why state aid — which is generally considered incompatible with the functioning of the internal market — may be crucial; subject to control by the Commission (European Commission, 2021a).

Being classified as a project of common interest can bring several other significant benefits, such as additional EU funding, accelerated planning, authorisations and better regulatory conditions. This enables the realisation of projects on a scale that would otherwise be more difficult. In addition, the European Commission has highlighted that IPCEIs represent an opportunity to promote economic growth, job creation, sustainable development or improved competitiveness in the places where they are developed (European Commission, 2021b). The European Commission, which guards against Member States granting selective advantages to some companies while putting others in an unfavourable position, is responsible for drawing up the list of projects in cooperation with EU Member States. The selection criteria which have hitherto been applied to, for instance, the field of energy infrastructure, include the involvement of at least two EU Member States, market integration by reducing bottlenecks and increasing system flexibility, and the guarantee of security of supply[1].

Whereas the pre-Lisbon Treaty rules limited IPCEIs to the areas of R&D[2] and environmental protection[3], the Commission in 2014 adopted a communication laying out a dedicated framework with guidelines for analysing whether state aid given to IPCEIs in *any* sector of economic activity is compatible with the internal market[4]. The overriding criterion is that such projects should provide substantial potential to advance broader EU treaty and policy objectives. Bailouts of ailing enterprises were initially excluded, but

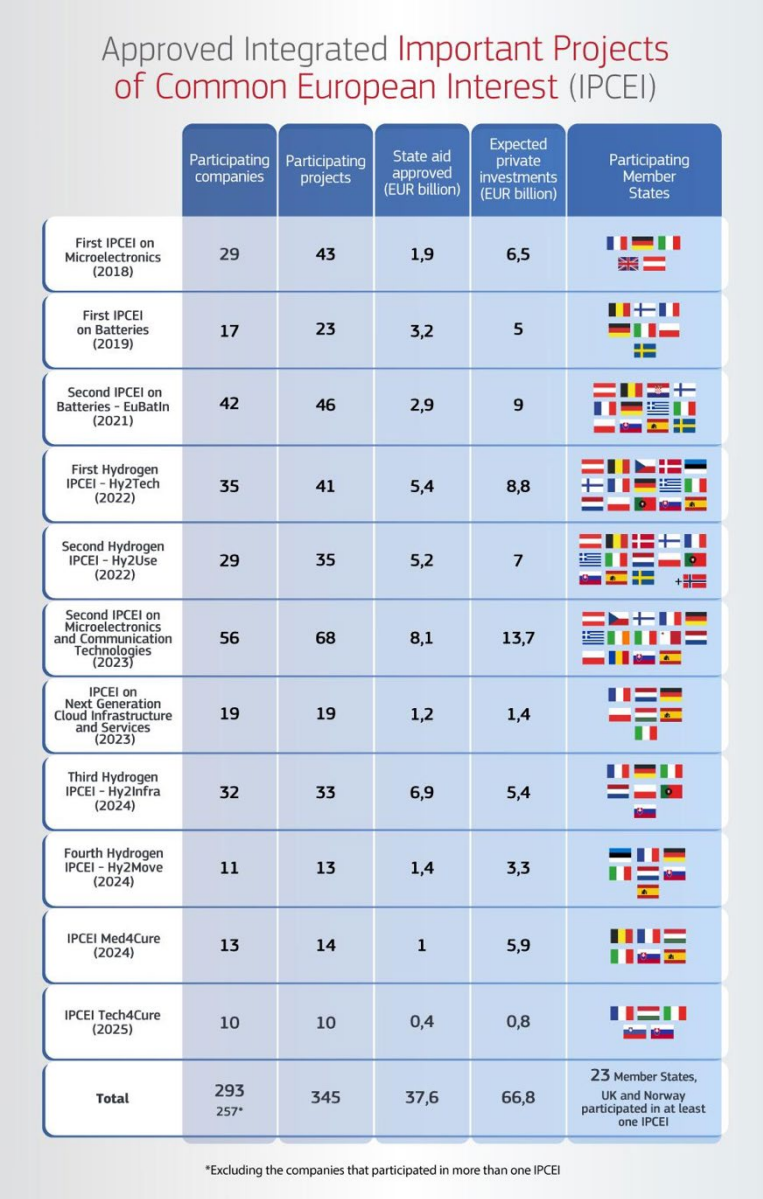
[1] Regulation (EU) No 347/2013 of the European Parliament and of the Council of 17 April 2013 on guidelines for trans-European energy infrastructure and repealing Decision No 1364/2006/EC and amending Regulations (EC) No 713/2009, (EC) No 714/2009 and (EC) No 715/2009 Text with EEA relevance, OJ L 115, 25.4.2013, 39–75.
[2] Community framework for state aid for research and development and innovation, OJ C 323, 30.12.2006, 1–26.
[3] Community guidelines on State aid for environmental protection (Text with EEA relevance), OJ C 82, 1.4.2008, 1–33.
[4] Communication from the Commission — Criteria for the analysis of the compatibility with the internal market of State aid to promote the execution of important projects of common European interest, OJ C 188, 20.6.2014, 4–12.

the 2020 update of the guidelines relaxed this rule for Corona-stricken companies[5]. To assist in the analysis of project potential and implementation, the Commission in March 2018 established a Strategic Forum on IPCEIs, a high-level expert group that gathers 44 representatives of the Member States, industry and the research community and that identifies key strategic value chains in the EU and develops a common vision for joint action and investment between the EU, its Member States and industry[6].

In the past decade or more, the concept of important projects of common European interest has found expression in a limited series of projects dealing with cross-border energy infrastructure, batteries, hydrogen and electrolysers, support for microelectronics development and communication technologies and next-generation cloud infrastructure and services (see Table 1). Practical experience with the development and implementation of IPCEIs has been uneven, though. The first two IPCEIs, the Øresund and the Fehmarn Belt fixed railway links, were challenged before the General Court of the Court of Justice of the EU (CJEU), which, on procedural grounds, partially annulled the state aid that the Commission had approved[7]. The projects on microelectronics and batteries have also experienced teething problems, including the challenge of the 'synchronisation and conciliation of common timetables and objectives (including multiple governments and companies) with differing national interests and budgets'. The projects also suffered from issues related to 'the management and safeguarding of confidential business data in an integrated project' and 'bringing national funding rules into line with the IPCEI framework' (Szczepański, 2020).

[5] Communication from the Commission concerning the prolongation and the amendments of the (...) Communication on the Criteria for the Analysis of the Compatibility with the Internal Market of State Aid to Promote the Execution of Important Projects of Common European Interest, (...) C/2020/4355, OJ C 224, 8.7.2020, 2–4.
[6] Commission Decision of 30 January 2018 setting up the Strategic Forum for Important Projects of Common European Interest, OJ C 39, 2.2.2018, 3-7.
[7] Case T-68/15, HH Ferries VS et al., ECLI:EU:T:2018:563 and T-630/15, Scandlines, ECLI:EU:T:2018:942.

Table 1: Approved IPCEIs



Approved Integrated Important Projects of Common European Interest (IPCEI)

	Participating companies	Participating projects	State aid approved (EUR billion)	Expected private investments (EUR billion)	Participating Member States
First IPCEI on Microelectronics (2018)	29	43	1,9	6,5	
First IPCEI on Batteries (2019)	17	23	3,2	5	
Second IPCEI on Batteries - EuBatIn (2021)	42	46	2,9	9	
First Hydrogen IPCEI - Hy2Tech (2022)	35	41	5,4	8,8	
Second Hydrogen IPCEI - Hy2Use (2022)	29	35	5,2	7	
Second IPCEI on Microelectronics and Communication Technologies (2023)	56	68	8,1	13,7	
IPCEI on Next Generation Cloud Infrastructure and Services (2023)	19	19	1,2	1,4	
Third Hydrogen IPCEI - Hy2Infra (2024)	32	33	6,9	5,4	
Fourth Hydrogen IPCEI - Hy2Move (2024)	11	13	1,4	3,3	
IPCEI Med4Cure (2024)	13	14	1	5,9	
IPCEI Tech4Cure (2025)	10	10	0,4	0,8	
Total	293 257*	345	37,6	66,8	23 Member States, UK and Norway participated in at least one IPCEI

*Excluding the companies that participated in more than one IPCEI

Source: European Commission

Still, the Strategic Forum on ICPEIs is giving rise to some important and relevant lessons learned on how to improve cooperation through these projects. For example, in a report released in 2019, the smart grid thematic group of the Strategic Forum evaluated six energy infrastructure projects of common interest and highlighted important lessons learned from the first batch of IPCEIs (Vasiljevska and Felgo, 2019). These lessons included a need to demonstrate openness to all Member States and companies (through open tenders or open calls); for early involvement of the Commission, together with the Member States, at the design phase of an IPCEI; intense cooperation and coordination among the Member States throughout the lifespan of the project; and an individual, tailored approach that is based on the distinctive characteristics of each IPCEI and the technologies used.

Table 2: Lessons learned from ICPEIs for EDPCIs

Lesson	Description	Implications for EDPCIs
Public good and spill-over logic	IPCEIs are justified because of their potential to generate significant technological, economic, and social spill-overs.	Future EDPCIs should clearly articulate collective European benefits to secure approval.
Cross-border cooperation requirement	A minimum number of Member States were involved in IPCEIs, leading to integration benefits (e.g. reducing bottlenecks, improving supply security).	Defence IPCEIs must ensure genuine cross-border value chains and interoperability.
Strategic Forum for ICPEIs	Established in 2018 to identify strategic value chains and coordinate policy and investment.	EDPCIs could benefit from such a Strategic Forum (e.g. DIRB).
Challenges in early projects	There were coordination problems (microelectronics, batteries) due to misaligned national priorities and funding rules.	Highlights the need for stronger governance, legal clarity and harmonised timelines for EDPCIs.
Coordination and synchronisation	Synchronising national timetables and budgets proved difficult across governments and firms.	EDPCIs will need coordination and joint planning mechanisms.
Confidentiality and data management	Managing business-sensitive information across borders created complications.	A secure, shared information governance system for EDPCIs is essential.
Adaptation to national funding rules	National differences in funding criteria delayed project execution.	Standardise eligibility and co-financing rules from the outset for EDPCIs.
Openness and inclusiveness	Projects must be open to all Member States and firms (via open calls or tenders).	The EDPCIs should avoid a concentration of benefits; encourage participation from SMEs and smaller states.
Early involvement of the Commission	The Commission's engagement at the design stage improved coordination and compliance.	Early political and regulatory buy-in is crucial for complex industrial projects.
Continuous Member State cooperation	Sustained cooperation throughout the project lifespan was critical for success.	Defence projects require enduring political commitment beyond the launch phase.
Leveraging existing political momentum	Building on established alliances (e.g. European Battery Alliance) amplified success under IPCEIs.	Defence cooperation should use existing PESCO or EDF frameworks for legitimacy, or develop bilateral/minilateral defence projects in Europe.

Lesson	Description	Implications for EDPCIs
Leadership and coordination role	France's leadership in coordinating the battery IPCEI accelerated approvals.	Assign clear leadership or co-leadership to capable Member States or consortia.
Administrative Streamlining	Standard templates and clear definitions sped up approvals.	Institutionalise administrative templates for EDPCIs.
Political visibility and stakeholder mobilisation	High political visibility and commitment attracted industry participation.	EDPCIs should maintain strong Council and Commission-level visibility.
Regular stakeholder meetings and communication	Frequent interactions built common understanding among actors.	Create permanent stakeholder forums to sustain coordination.
Clarity on participation rules	Defined entry and exit rules enhanced transparency and governance.	This will be essential for managing industrial consortia in sensitive defence domains.
Transparency and guidance	Need for clearer guidance and better support to stakeholders.	EDPCIs will need to help rationalise existing EU defence financing tools.
Inclusive participation and dissemination	Ensuring SME participation and sharing of results strengthens legitimacy and impact.	EDPCIs potentially require open dissemination of dual-use technological results.

Source: Author's own

Furthermore, in the assessment of the IPCEI on batteries, which was prepared and adopted faster using the lessons from its predecessor on microelectronics, the European Commission underlined further factors for success. First, there was a need to build on the 'already existing strong political clout (European Battery Alliance, Strategic Action Plan)' of existing projects to create spill-over effects. Second, it was beneficial for there to be the heavy involvement of one Member State (France) in coordinating the pre-notification and notification process, which allowed the submission of the whole package at the start of the process. Third, it was vital to address difficult issues at an early stage based on the experience from the previous IPCEI. Fourth, the increased use of template documents streamlined the process. Fifth, it was beneficial to ensure close work with DGs RTD and JRC on eligible costs. Sixth, it helped that there were clarifications of difficult concepts and definitions. Finally, the use of a claw-back mechanism for larger aid beneficiaries was effective (Szczepański, 2020). In addition to these specific lessons learned on ICPEIs, a range of other recommendations have proposed including 'assigning an important role to high political visibility and ownership of the project in mobilising multiple stakeholders'; 'signalling a strong commitment by both the industry and the member states'; 'holding regular meetings with all stakeholders to develop a common understanding'; and 'developing clearer rules on how to join and leave an IPCEI' (Szczepański, 2020). Finally, it would also be helpful if the Commission clearly explained the possibility of combining an IPCEI with other R&D&I supporting funds, such as the Just Transition Fund and existing regional funds (Szczepański, 2020).

What is more, the Strategic Forum has suggested the following improvements be made in future. First, to increase the transparency, clarity and provision of hands-on guidance to all stakeholders. Second, to

increase participation in the formation/design phase to include all Member States and companies of all sizes. Third, ensuring wider dissemination of results. Fourth, ensuring the involvement of central EU funds. Finally, to improve the efficiency and speed of the decision-making process, given how highly dynamic the technologies are (Strategic Forum, 2019).

While not a silver bullet, IPCEIs offer an interesting option for complex endeavours aimed at increasing the EU's technological sovereignty. Extending this philosophy and *modus operandi* to the area of defence industrial integration is a logical step to take in securing supplies and integrating highly fragmented European defence markets. While defence projects are exempt from state aid rules due to Article 346 TFEU, the rules of programmes such as EDF and specific exemptions where a project has both military and civilian applications (under Article 107.3(c) TFEU), EDPCIs still offer the Union an interesting framework to develop common defence projects. Indeed, the March 2024 European Defence Industrial Strategy (EDIS) spelt out an ambitious timeline and identified likely priorities for EDPCIs:

> 'By 2035, the EU should have in place, or at a mature stage of development, projects for capabilities that are European by nature. Subject to Member States' agreement, these could include: capabilities related to integrated European air and missile defence (whose criticality has been confirmed during Russia's unprovoked military aggression against Ukraine), Space Domain Awareness, a network of cyber defensive capabilities commensurate to the need to effectively protect the Union, as well as properly dimensioned maritime and underwater protective assets' (European Commission, 2024).

Responding to US announcements to move an unspecified number of troops and key enablers away from Europe, the March 2025 White Paper for Defence Readiness 2030 brought the time horizon forward and specified areas for which Member States should 'urgently pool their efforts [...], including through a set of Defence Projects of Common European Interest', including: air and missile defence; artillery systems; ammunition and missiles; drones and counter-drone systems; Military Mobility; AI, Quantum, Cyber & Electronic Warfare; and strategic enablers and critical infrastructure protection. Except for Military Mobility, this mirrors the priorities set out by the European Council of 6 March 2025. It is worth noting, though, that the language about having these priority areas covered by EDPCIs remains ambiguous (at least in the public domain).

However, the Commission did present a 'Scoping Paper' on the Readiness 2030 Plan, which included further details on the EDPCIs, including some proposals to Member States on what projects could be launched. Indeed, the 'Scoping Paper' called for the launching of European readiness flagship projects to 'benefit the security of Europe as a whole, while being mutually reinforcing' (European Commission, 2025b). The Commission called for the flagship projects to be 'pan-European by design and by nature' and it underlined that '[f]lagships are of a cross-cutting nature and imply parallel progress in several capability areas and in sectors beyond core defence. Protection of critical infrastructure, border management and internal security will be of particular importance' (European Commission, 2025b: 4). To this end, the Commission and High Representative have proposed to the European Council four specific flagship projects: 1) the Drone Defence Initiative; 2) the Eastern Flank Watch; 3) the European Air Shield; and 4) the European Space Shield[8].

[8] Joint Communication to the European Parliament, the European Council and the Council, 'Preserving Peace – Defence Readiness Roadmap 2030', JOIN(2025) 27 final, Brussels, 16.10.2025.

In the Defence Readiness Roadmap 2030, the Commission and HR/VP went further by outlining a structured timeline to drive the deployment of common European defence flagship projects against measurable milestones up to the year 2030. They proposed forming 'Capability Coalitions' in all priority capability domains by the start of 2026, with lead and co-lead states defining implementation plans and governance. Concurrently, the Readiness Roadmap endorses the four pan-European flagship programmes (European Drone Defence Initiative, Eastern Flank Watch, European Air Shield, European Space Shield), to be developed and made operational no later than 2028. To underpin these efforts, the Readiness Roadmap sets out delivery targets such as raising the share of joint procurement to 40 % by the end of 2027, increasing defence investment sourced from the EDTIB to at least 55 % and scaling up industrial production to reduce reliance on non-EU suppliers. The Readiness Roadmap also calls for legislative adoption of the Defence Readiness Omnibus and Mini-Omnibus by end-2025 to facilitate harmonised procurement rules, the establishment of a unified EU-wide Military Mobility area by the end of 2027 and the incorporation of private capital and EIB financing via a defence equity 'fund of funds' by early 2026.

As we will show later in this study, there are important reasons why these four projects were promoted as EDPCIs, but there are also a multitude of questions surrounding their relevance and plausibility as core projects.

3 Legal foundations for EDPCIs

Unlike in other industrial sectors, a single market for defence equipment has not been developed. Member States have regularly used Article 346 TFEU to exempt certain defence-related industries and measures from internal market rules when they consider this to be necessary for the protection of their essential security interests. A European Defence Technology and Industrial Base is, however, considered to be a crucial prerequisite for the Union's defence readiness and credible deterrence. And, as with other areas of the single market, it can be an important contributor to economic growth, competitiveness, innovation and job creation. As noted by Enrico Letta in his report for the EU on the single market, 'Europe's defence industry remains a crucial industrial player, often leading disruptive innovations across various sectors. Strengthening European defence, therefore, is vital not only for sovereignty but also for the continent's economic security, reindustrialisation, and global competitiveness, making the DTIB an essential player in the digital and energy transitions' (Council of the EU, 2024: 73).

Using its competence to support EU countries' industrial policy, the Commission has since 2021 employed Article 173(3) TFEU as the main legal basis for the adoption of defence-related regulations, through the ordinary legislative procedure — hence with the Council deciding by qualified majority vote (QMV). With the creation of a European Defence Fund (see Section 4), the Commission has sought to boost defence innovation through investments and to help EU companies develop cutting-edge and interoperable defence technologies and equipment. With follow-up regulations on support for ammunition production (Act in Support of Ammunition Production — ASAP) and the procurement of weapons (European Defence Industry Reinforcement through Common Procurement Act — EDIRPA), the EU has also aimed to enhance cooperation among defence companies and research/technical institutes across Europe to increase their production capacity, allow for economies of scale, reduce costs, boost innovation and create a true single market for defence equipment (see below).

In March 2024, the executive proposed a European Defence Industrial Programme (EDIP) as a gap filler between 2025 and the next MFF (2028-2035), providing EUR 1.5 bn in new funding to beef up the EDTIB

and that of Ukraine (cf. Article 212 TFEU as additional legal basis) via the EU budget. On 16 October 2025, the European Parliament and the Council reached provisional agreement on the draft regulation on the EDIP, which makes formal adoption possible by the end of 2025. In structural terms, EDIP is designed to deepen the Commission's new role established through the temporary ASAP and EDIRPA, allowing it to intervene in a number of regulatory areas and in defence planning in times of supply crisis. The Regulation on EDIP foresees the conferral of new powers on the Commission, like those pioneered under the emergency response Covid-19 vaccine strategy and replicated in the EU's Chips Act and Critical Raw Materials Act.

As such, EDIP is intended to strengthen the European Commission's capacity to support, coordinate and rationalise Member States' demand for military equipment vis-à-vis the defence industry. It is also designed to enable the Commission to negotiate defence contracts (which it could co-finance) on behalf of groups of Member States. This would give the executive an unprecedented role in selecting defence projects of 'common interest' that could be co-financed by the EU. Finally, the EDIP can authorise the Commission, in exceptional circumstances and under certain strict conditions agreed with the Member States concerned, to impose priorities on defence companies in terms of military production and critical components, even going so far as to impose sanctions if necessary.

Under the EDIP, a new Defence Industrial Readiness Board (DIRB) is proposed to assist the Commission and be responsible for, inter alia, supply chain surveillance and monitoring, proposing that the Council activate a state of supply crisis, advising and assessing emergency measures, facilitating coordination action between the Commission and the Member States, and identifying funding priority areas taking into account Member States' capability development plans. Based on Articles 114(1), 173(3), 212(2) and 322(1) TFEU, the DIRB will operate along supranational lines. Even if it is said to 'complement' the European Defence Agency (EDA), the DIRB would eclipse the Agency in a state of supply crisis — which may come sooner than Member States wish for if China, for instance, blocks the supply of certain rare earths and critical materials needed in the European defence industry.

Sat within the Common Security and Defence Policy (CSDP), the EDA runs along intergovernmental lines, which has dampened its effectiveness. With its limited staff and budget, the reluctance of (big) Member States' defence ministries to cooperate and NATO's refusal to exchange information about its planning processes, the Agency has been criticised for being unable to play an impactful role in terms of fostering more R&D and procurement of military equipment (Scazzieri, 2025). Acting under the authority of the Commission's Directorate General Defence Industry and Space (DG DEFIS), the DIRB may well become the channel through which to functionally spill over and supranationalise certain tasks hitherto managed by the EDA. For reasons mentioned above, the rationale to use the Community method in arranging EU support for Member States' R&D and joint procurement is indeed strong.

However, the Commission indeed faces a challenge in promoting the most effective cooperative framework for the management of ECDPIs. A number of options are on the table. In fact, the past proposal for the EDIP Regulation was careful to outline a number of potential candidates for a 'procurement agent' – or body that would be responsible for managing collaborative defence projects. Recital 14 foresees a Member State authority, the EDA, a Structure for European Armament Programme or an international organisation 'to conduct a common procurement' on behalf of the Member States. In practice, such a procurement agent should be appointed by unanimity and would 'carry out the procurement procedures and conclude the resulting contracts with contractors on behalf of the participating countries [and the procurement agent] may act as the coordinator of the consortium and may therefore be able to manage

and combine funds' (Article 12(2) Proposed EDIP Regulation). In essence, this means that national procurement agencies, the EDA, bodies such as OCCAR or even the Commission itself could play the role of procurement agent (Interview 1).

3.1 Selection criteria

Article 15 of the draft regulation on EDIP notes that the Commission will identify EDPCIs through its work programme, based on the guidance of the DIRB board and the views of Member States, which it should align with the CDP and the objectives of the 2022 Strategic Compass for security and defence. As general criteria it requires that the potential overall benefits of the EDPCIs must outweigh its costs (Article 15(3)b) and that projects: involve at least four Member States (Article 15(4)); 'contribute to the defence capabilities critical for the security and defence interests of the Union and its Member States and therefore to be in the public interest' (Article 15(5)); and 'aim at developing capabilities, including those securing access to strategic domains and contested spaces, strategic enablers, and, as appropriate, systems acting as European defence infrastructure of common interest and use' (Article 15(3)a).

Table 3: Major selection criteria for EDPCIs

Criterion	EDIP Proposed Regulation	Requirement
Strategic alignment	'the project aims at developing capabilities, including [...] strategic enablers and, as appropriate, systems acting as European defence infrastructure of common interest and use' Art. 15(3)(a)	The project must contribute to EU Member States' defence capability priorities, including strategic domains, contested spaces, enablers, infrastructure of common interest.
Cost vs benefit	'the potential overall benefits of the project outweigh its costs, including in the longer term' Art. 15(3)(b)	The overall benefits must outweigh its costs, including over the long term.
Minimum participants	'A European Defence Project of Common Interest shall involve at least four Member States' Art. 15(4)	The project must involve at least four Member States.
Common interest / public good	'shall be considered to contribute to the defence capabilities critical for the security [...] and therefore to be in the public interest' Art. 15(5)	The project must serve public interest at Union level, contributing to collective security, and be considered 'in the public interest' for EU defence.

Source: Author's own

Furthermore, each proposal for an EDPCI will be assessed based on specific award criteria (Article 16(1)), which prioritise the potential to: 'increase production capacities, reduce lead times, eliminate bottlenecks and thereby increasing interoperability and interchangeability'; 'increase timely availability and supply to all locations, strengthening security of supply throughout the Union in response to identified risks, (in particular) conventional military threats, and the non-dependency on non-associated third country sources'; and 'foster genuine armament cooperation among Member States, associated countries or Ukraine (...), involving in particular, to a significant extent, SMEs, small mid-caps and other mid-caps as recipients, as subcontractors or as other undertakings in the supply chain'.

Leaving aside the question what may constitute the 'security interests of the Union and its Member States and therefore (...) the public interest', a compound of phrases that have for decades been interpreted by

Member States as permission to disregard EU law obligations (Uttley and Wilkinson, 2016), the wording of the selection criteria may well exclude some of the capability areas listed in the Joint White Paper on Defence Readiness 2030 and European Council conclusions. As noted by the European Court of Auditors in its special report on the EDIP proposal:

> 'the time horizon for carrying out such projects is likely to exceed the EDIP's 2-year implementation period. Consequently, securing long-term financing will be instrumental in completing the selected projects and reaping their expected benefits. The Commission and the co-legislators should therefore consider introducing a requirement to secure long-term financial support as a prerequisite for the selection of EDPCIs' (European Court of Auditors, 2024: 19).

This is an important point, as long-term financing commitments should not rely on raising national debt (see Section 5).

By way of an interim conclusion, the EDPCI selection criteria set out in the proposed EDIP regulation offer a sufficient basis for understanding what makes an EDPCI a flagship project. Analysing and developing the selection criteria further, EDPCIs can be said to be projects that:

1. **Create a critical mass of cooperation**: the EDPCIs should create a critical mass of cooperating Member States, which should also lead to the inclusion of a broad range of industrial actors, including primes, mid-caps and SMEs in cross-border projects.
2. **Ensure the scale of production**: the EDPCIs should be projects that cannot be conducted by any single Member State, thereby necessitating a pan-European approach to development.
3. **Align with military needs**: the EDPCIs must respond to current and future geopolitical scenarios and military needs facing the EU, and complement NATO requirements.
4. **Meet societal needs**: the EDPCIs should address the critical security needs of EU citizens and demonstrate a tangible public benefit, especially given the use of EU public funds.
5. **Lead to security of supply**: EDPCIs should lead to an industrial critical mass that can help the Union develop critical technologies and ensure economic inputs into the defence sector.
6. **Boost industrial skills**: the EDPCIs should enhance the EDTIB by building skills, recruiting and retaining skilled labour and ensuring a vibrant workforce.
7. **Ensure autonomy and authority**: the EDPCIs should ensure European ownership and control over the design, development, production and export of defence systems and equipment. Design authority should be retained by the EU.

The emergence of EDPCIs represent a significant opportunity to consolidate and strengthen the European Defence Technological and Industrial Base (EDTIB). By pooling demand across Member States and focusing resources on select flagship projects, EDPCIs could reduce the fragmentation that has long characterised Europe's defence sector. This aggregation effect allows European companies to benefit from larger, more predictable production runs, enhancing economies of scale and supporting higher-end technological development. In particular, joint procurement and shared project management can incentivise investment in research and development, encourage cross-border industrial partnerships and promote the retention of strategic know-how within the Union. For SMEs and mid-caps, EDPCIs offer a pathway to integrate into wider defence supply chains that might otherwise be inaccessible, ensuring that Europe's industrial base remains diverse and resilient.

At the same time, the impact of EDPCIs on the EDTIB is conditioned by the governance, financing and scope of the projects themselves. Projects that are heavily dual-use or technologically diffuse may not generate sufficient industrial spillovers, limiting their contribution to European capability autonomy. Likewise, the financial ceiling set for EDPCIs under the EDIP may constrain the ability to fund multiple high-end flagship programmes simultaneously, potentially fragmenting investment and reducing the incentive for industrial consolidation. Nonetheless, when designed with clear technical requirements, interoperable standards and an emphasis on European supply chains, EDPCIs can act as a lever for industrial competitiveness, reducing dependency on non-EU suppliers and accelerating the modernisation of Europe's defence production ecosystem. In this sense, EDPCIs do not merely finance capability development — they signal a political commitment to an integrated, technologically sovereign European defence sector.

However, there is a need to be clear-eyed about the challenges associated with major defence capability projects. Collaborative defence projects in Europe have repeatedly illustrated the tension between ambition and cost, with programmes such as the A400M, Eurofighter and Future Combat Air System (FCAS) exemplifying both the strategic benefits and financial burdens of multinational cooperation. While the A400M strategic airlift aircraft and Eurofighter projects have fostered technological innovation and strengthened cross-border industrial linkages, they have also consistently exceeded initial budgets and schedules, reflecting the complexity of harmonising requirements across multiple Member States. The A400M airlifter, for example, suffered significant cost overruns due to differing national specifications and industrial obligations, while the Eurofighter programme similarly illustrates how multi-national coordination can drive up procurement and lifecycle costs despite producing a world-class fighter platform (Hartley, 2023; Calcara, 2020). FCAS, as a next-generation European air combat system, faces comparable challenges, combining the demands of advanced stealth, networking and sensor integration with the need to align the operational priorities of Germany, France and Spain. At the heart of the challenge of developing the FCAS is also the question of technology transfers, and how best to organise major defence programmes (e.g. workshare balance versus technology leadership).

3.2 Governance and complementarity

These examples underscore that collaborative projects, while essential for European strategic autonomy, require robust governance, disciplined project management, and realistic cost-sharing arrangements to ensure that industrial and capability ambitions are financially sustainable. Specifically, the question of how to govern EDPCIs will be critical, although at this time it is unclear what the governance structures for EDPCIs will look in practice, as there is no agreed definition of EDPCI governance. If we draw on the experience of the IPCEIs, we can see a close working relationship between EU Member States and the European Commission. A joint forum is created for ICPEIs, which is chaired by the Commission and includes senior and technical officials from Member States. This shared approach allows the Commission to maintain coherence and provide guidance, whereas coalitions of Member States drive forward each project in a material sense.

What is known about potential EDPCI governance is that the Defence Readiness Roadmap 2030 foresees the creation of 'Capability Coalitions' by the start of 2026 in the nine critical capability areas outlined in the White Paper, including 1) air and missile defence; 2) strategic enablers; 3) military mobility; 4) artillery systems; 5) cyber, AI and electronic warfare; 6) missiles and ammunition; 7) drones and counter-drones; 8) ground combat; and 9) maritime. It can be assumed that such Capability Coalitions for critical areas 1, 2 (if the term strategic enablers includes space), 7, 8 and 9 will form the backbone of the four proposed EDPCIs

so far, should Member States finally agree to these flagship projects. The Readiness Roadmap calls for the swift completion of Capability Coalitions under the leadership of lead and co-lead Member States, and it indeed sees the Coalitions making use of EDIP and, possibly, PESCO, for the projects. The Roadmap makes clear that each Capability Coalition should make full use of existing EU processes, including the EDA-led Priority Implementation Roadmaps and its Capability Expert Groups.

Interestingly, the Readiness Roadmap's reference to Capability Coalitions making use of EDIP opens up a reflection on which governance mechanism to use for the Capability Coalitions. On the one hand, the EU is offering to support the work of Capability Coalitions through its financial mechanisms and existing support structures, but there is some flexibility on the design of the coalitions. On the other hand, any Capability Coalitions that translate into an EDPCI will imply the use of the governance structure outlined in the EDIP Regulation. While the final agreed EDIP Regulation has not be released at time of writing, the EDIP provisions for the EDPCIs state that at least four Member States should participate in a project, but the role of the Commission is unclear, as the Council of the EU strove to ensure that the Commission, HR/VP and the EDA could only be invited as observers to EDPCIs. Still, obtaining financial support for EDPCIs via the EDIP would require a role for the European Commission, although the Readiness Roadmap already makes clear the need for a lead nation from among the EU Member States to lead a capability coalition.

The question of the governance of the EDPCIs also raises questions about how these flagship projects will relate to ongoing NATO capability efforts. EDPCIs could play an important role in helping individual EU Member States meet their obligations as part of NATO's Defence Planning Process (NDPP), should they also be a member of the Alliance. The NDPP is a framework in which individual allies are set national targets through consensus to meet basic NATO military capability needs. The NDPP does not cover the entirety of national capability development plans, and allies can develop or acquire capabilities that go beyond NDPP targets. In practice, therefore, EDPCIs could indeed be regarded as a contribution to NDPP targets, especially if they are aligned with NATO Capability Targets. In June 2025, NATO agreed on a set of new Capability Targets that include a need to develop air and missile defence, logistics and long-range strike (Perot, 2025). While NATO does not determine how individual Allies meet the NATO Capability Targets, it is important that procured or developed capabilities meet NATO's interoperability needs for the Alliance's forces to work in a multinational and multidomain environment. Accordingly, the EDPCIs proposed by the Commission in Copenhagen do neatly align with the new NATO Capability Targets.

What will be of utmost importance is to ensure complementarity between EDPCIs and NATO capability efforts, especially when it comes to ensuring interoperability. An important aspect of interoperability is standardisation and it sits at the heart of meaningful EU–NATO cooperation on capability development because it provides the technical and political scaffolding upon which genuine interoperability is built. As the European armaments landscape demonstrates, the proliferation of national requirements, industrial protections and duplicative platforms continues to erode both efficiency and readiness. Standardisation offers a pathway to aligning technical norms, certification processes and component-level requirements. This matters operationally, as joint or multidomain operations demand interoperable communications, logistics and supply chains; but it also matters industrially, as standardisation helps consolidate Europe's defence technological and industrial base. Standardisation may also reduce life-cycle costs and support the integration of emerging technologies (Fiott, 2018). There is no specific mention of standards in relation to EDPCIs in the EDIP Regulation, although the proposed Capability Coalitions — in how they bring Member States together — are unlikely to avoid the questions of interoperability and standardisation. In particular, existing NATO standards (STANAGs) are of critical importance and the Readiness Roadmap also signals

that standards and the mutual recognition of certification are critical features of a robust security of supply regime for defence in Europe (Readiness Roadmap, p. 12).

4 Financing mechanisms for European defence projects

Writing at a time when the Russian war economy was expected to 'surpass Member States' defence spending in purchasing power parity terms', the HR/VP Kaja Kallas, and Commissioner for Defence and Space Andrius Kubilius published their White Paper on Defence Readiness in Europe, which contained a EUR 800 billion 'once-in-a-generation surge in European defence investment'. The reference here is to the Commission's initiative, which was endorsed by the European Council on 6 March 2025 and renamed 'Readiness 2030' after complaints that the initial label was excessively charged and might alienate citizens[9]. While there are genuine questions about how far instruments such as SAFE and the national escape clause can genuinely kick-start a dynamic of common European defence cooperation (Arnal and Blockmans, 2025; Fiott, 2025b), the Readiness 2030 plan to complement national rearmament is built on five key pillars:

1. A landmark relaxation of eurozone fiscal rules to allow greater defence spending without breaching EU budget constraints (the so-called 'National Escape Clause'), which could potentially unlock EUR 650 bn in additional national defence spending;
2. The creation of a new EUR 150 bn joint EU loan instrument called 'Security Action for Europe (SAFE)' (adopted on 27 May 2025) to finance strategic defence capabilities — drones, anti-drone systems, cyber and missile defence[10];
3. A revision of the EU's cohesion policy and a redirection of post-COVID recovery and resiliency funds towards military investments[11];
4. An expansion of the mandate of the European Investment Banks (EIB) to support the defence industry; and
5. The mobilisation of private capital through the Capital Markets Union to fund security-related projects.

Since the publication of the White Paper, Member States have engaged with its main policy innovations. For example, in April 2025, 12 EU Member States submitted a request to the Commission to activate the national escape clause, including Belgium, Denmark, Estonia, Finland, Germany, Greece, Hungary, Latvia, Poland, Portugal, Slovakia and Slovenia. These requests will allow these Member States to increase net expenditure on defence by up to a maximum of 1.5 % of GDP each year up to 2028 (European Commission, 2025c). In terms of the SAFE loan instrument, 19 Member States have already applied for a defence loan for the production of defence capabilities and other needs, already utilising the EUR 150 bn ceiling in SAFE (European Commission, 2025d). On 1 April 2025, the European Commission presented a revision of the EU's cohesion policy that will further enable Member States to use current cohesion funding to build resilient infrastructure to foster Military Mobility. It will also support the productive capacities of small and large enterprises in the defence sector across all EU regions (European Commission, 2025e).

[9] Euronews, 'Brussels rebrands 'Rearm Europe' plan after backlash from leaders of Italy and Spain', 21 March 2025.
[10] Council Regulation (EU) 2025/1106 of 27 May 2025 establishing the Security Action for Europe (SAFE) through the Reinforcement of the European Defence Industry Instrument (Text with EEA relevance), ST/7926/2025/INIT, OJ L, 2025/1106, 28.5.2025, ELI: http://data.europa.eu/eli/reg/2025/1106/oj.
[11] Communication from the Commission to the European Parliament and the Council, 'A modernised Cohesion policy: The mid-term review', COM(2025) 163 final, Strasbourg, 1.4.2025.

These ideas come on top of multiple, but mostly small-scale initiatives made during two earlier rounds of EU defence policy innovations over the past decade. First, the post-2014 creation of a Commission-managed EDF, with EUR 8 bn allocated under the current multiannual financial framework (MFF; 2021-2027); the launch of 74 industrial and logistical support projects under PESCO; and the European semester-like CARD mechanism, managed by the EDA and EU Military Staff, to assess progress in the implementation of Member States' capability development plans. And second, the post-2022 adoption of ASAP and EDIRPA, worth EUR 500 m and EUR 300 m respectively, drawn from the general budget of the EU for a period of two years to co-finance, respectively, the production of ammunition and partially reimburse joint purchases involving consortia of at least three Member States. Under EDIRPA, the Commission is financing cross-border projects related to air and missile defence, ammunition and defence platforms. Under ASAP, the Commission is financing the production of explosives, powder, shells, missiles and testing/certification processes.

As with other public goods, EDPCIs should be financed through EU-level transfers rather than national debt. This avoids the need to reform EU fiscal rules. By way of derogation from Article 190 of Regulation No. 2018/1046 on the financial rules applicable to the general budget of the EU, EDIP may finance up to 100 % of the eligible costs (Article 17(1) of the draft regulation). That excludes activities related to speeding up the adjustment to structural changes of the production capacity of defence products (industry reinforcement actions), where EU funding is capped at 35 % of the eligible costs. Under the EDIP, extra funding will also be available to projects where (a majority of) the beneficiaries are SMEs or small mid-caps, and EDPCIs where Ukraine is the recipient of defence products produced or procured under the EDIP and those products are subject to financial support under the European Peace Facility (EPF). If Member States agree on a common approach to exports for defence products developed and procured in the context of the Structure for European Armament Programme (SEAP, see below), then they may also be eligible for additional funding.

For the future MFF (2028-2034), the European Commission has requested a total of EUR 131 billion for defence and space under the 'European Competitiveness Fund' heading. Time will, of course, tell whether Member States agree to this amount, but it is clear that there is more financial support for defence at the EU level. One of the key challenges in developing EDPCIs is ensuring enough financial bandwidth to finance existing priorities, invest in non-ECPDI defence innovation and capability areas and to finance defence flagship projects themselves. Although the initiation proposal for the EDIP contained a ceiling of 25 % of the total EDIP for EDPCIs, this — the authors understand through interviews — could likely be set at a 30 % ceiling. At present, it is difficult to calculate how much of the EUR 131 billion request for defence and space will be dedicated to the EDIP, and, for this reason, we cannot ascertain at present what 30 % of the EDIP will amount to in financial terms.

Under the proposed EDIP regulation, an amount of EUR 1.5 billion is foreseen for the 2025-2027 period to start common defence procurement. However, 30 % of EUR 1.5 billion would amount to EUR 450 million, which in turn would mean EUR 225 million being potentially available for EDPCIs — such an amount would struggle to help launch significant defence flagship projects, unless, of course, other sources of finance (Member State investments or SAFE) are utilised to increase the level of funding under EDIP. However, beyond 2027, if we assume that the EDIP will be endowed with say EUR 20 billion over seven years, this would amount to EUR 6 billion for EDPCIs. Presuming that more than four EDPCIs are selected by the Commission, this EUR 6 billion would have to be divided between four projects, but spread over seven years. It is not at all clear whether the four projects detailed in the Commission's 2025 'Scoping Paper' could

be financed with such a level of investment. Should, however, the EDIP be endowed with EUR 50 billion, this would result in the 30 % EDPCI ceiling increasing to EUR 15 billion. Again, perhaps this is still a low level of investment when one considers that the EUR 131 billion request is designed to finance the EDIP, the EDF and the Union's space programme. In this respect, it is reasonable to suggest that without sufficient financial muscle, it will be difficult for the Union to finance all of its existing and future defence capability needs (de Cordoue, 2025).

Regardless of the level of EDIP funding for EDPCIs, however, there is an urgent need to rationalise the growing number of defence financing mechanisms at the EU level. For example, it is unclear at this stage how the EDF will connect with the EDIP, and whether EDF projects will feed into some of the EDPCIs to eventually be agreed upon. The Fund principally finances collaborative defence research and development projects across various areas, including emerging challenges (medical support, CBRN threats), boosters and enablers (digital transformation, energy resilience) and excellence in warfare (air combat, ground combat, cyber, and maritime systems). In this respect, the Fund addresses key defence technology domains identified in the Joint White Paper on European Defence Readiness 2030, such as air and missile defence, AI, cyber and electronic warfare, drones and counter-drone systems, high-intensity conflict scenarios and strategic enablers like airlift and space capabilities. A choice may have to be made over what existing EDF projects may feed into the EDPCIs as technology building blocks, and this requires proper management of the interface between the Fund and the EDIP. Here, the Commission claimed to the authors that it has some experience in linking EDF to EDIRPA projects, so as to benefit from defence innovation efforts and pre-existing European cooperation between firms and institutes (Interview 2). In time, a study into such synergies would be necessary to have a clearer understanding of the linkages between existing EU defence tools.

Another relevant question that emerges in the context of rationalising EU-funded defence cooperation tools is the relationship between the EDF, EDIP, EDPCIs and PESCO. As the principal intergovernmental tool for defence capability cooperation at the EU level, PESCO is primarily geared towards both harmonising requirements for common capabilities and developing operationally relevant projects. Under PESCO, some of the 74 ongoing capability projects directly respond to Russia's war on Ukraine, including the projects dedicated to Strategic Airlift for Outsized Cargo and Counter-battery System (i.e. artillery detection and targeting). However, PESCO deliverables are coming online slower than foreseen, with only half of the anticipated 26 projects reaching full operational capability in 2025, which raises questions about the value-added of PESCO project deliveries (Council of the EU (2024b). Nevertheless, PESCO can be useful in ensuring that its projects address only the most pressing capability needs, as identified by armed forces.

Yet, what is unclear at present is whether existing or future PESCO projects would qualify as EDPCIs, given how broad PESCO projects are in terms of ambition, scope and participation. Of course, doing so would raise a host of legal and political questions. The proposal for the EDIP regulation makes clear that EDIP should 'facilitate Member States cooperation efforts in the permanent structured cooperation framework [...] [by contributing to the] 'speed up, ease and support' in 'fulfilment of the more binding commitments' in PESCO. The proposed EDIP regulation also calls for an increased funding rate under the SEAP or in the context of a PESCO project, provided that they did not benefit from a comparable increased funding rate in another EU funding programme (e.g. EDF) (see Article 17(2) a). While the proposed EDIP regulation does not specifically refer to PESCO when outlining the rationale for EDPCIs in Article 15, one could well imagine PESCO 'projects of common interest' to be put on a SEAP footing and thus reap the benefits from the

Community method of governance and the state aid permitted for EDPCIs under Article 107(3) TFEU (see below).

That said, we should recognise that PESCO's governance structure — relying more on unanimity through the Council —, is different to the Communitarian approach, which raises questions about the compatibility of PESCO project governance with future EDPCIs, where a more communitarian approach will be used. Here, one such critical question is what governance structure should prevail — PESCO or SEAP/EDIP — in case an EDPCI also becomes a PESCO project. Indeed, one may even wonder what the benefits of launching an EDPCI as a PESCO project in the first place are. To date, most PESCO projects that respond to collective defence needs already receive EU financial support via the EDF and other programmes (e.g. CEF and the Military Mobility project). Thus, the governance structure of an EDPCI within PESCO would need clarity at the earliest time, especially in order to provide clarity to the EU Member States of the benefits of launching common defence projects in PESCO. Indeed, any political interplay between institutional frameworks on behalf of the Member States to strengthen unanimity or obstruct the communitarian approach in EDPCIs by relying on PESCO's intergovernmental format should be avoided. Doing so would potentially raise risks in terms of project oversight, delivery and cost.

As mentioned above, the proposed EDIP regulation states that future EDPCIs could be launched within the framework of the Structure for European Armament Programme (SEAP). The SEAP takes inspiration from the (civilian) Galileo programme, which is owned by the EU and managed by the Commission (and the European Space Agency). It is a voluntary legal framework under the EDIP (Chapter III of the draft regulation on EDIP), which is designed to foster long-term cooperation between Member States for defence equipment. It requires a minimum of three Member States to apply for a SEAP, which — once approved by the Commission — receives legal personality to initiate and manage cooperative programmes, inter alia, by entering into contracts and becoming a customer for the EDTIB. The key features of the SEAP include standardised procedures, VAT exemptions for procured equipment and — as mentioned above — the potential for additional EU funding. It should be noted that EU law treats state aid for defence projects with flexibility when they serve 'essential interests of security', allowing some aid under Article 346 TFEU or a prioritised, expedited assessment under Article 107(3)(c) for measures not covered by Article 346. For future EDPCIs too, Member States may, without prejudice to Articles 107 and 108 TFEU, apply (administrative) support schemes.

5 Four flagship EDPCIs

In this section of the study, we provide an overview and analyse the four EDPCIs mentioned by the European Commission in its 'Scoping Paper' dated 29 September 2025 to the European Council. The paper was designed to provide a basis for discussion at the informal leaders' meeting in Copenhagen on 1 October 2025. Endorsed at that meeting, the Commission and High Representative reiterated a rationale for enhanced cooperation in defence at the EU level, and set out four specific EDPCIs to take the cooperation forward: 1) the European Drone Defence Initiative; 2) the Eastern Flank Watch; 3) the European Air Shield; and 4) the European Space Shield (see also European Commission, 2025b). As stated in section 3 of this study, such projects have been designed by the Commission with several objectives in mind including their geopolitical relevance, the potential defence industrial impact, a way to build upon other European

capability efforts in these domains, to develop large-scale projects, to provide a strong signal of action to European publics and enhance European strategic autonomy (Interview 1).

Of course, the ongoing war in Ukraine has only added to the urgency of European defence capability projects, and recent air incursions in NATO/EU territory have given rise to a greater sense of political urgency for certain capability areas. Indeed, all four EDPCIs proposed by the Commission follow the logic of President Ursula von der Leyen's annual State of the European Union speech in September 2025, which made it clear that the EU needs to improve drone defences. Here, the president committed the EU to a EUR 6 billion loan to enter a 'drone alliance' with Ukraine, which could enable the EU to benefit from Ukraine's ingenuity in drone technology. To directly respond to Russia's growing air incursions into Europe with drones and aircraft fighters, President von der Leyen also floated an 'Eastern Flank Watch' that she said would provide 'real-time space surveillance' to track all aerial movement, and in particular drone incursions, from the Baltic to the Black Sea. This initiative will also include the planned construction of a 'European drone defence initiative' — something the Commission initially rejected to fund when Estonia, Latvia, and Lithuania asked for financial support earlier this year for just such a venture. Such initiatives borrow from the logic of the 'European Air Shield', a collaborative effort by the EU and other European states to enhance air and missile defence capabilities. The European Space Shield also follows a similar logic.

Here, it is worth unpacking each proposed EDPCI in more detail.

5.1 The European Drone Defence Initiative

Since the full-scale invasion of Ukraine in 2022, the EU has increasingly recognised the threat posed by unmanned aerial vehicles and loitering munitions as a central component of Russia's asymmetric tactics. Such threats have led the EU to focus on the concept of a 'Drone Defence Initiative' along Europe's eastern flank. In meetings of defence ministers from frontline states such as Estonia, Finland, Latvia, Lithuania, Poland, Romania and others — together with the European Commission and Ukraine — EU leaders have acknowledged the need to build a new layered defence ecosystem to detect, track and where necessary intercept or neutralise drones that violate airspace or threaten critical infrastructure. However, it is still unclear what such a Drone Defence Initiative would look like in practice and whether it will include the development of a comprehensive sensor network that feeds on expertise gained in Ukraine in areas such as acoustic sensors, radar and optical/signal detection. It is also unclear how such sensors and technologies would be integrated into real-time surveillance and early-warning systems. Ukraine is likely to play a major role in the proposed project, as Ukrainian manufacturers are developing combat-tested drone systems. Russia's recent drone incursions into European airspace — which were countered with the use of sophisticated defence systems (e.g. F-35 aircraft) — show that Europe needs a cost-effective counter-drone architecture that can respond in a timely fashion to drone swarms of low-cost drone incursions by Russia.

However, the 'Drone Defence Initiative' proposal faces a range of technical, organisational and political challenges. Technologically, while detection systems may be deployable relatively quickly — European Commissioner Andrius Kubilius has suggested the detection network could be functional within a year — the capabilities for reliable interception or neutralisation, especially of low-cost or small drones, are less mature and require further research, standardisation and testing. Coordination across borders is another key hurdle that a drone ECDPI needs to address, including the requirement to ensure the interoperability of sensors, communication links, data sharing, C2 and rules of engagement in peacetime as well as during

an escalatory period, which requires consensus among EU Member States and alignment with NATO targets and rules of engagement. Finally, strategic clarity about the scope of the 'Drone Defence Initiative' — whether it is limited to EU territory, whether Ukraine itself will be integrated fully or only as a partner and how to avoid escalation — is still unclear.

There is indeed some contest over the meaning of the term 'Drone Defence Initiative' and whether drones are changing the characteristics of warfare (Calcara et al., 2022). In reality, the system under consideration would be a defensive system that would have to be integrated with all other ECDPIs under consideration. Drones alone will not be enough to respond to air incursions or drone threats. The notion of 'wall' is also misleading, as there will inevitably be gaps in the system that will be exploited by adversaries. Here, it is worth recalling the technological and operational challenges that have affected the North American Aerospace Defense Command (NORAD) and Israel's 'Iron Dome' system. While NORAD and Iron Dome are different systems from the proposed 'Drone Defence Initiative', both cases illustrate that a huge outlay of finances is required to develop radar, sensing and surveillance systems. Beyond governance and funding, there are also profound technological hurdles. 'Iron Dome' is optimised for intercepting short-range rockets and drones over a limited geographic area, whereas any European 'Drone Defence Initiative' would span thousands of kilometres from the Baltic to the Black Seas, and this would require a distributed and layered system capable of dealing with saturation attacks and low-cost drone swarms.

Indeed, using expensive interceptors against cheap drones raises questions about how to achieve a sustainable cost/effectiveness balance, which echoes NORAD's experience with balancing investment in high-end aerospace surveillance against emerging asymmetric threats. For the EU, achieving sufficient interoperability of sensors, electronic warfare suites and counter-drone effectors across diverse national systems remains a daunting task. Moreover, unlike NORAD's bilateral framework or Iron Dome's nationally centralised system, the EU must reconcile multi-level coordination with NATO, Member States and Ukraine as a partner, which risks duplication or gaps. These challenges suggest that while a 'Drone Defence Initiative' is politically salient in the wake of Russia's aggression, its operational credibility will hinge on overcoming technical integration, cost sustainability and coordination hurdles that past defence architectures only solved through long-term, centralised investment.

European industry is already taking concrete steps toward realising a 'Drone Defence Initiative' and several initiatives suggest that the capability is developing rapidly. In the Baltic region, for example, a drone defence concept is being pursued by a partnership of Latvian startup Origin Robotics and Estonia's Defsecintel, integrating long-range detection, sensor fusion and electronic warfare methods (Latvian Public Media, 2025). The dual-use and commercial sector in Europe is also able to develop counter-drone systems. For example, in Belgium, 'Skeydrone' has been able to develop a multi-site drone detection solution to ensure that Belgium's energy grid is secure and fortified against physical attacks on critical infrastructure (Skeydrone, 2025). These and other examples demonstrate that European industry not only has strong technological foundations in sensors, electronic warfare, radar, drone platforms and software, but is also moving toward operationalisation. However, the scale and cross-border interoperability required of the 'Drone Defence Initiative' will require big investments and a significant improvement in defence cooperation between EU Member States.

These industrial skills and competencies are being demonstrated in PESCO and the EDF, too. Under PESCO, EU Member States are developing a number of projects on drones, including the 'Eurodrone' project to develop a medium-altitude long-endurance drone (DE, CZ, ES, FR, IT). PESCO is also helping to develop the 'DES' project on directed energy systems, which can be used for air defence and counter-

drone capacities (IT, ES). This is being combined with a further PESCO project 'C-UAS', which is developing a command and control (C2) structure for counter-drone operations (IT, CZ, SE). Italy and France are developing a rotorcraft docking station for micro- and small drones, which can enable swarm drone management and recovery. The EDF is also funding drone technologies. The 'HYBRID' project, for example, seeks to develop a hydrogen battlefield reconnaissance and intelligence drone, although it has only a budget of just over EUR 3 million (FR, HR, HL). Likewise, the 'VANTAGE' project is developing a next-generation tactical European drone with a budget of just over EUR 10 million (LV, BE, FR, ES, EE, RO). Furthermore, the EU is supporting efforts to develop drones that can be used for strategic autonomous tasks, such as reconnaissance and logistics, giving the EU the future ability to deliver situational awareness and equipment to armed forces. It is doing so via the EUR 4 million 'SABER' project (ES, FR, HL, FI).

5.2 The 'Eastern Flank Watch'

The idea for an 'Eastern Flank Watch' comes in the wake of Russia's invasion of Ukraine and recent Russian air incursions into EU/NATO territory with drones and aircraft. This proposed EU flagship project is designed to respond to threats and risks in the EU frontline states bordering Russia. Eastern EU/NATO states are faced with Russian aggression beyond incursions, including through hybrid threats and the use of shadow fleets to conduct sabotage operations (e.g. undersea cables) and surveillance. Russia has also undertaken direct forms of aggression against EU frontline states, including arson attacks on Polish supply depots and shopping centres, cyber-attacks, jamming and spoofing of global navigation systems (e.g. GNSS), the funding of extremist political parties and politicians in Europe and the spread of disinformation. Naturally, military capabilities will not be enough to deal with the full suite of Russian conventional and hybrid threats, but combining land, air, sea and space assets may deter Russia from military aggression in the EU/NATO and secure frontline states.

As proposed by the European Commission on 29 September 2025 in its 'scoping paper' for the European Council, the 'Eastern Flank Watch' has the potential to become an EDPCI and to draw on EU funding (European Commission, 2025b). The Commission sees the project as a good opportunity to develop defence industrial programmes and to stimulate dual-use projects in areas such as border control and communication technologies. At its core, the proposed 'Eastern Flank Watch' is composed of four main pillars, two of which are being proposed as stand-alone but interrelated ECDPIs: the Drone Defence Initiative and the European Space Shield. By developing the Drone Defence Initiative and the European Space Shield, the 'Eastern Flank Watch' will go further in developing ground defence capabilities (fortification and anti-mobility systems) and maritime security in the Baltic and Black Seas. In this regard, the 'Eastern Flank Watch' could help develop a 'porcupine' military posture for the EU, or, as stated by President von der Leyen in the 2025 State of the Union speech, 'Qualitative Military Edge'. Both of these concepts assume that military rivals will face grave difficulties in attacking, seizing or holding territory taken through military aggression.

However, of all of the EDPCIs proposed by the Commission in September 2025, the 'Eastern Flank Watch' is the one most open to confusion and an unclear rationale. First, the Eastern Flank Watch is supposed to contain two other ECDPIs (the Drone Defence Initiative and Space Shield), which dilutes its originality and strategic purpose. True, the focus on ground and naval combat is relevant and is clearly needed in a European context, but for such reasons, it may have been advised to focus on one of these domains. Having an EDPCI on either ground or naval combat would have provided for a clear project focus, and improved the rationale of the EU's efforts. Given how vast the ground and naval domains are in military and industrial terms, having one ECDPI to cover ground and naval forces, complemented with drone and space defence

technologies, is overly ambitious and leads to confusion on what such a project could look like in practice. The 'Eastern Flank Watch' project lacks focus and is far less intuitive to defence planers, analysts and the public when compared to the other three proposed ECDPIs.

Additionally, we should acknowledge that the 'Eastern Flank Watch' concept mimics (and potentially supports) NATO's recent 'Eastern Sentry' concept and its existing Baltic Air Policing and Enhanced Forward Presence (eFP) forces. Following in the wake of Russia's drone incursion into Poland in mid-September 2025 with 19 drones, NATO announced that Eastern Sentry will bring together a range of Allied military capabilities and assets to protect critical infrastructure and enhance NATO's military readiness in case of further Russian incursions (NATO, 2025). In fact, Eastern Sentry has already seen several NATO states deploy further air assets and military capabilities to the eastern flank to reassure frontline states and deter Russia. This has included the deployment of aircraft fighters from France (Rafale jets) and Denmark (F-16 jets), and the promise of additional brigades and armed forces to the Baltic states and Poland. In this respect, the 'Eastern Flank Watch', despite its vast and unclear definition, could eventually become a useful component of EU-NATO cooperation.

The idea for an Eastern Flank Watch, given its wide definition and application, will nevertheless be able to draw on a range of existing EDF and PESCO projects, more specifically in the naval and ground combat domains. For example, PESCO is helping to develop a maritime semi-autonomous mine countermeasure capability (BE, FR, HL, IE, LV, NL, PO, PT, RO, SE), and there is also a project on harbour and maritime surveillance and protection ('HARMSPRO') currently underway (IT, HL, PO, PT). Even under the EDF, there is a range of ground and maritime projects that will complement EU efforts on drones and air defence. These include, for example, the EUR 95 million 'EUROGUARD' project that will develop semi-autonomous surface vessels (EE, NL, PO, BE, IT, NO, FR, ES, DK, SE). The EDF is also supporting efforts to develop a European integrated system of naval platforms ('NEREUS') worth EUR 64 million, that will increase the survivability of naval assets (ES, LT, PT, EE, CY, NL, BE, DE, IT, HL, NO, FR, SE, DK). Finally, through the 'iMUGS2' project worth over EUR 54 million, the Union is seeking to develop a multipurpose unmanned ground combat system (EE, AT, FI, CZ, NL, DE, BE, IT, ES, NO, PO, HL, FR, LV, SE).

Such projects in PESCO and the EDF demonstrate that European industry is up to the challenge of developing sophisticated defence technologies and systems that can be deployed in the air, land, sea and space domains. Europe's defence industry demonstrates notable production and technological prowess in the land and naval sectors. Firms such as KMW, Rheinmetall and Nexter deliver world-class armoured vehicles and tanks, while cooperation under the Main Ground Combat System (MGCS) project points to future innovation. In the naval sector, Naval Group, Fincantieri, Navantia and TKMS lead in submarine and frigate design, complemented by collaborative programmes like the FREMM frigates and European Patrol Corvette. This industrial leadership is reflected in strong global exports and technological excellence. Yet, as ever, fragmentation of demand and duplication of programmes risk undermining scale and efficiency.

5.3 The European Air Shield

The European Air Shield is another EDPCI proposed by the Commission. This effort, spurred by the intensification of missile and drone threats emanating from Russia's war against Ukraine and incursions into EU/NATO airspace, reflects a growing awareness that Europe's fragmented and nationally focused air defence systems leave critical vulnerabilities exposed (Bronk and Watling, 2025). Existing initiatives, such as the European Sky Shield Initiative (ESSI), led by Germany and involving 24 participating states, already aim to pool resources, harmonise procurement and integrate missile defence architectures across the

continent. The idea of proposing the 'European Air Shield' in an EU context appears to be to build on the ESSI to develop interoperable, diverse national air defence systems, while avoiding overdependence on non-European air defence technologies. Indeed, the ESSI proposes to create a layered defence architecture through the joint procurement of systems ranging from short-range to high-altitude interceptors. However, ESSI seeks to integrate a mix of national assets and jointly procured systems such as the German-led IRIS-T, the American-made Patriot and the Israeli–US Arrow-3 interceptor. This mix of American, Israeli and European technologies raises questions about strategic autonomy, with a questionable reliance on non-European suppliers for critical capabilities — this is also one of the reasons why France has not joined ESSI.

Thus, creating a European Air Shield at scale in the EU has potential defence industrial benefits, while also meeting one of NATO's core defence requirements, as well as helping to integrate Ukraine into European air defence schemes (Di Mizio and Gjerstad, 2025). Since Russia's war on Ukraine, NATO has significantly reinforced its Integrated Air and Missile Defence (IAMD) posture, recognising that the Alliance faces the most acute missile and drone threats to its territory since the end of the Cold War. IAMD encompasses a combination of sensors, command-and-control arrangements and defensive assets designed to protect Allied populations, forces and infrastructure against the full spectrum of aerial threats, from aircraft and helicopters to cruise missiles, ballistic missiles and unmanned systems. Since 2022, NATO has intensified its air policing missions along the eastern flank, deployed additional Patriot and SAMP/T batteries to Member States bordering Russia and Belarus and improved early warning and surveillance through enhanced use of AWACS aircraft and ground-based radar. As NATO's 2022 Strategic Concept makes clear, IAMD is a 'core Alliance task' and for this reason the Alliance seeks to support European efforts in air and missile defence systems, despite the fact that NATO still overwhelmingly relies on American-made systems (e.g. Patriot and Aegis).

To ensure that the air shield corresponds with Europe's security needs, any future EDPCI should respond to a host of technological, doctrinal and industrial challenges. For example, air and missile defence is essentially a multi-layered defensive architecture that is designed to defend against aerial threats. At the foundation of such an architecture are advanced sensor systems, including ground-based radars, space-based early warning satellites and airborne platforms, which detect, track and classify incoming targets such as ballistic missiles, cruise missiles, drones and aircraft. These surveillance assets feed into C2 and ISR networks that enable real-time data fusion, threat evaluation and engagement coordination across multiple domains. Interceptors form the kinetic backbone of air and missile defence and are designed with varying short-, medium- and long-range strike capacities and altitudes to provide a layered defence. Complementing kinetic interceptors are non-kinetic capabilities such as electronic warfare and emerging directed-energy weapons (e.g. high-powered lasers and microwaves), which help counter saturation attacks, particularly from drones. Crucially, interoperability between these systems depends on resilient digital architectures capable of integrating multinational assets. And here, an emphasis is required on the digital backbone of air and missile defence systems and ensuring industrial production can continue to produce drones and interceptor missiles at scale.

As with the European Drone Defence Initiative, the idea for a European Air Shield invites a number of technological and military questions. Air and missile defence presents profound strategic and technological dilemmas that complicate the development of a credible European Air Shield. The experience of Israel's 'Iron Dome' illustrates that even highly advanced systems struggle with issues of cost, coverage and sustainability. While 'Iron Dome' has demonstrated impressive interception rates against short-range

rockets, it does so at enormous financial expense and under conditions of geographical advantage that Europe cannot easily replicate. The economic asymmetry between cheap offensive missiles and costly interceptors raises serious questions about the long-term viability of a continent-wide defensive posture, particularly if Europe were to face saturation attacks involving drones, cruise and ballistic missiles simultaneously. Moreover, effective air defence requires not only interceptors but also an integrated network of sensors, radars and command systems that can operate seamlessly across national borders and military doctrines — something Europe has historically struggled to achieve.

European defence firms today possess much of the industrial and technological competencies required to design, integrate and field a modern, layered air and missile defence architecture, but capability and capacity remain uneven across the continent. Major prime contractors such as MBDA, Leonardo/Eurosam, Diehl, Hensoldt and Saab, among others, already produce core air and missile defence capabilities, including vertically launched missiles and ground mobile systems and advanced radars and fire-control suites. These European technologies demonstrate that European industry can deliver both missile interceptors and the sensor/C2 elements required for layered defence. However, European firms have only recently started to scale up production lines to replenish stocks depleted by support to Ukraine, and some high-end sensors and interceptors still depend on transatlantic supply relationships for critical subsystems. Consequently, while technologically feasible, a genuinely European end-to-end continental 'air-defence system' will require further investment to increase missile-production capacity, harmonise standards and C2 protocols and secure resilient supply chains for specialised components.

To date, the EU has also used PESCO and the EDF to stimulate cooperation on air and missile defence technologies. For example, in PESCO, there are presently at least 11 air and missile defence-related projects focusing on an integrated and multi-layered air and missile defence system (IT, FR, HU, SE); counter-drone systems (IT, CZ, SE); small drones (ES, DE, HU, PT, RO, SL); space-based threat surveillance (FR, AT, FI, DE, IT, NL, ES); the 'Eurodrone' (DE, CZ, ES, FR, IT); airborne electronic attacks (with FR, ES, SE); short-range air-to-air missiles (DE, ES, IT, HU, SE); high atmosphere airship platforms (IT, FR); drone training (IT, FR, RO); satellite observation for defence (DE, AT, FR, LT, LU, NL, RO, ES); space asset defence (FR, AT, DE, IT, PL, PT, RO, ES); and military space surveillance (IT, FR, DE, NL, ES).

Under the EDF, the European Commission is supporting a range of defence innovation projects that relate to air and missile defence. For example, since 2021, the EDF has provided over EUR 900 million for projects in air combat, space and air and missile defence. Indeed, the EU is currently helping to finance defence innovation projects for a hypersonic defence interceptor ('EU HYDEF') worth over EUR 100 million (ES, DE, PL, CZ, NO, SE, BE); a counter drone system ('E-CUAS') worth some EUR 71 million (IT, ES, AT, LT, FR, NL, DE, HL, BE, NO, EE, DK); and an advanced missile system ('BEAST') totalling some EUR 34 million (DE, HL, LT, PT, IT, NL, NO, SE, ES, PO, HU, CY). Of course, it should be recalled that the EDF finances early development of defence technologies, so the majority of EDF-funded projects in the area of air and missile defence are still at the experimental or study phases.

5.4 The European Space Shield

Space has become a critical domain for European defence, not simply as an enabler of terrestrial operations but as a theatre of strategic competition in its own right (Fiott, 2020a, 2023; Gonçalves dos Reis, 2025). From satellite communications and earth observation to positioning, navigation and timing services, European security and defence depend increasingly on space-based infrastructures. Russia's war against Ukraine has underscored the value of resilient space assets, as satellite imagery and commercial

constellations have shaped battlefield awareness and command. In fact, without space defence assets, any EU plans to develop a 'Drone Defence Initiative', 'Air Shield' or 'Eastern Flank Watch' will be impossible. Developing the EU's space defence assets to help support EU Member States in collecting military intelligence in and from space will be an invaluable part of the Union's early warning and detection tasks for (counter)drones and air and missile defence.

For the EU, therefore, ensuring access to space and the protection of its assets is no longer a question of industrial prestige but one of strategic necessity. The integration of space into the EU's Strategic Compass, and following the dedicated EU Space Strategy for Security and Defence, plus the ongoing evolution of initiatives such as Galileo's PRS and IRIS², which would enable military and security services to benefit from accurate global navigation and secure communications, reflects the growing recognition that space is essential for the Union's defence autonomy and operational credibility (Fiott, 2020a and 2023). Given the EU's relative advantage in space, it is not surprising to learn that one EDPCI has been proposed by the Commission in the area of space defence.

Yet the path towards credible EU space defence is fraught with challenges. First, the EU and its Member States confront a crowded orbital environment where adversaries and competitors alike are developing counter-space capabilities, from anti-satellite weapons to cyber interference and jamming. Second, fragmentation within Europe risks undermining collective action: while several EU Member States boast advanced space industries and national military space strategies, translating these into a coherent EU effort requires significant political alignment and pooled resources. Moreover, unlike the US with its dedicated Department of War and Space Force, the EU must navigate a patchwork of civilian and military competencies, where the line between space security and space defence remains politically sensitive. This institutional ambiguity complicates decision-making at the European level and hampers rapid responses to emerging threats, all while the Union continues to uphold international law and norms as it pertains to the responsible use of outer space.

A final set of challenges lies in ensuring that the EU not only protects its space assets but also projects credibility in a contested space environment. Achieving this will require advances in space situational awareness, the hardening of satellite constellations against kinetic and non-kinetic attacks and the ability to respond proportionally to hostile actions in orbit. It will also necessitate difficult choices: whether to invest in sovereign launch capacities and how to balance military requirements with commercial innovation. Ensuring EU space defence, therefore, is not simply a technical or financial undertaking. As the US is discovering through its own 'Golden Dome' system, there are challenges involved in deploying hundreds of interceptors and satellites in space for military purposes, developing space debris avoidance systems and ensuring that the US Space Force can adequately communicate and work alongside other branches of the US joint force (Williams, 2025). The EU will also face similar challenges as it seeks to meet an adequate level of space domain awareness and potentially develop a European Space Shield.

Europe possesses a significant but often underappreciated industrial potential in the field of space defence, rooted in decades of technological innovation and cooperation across its aerospace sector. Companies such as Airbus Defence and Space, OHB, Indra and Thales Alenia Space have established a strong footprint in satellite manufacturing, secure communications and Earth observation, while ArianeGroup continues to work towards European autonomous launch capabilities through the Ariane and Vega families. In the defence domain, the EU has moved to operationalise this industrial base through initiatives like the planned IRIS² constellation, which aims to ensure resilient, encrypted satellite communications for military and governmental users. Moreover, advances in space situational awareness

(SSA) under the EU Space Surveillance and Tracking (EUSST) framework, alongside national programmes such as France's Syracuse IV military communications satellites and Germany's SARah radar satellites, demonstrate Europe's capacity to field cutting-edge capabilities. Yet the challenge remains one of scale and integration: while the industrial ecosystem is technologically advanced, fragmentation between national programmes and the lack of sustained collective investment risk undermining Europe's ability to match the speed and ambition of American and Chinese space defence projects.

Again, several PESCO and EDF projects are specifically focused on space defence. Under PESCO, there are projects underway related to governmental space imagery (DE, AT, FR, LT, LU, NL, RO, ES), the defence of space assets (FR, AT, DE, IT, PO, PT, RO, ES), radio navigation solutions (FR, AT, BE, DE, ES, IT, PO, NL, SE) and space surveillance (IT, FR, DE, NL, ES). Under the EDF, since 2021, the European Commission has dedicated over EUR 300 million to innovative space defence technologies. These projects include studies and demonstrators for a protected waveform to safeguard against jamming of satellite communications ('EPW' and 'EPWII') for EUR 30 million (BE, DE, HR, IT, FR, PO, ES, RO, LU, DK, NL); a detection system for harmful and illegitimate activities aimed at the Galileo PRS worth more than EUR 55 million (FR, BE, DE, SE, IT, ES, AT); a counter missile early warning system ('ODIN'S EYE II') totalling EUR 96 million (DE, FR, AT, ES, LT, IT, HL, FI, NO, NL, PO, DK); a network of systems in space for satellites and date ('REACTS') worth more than EUR 19 million (DE, NL, RO, ES, FR, NO, PO, IT, BG, AT, LU, LT, CZ); a space-based multi-sensor system for earth observation ('SPIDER') totalling more than EUR 40 million (FR, DK, DE, ES, LV, IT, BG, PO, EE, BE, HL, NO, IE, LT, NL, SE, FI); an integrated military space situational awareness capability ('EMISSARY') totalling over EUR 155 million (IT, DE, ES, FR, AT, IT, LU, RO, FI, HL, PT, SE, NO, PO); and an autonomous space situational awareness capabilities onboard satellites ('BODYGUARD') worth over EUR 6 million (FR, HL, LU, BE, FI, LV, DK, SE).

6 Further priority areas that would be most suitable as EDPCIs

In the previous section of the study, we outlined and probed the four EDPCIs proposed by the Commission in September 2025. We have raised several strategic and technological challenges associated with each project proposal, but have underlined the European defence industrial potential in developing each proposed EDPCI. The previous section acknowledged that three of the proposed EDPCIs are interrelated as the European Drone Defence Initiative will form part of the European Air Shield and neither of these two projects is feasible without the European Space Shield. The study has also raised doubts about the feasibility and purposes of the Eastern Flank Watch. While the title of the project and its purposes speak to insecurity along the EU's and NATO's eastern flank, the project as a whole lacks focus and is potentially far too large in scope (including, as it does, four strategic domains) to become operational and industrially manageable.

In this section of the study, we move beyond the four EDPCIs proposed by the Commission to highlight other projects that could be potential future contenders for flagship projects. They address specifically future technologies and strategic enablers. We do so by also highlighting the challenges involved in each alternative EDPCI. In particular, we look at ideas such as a 'Cyber Shield', a 'Military Cloud' and 'Military Mobility'. By analysing these three projects, we focus on capability gaps that have been identified by the CDP, the CARD and the priority areas set out in the EU White Paper for Defence. We acknowledge from the outset that these three additional project ideas are less relevant in terms of the daily news cycle, such as drones or air defence may be, but these military capability areas are nonetheless not only vital in their own right as military capabilities but as strategic enablers for other areas of European defence, including

the four EDPCIs proposed by the Commission. We also acknowledge that each of these three potential EDPCIs comes with its own challenges, including sensitivities about national sovereignty, the role of the EDTIB in relation to commercial operations and the composition of project partners.

6.1 The 'European Cyber Defence Shield'

The imperative for a robust cyber defence system at the EU level stems from the recognition that the digital domain has become a decisive arena of conflict, one in which deterrence and resilience are increasingly intertwined. Russia's cyber operations against Ukraine and EU Member States have revealed how digital attacks can complement conventional warfare by targeting command structures, logistics and civilian infrastructure. For the EU, building credible cyber defence capabilities is therefore not simply a technical matter but a strategic necessity tied to autonomy and collective security (see Pupillo et al., 2018; Fiott, 2017). It is also a core feature of EU and NATO cooperation in security and defence, and cyber defence forms an important part of several EU Security and Defence Partnerships with like-minded partners internationally. Cyber defence demands the establishment of shared situational awareness, trusted information exchange and a European cyber-industrial base capable of supporting critical defence networks without dependence on external actors. For such reasons, the idea for a 'Cyber Shield' would help meet many of the EU's defence priorities while also plugging a critical capability gap.

The EU's engagement with cyber defence has deepened considerably over the past decade, reflecting both the strategic centrality of cyberspace and the proliferation of hybrid threats targeting EU institutions, governments and industries. The establishment of the EU Agency for Cybersecurity (ENISA) and the growing role of the EDA in fostering cyber defence cooperation mark important institutional advances. The EU Cyber Defence Policy Framework (CDPF) provides a blueprint for improving operational coordination among Member States and ensuring that cyber considerations are integrated into the CSDP. The work of the EU Cyber Rapid Response Teams (CRRTs) under PESCO, one of the first operational PESCO projects, further demonstrates the EU's attempt to operationalise its cyber ambitions. Nevertheless, the diffusion of responsibility between civilian and military actors continues to challenge the Union's coherence, while the need for a more unified approach to offensive and defensive capabilities remains pressing (Koziol, 2023).

Developing credible cyber defence at the EU scale poses a series of institutional, technical and political challenges (see Ortiz Hernández, 2024). Cybersecurity remains an area where national sovereignty is jealously guarded, and the willingness of Member States to share sensitive information about vulnerabilities, capabilities or incidents is still limited. This inhibits the creation of a genuinely collective cyber defence posture. Moreover, Europe's cyber ecosystem is fragmented: while some Member States boast advanced national cyber commands and mature industrial bases, others remain heavily dependent on external technologies and lack the capacity to respond to high-intensity threats. The EU's regulatory and normative approach to cyberspace — centred on resilience, privacy and civilian oversight — also sits uneasily alongside the more operational imperatives of military cyber defence. Bridging this cultural and institutional divide is essential if the EU is to evolve from a regulatory power in cyberspace into a credible cyber defence actor capable of acting in concert during crises (Kaushik, 2024).

Nevertheless, the issue of Cyber Defence is strongly linked to innovations, regulations and policy processes found in the civilian domain (Farrand, Carrapico and Turobov, 2024). In this sense, any 'Cyber Defence Shield' needs to be built on more than just capabilities — it needs to bring together regulation, response mechanisms and early warning capacities. Legal tools such as the EU Cyber Solidarity Act can be useful

here, as they emphasise the need for the Union to develop detection and response procedures in case of a large-scale cyber-attack. In fact, the Cyber Solidarity Act has at its core the notion of a 'European Cybersecurity Shield', which will enhance the EU's cyber alert capacities and use AI and data analytics to detect and share cyber warnings. Yet more than cyber detection is required to create a genuine 'Cyber Defence Shield' for the Union. In fact, in 2023, the Commission had already proposed such a shield based on technological innovation, regulation, security of supply and cyber response mechanisms (European Commission, 2023). A 'Cyber Defence Shield' could perhaps go one step further as an EDPCI and aim to create an EU Cyber Command to ensure more effective early warning and action on cyber defence.

Given the political energy already dedicated to cyber defence by the EU, it seems odd that such a 'Cyber Defence Shield' was not proposed as an EDPCI. The Union has already published a Joint Cyber Defence Communication (Commission and HR, 2022) that details the necessity for cyber defence capabilities. Perhaps, however, one of the main reasons why cyber defence was neglected as an initial EDPCI is that it might be considered an overly complex or vague defence capability. Alternatively, perhaps decision-makers were already comfortable with the level of cooperation already achieved in cyber defence. Still, developing cyber defence into an EDPCI could have the benefit of enhancing cooperation among Member States, further developing joint situational awareness and collective response in a domain that has traditionally been fragmented along national lines. A strong European cyber posture would also help reduce dependence on external actors, such as the US for digital intelligence, security technologies and crisis response. On the industrial front, investment in indigenous encryption technologies, secure communications and threat intelligence capabilities would contribute to the growth of a competitive European cyber sector.

6.2 The 'European Combat Cloud'

A 'European Combat Cloud' could represent the digital backbone of future EU defence cooperation. Essentially, such an EDPCI would develop a cloud architecture that could be used by Europe's militaries, either as a federated or semi-federated system drawing on civilian cloud technologies. As armed forces across Europe digitise their operations, the capacity to store, process and share classified data securely across domains and borders will determine the effectiveness of joint missions and interoperability. A trusted European Combat Cloud architecture, developed in alignment with initiatives such as the EDF and future EDIP, and the EU's broader data governance frameworks, could allow Member States to collect, share and process data without exposing sensitive information to foreign-controlled infrastructures (Fiott, 2020b). The Military Cloud, therefore, could not only be a technical enabler but also a symbol of strategic autonomy in the information age (European Defence Agency, 2024b). It could underpin the EU's ability to act collectively in crises, allowing for more effective coordination of C2 functions, logistics and intelligence-sharing among armed forces. Without such a secure and sovereign data environment, efforts to achieve genuine interoperability would remain dependent on non-European providers and vulnerable to political leverage. In this sense, a Combat Cloud links to the EU's digital agenda with its defence ambitions, while also meeting one of the core capability gaps identified by both the European Council and Commission.

The EU has already begun to translate the notion of 'digital sovereignty' into practical defence initiatives. Projects such as the 'EU Collaborative Warfare Capabilities' and 'European Military Digitisation' under PESCO aim to lay the groundwork for secure cloud infrastructures capable of supporting networked operations. The EDF has started to channel resources into next-generation C4ISR technologies, which are an essential prerequisite for the development of a trusted European Combat Cloud. The EDA has also been undertaking defence cloud-related studies (e.g. the 'CLAUDIA' study), looking at the feasibility of applying

civilian cloud technologies into the defence sector with some interesting results (European Defence Agency, 2024b). Complementing these efforts, the European Commission's broader 'European Data Strategy' and work on federated cloud architectures, such as GAIA-X, seek to ensure that defence data can circulate within a secure European ecosystem. Additionally, it is important to acknowledge bilateral European efforts in the domain being developed by France, Germany and Poland (Burilkov, Sylvia and Barros, 2025). Yet, the challenge remains one of integration and scale, as well as innovation: without harmonised standards, cybersecurity protocols and political agreement on data governance, the EU risks constructing parallel rather than shared infrastructures.

The development of a European Combat Cloud faces equally complex challenges rooted in issues of trust, standardisation and sovereignty. The very idea of a shared military cloud raises political sensitivities about who controls access to data, how it is secured and under what conditions it can be shared among allies. NATO faces a similar dilemma as it seeks to develop an allied federated cloud architecture (Fiott and Calcara, 2025). EU Member States and NATO allies differ widely in their levels of digital maturity and in their relationships with major cloud providers — many of which are non-European. This creates asymmetries in capability and dependence that complicate efforts to establish a secure, interoperable architecture (Fiott and Calcara, 2025). Additionally, defence-relevant data sits at the intersection of national security and industrial competitiveness, meaning that states and companies are often reluctant to open their systems to external scrutiny (Calcara 2025). The challenge, therefore, is not purely technical but political.

Nevertheless, the establishment of a trusted European Combat Cloud could strengthen the foundations of collective defence and autonomy. A secure, interoperable cloud infrastructure would make multinational operations and deterrence measures faster, more coherent and less reliant on non-European data ecosystems (ASD Europe, 2025). By providing a common platform for data storage, analysis and decision support, such a system would enable the real-time coordination of joint operations, logistics and command structures – transforming the EU's potential for operational coherence. Although this presupposes more centralised and EU-level C2 structures that can handle, distribute, operationalise and secure data via the Combat Cloud. Industrially, the development of a military cloud ecosystem could drive innovation across the EU's digital sector, creating demand for secure software, encryption standards and data management solutions. In doing so, it could stimulate the emergence of an EDTIB that is competitive, interoperable and less dependent on global cloud monopolies.

6.3 Military Mobility

The ability to move troops, equipment and supplies swiftly across the European continent is not a logistical afterthought but a strategic necessity, especially in light of the renewed focus on deterrence and rapid reinforcement on Europe's eastern flank. Again, other EDPCI proposals such as the Drone Defence Initiative, Air Shield and Eastern Flank Watch would be impossible to sustain without coherent and effective movements of military personnel, equipment and supplies across EU/NATO territory. However, Military Mobility is still hampered by regulatory, infrastructural and procedural barriers that impede movement within and across the EU/NATO territory. Investment in dual-use transport infrastructure, harmonised customs procedures, and secure digital documentation is essential if Europe's armed forces are to move into position (and be re-supplied) effectively in times of crisis. In this sense, Military Mobility remains a critical project that can help ensure Europe's defence, although it fails to capture enough political and public attention due to its complex nature (Chihaia, 2025).

Military Mobility exposes a contradiction in major flagship defence projects in the EU. Despite repeated and clear political commitments, the harmonisation of transport regulations, customs procedures and infrastructure standards remains slow and uneven across EU Member States. Civilian infrastructure is often ill-suited to military needs (i.e. bridges cannot always support heavy armour, rail networks have incompatible gauges or border crossings are burdened by bureaucratic procedures). Additionally, financing presents another challenge: the funds available under the Connecting Europe Facility (CEF) and other EU instruments fall short of what is required to modernise transport corridors at the scale necessary for rapid reinforcement, which is perhaps one reason why the Commission did not advance Military Mobility as an EDPCI as part of its 'Scoping Paper'. It is also certainly true that Military Mobility is, at present, also a PESCO project that brings together 28 participating states – including Canada, Norway and the US, which sit outside the EU. Indeed, there might be some reluctance to open EDPCIs to non-EU states, which highlights a challenge of how to align partnerships with EU initiatives such as EDPCIs. Moreover, while cooperation with NATO has improved, differing operational doctrines and planning cycles still complicate synchronisation. To be sure, overcoming these obstacles will require more than investment.

Some progress on Military Mobility has been achieved, however. The Military Mobility Action Plan 2.0, updated in 2017 for the period 2022-2026, is designed to identify critical infrastructure gaps and regulatory obstacles, aligning investments under the CEF with military requirements. The inclusion of Military Mobility within PESCO has also fostered closer coordination between defence and transport ministries across Member States. Yet even with financial commitments and political attention, implementation remains uneven. National regulations, customs procedures and infrastructure bottlenecks still slow rapid deployment, particularly along Europe's eastern flank (Council of the EU, 2024b). The Commission has recently sought to breathe new life into the Military Mobility initiative, with the European Council Conclusions of March 2025 calling for a renewed effort. In this respect, the 2025 Joint EU White Paper on Defence Readiness emphasises the urgent need to harmonise national customs procedures, as well as underlining how 500 hot-spot projects have been earmarked for EU funding for an urgent upgrade. To this end, the Commission and HR/VP have committed themselves to adopting a Joint Communication on Military Mobility in late 2025 (European Commission, 2025a: 8-9).

Having in place a complementary EDPCI for Military Mobility could certainly spur on such efforts, although aligning project partners already working together in the dedicated PESCO project on mobility with any EDPCI would raise questions about third-country participation in such flagship projects. However, there are questionable defence industrial benefits to be had from such a flagship project. Indeed, most of the infrastructure needed to make Military Mobility a success is civilian and owned largely by commercial companies. Given the potentially limited benefits for the EDTIB, Military Mobility was perhaps overlooked as an ECDPI. Yet, any comprehensive approach to Military Mobility will move beyond traditional transport nodes and networks. Indeed, Military Mobility could be linked to other critical military requirements in the EU and NATO. For example, mobility of forces and equipment is vital in peace and wartime, but so too are weapons and ammunition storage facilities, and these need to be better linked with transport corridors (Fiott, 2024). What is more, given the ballistic and drone threats facing the EU/NATO new facilities may need to be created in more protected geographical areas in the EU/NATO (i.e. far enough from the frontline to be struck, but near enough to supply Europe's forces). Furthermore, a Military Mobility EDPCI could also direct some of its allocated funding to new technologies and processes, such as the use of autonomous robotics for logistical and medical purposes.

6.4 Concluding remarks and the issue of C2

As these three additional potential EDPCIs highlight, there is scope to develop and finance other critical defence projects at the Union level. In fact, cyber, cloud computing and military mobility highlight areas of defence cooperation that are already underway at the EU level, so there is scope to develop these further in the years ahead. However, it is also important to reflect on some of the factors that may hinder such additional EDPCI areas from coming to life. On the one hand, all three of these additional EDPCI proposals have the benefit of being genuinely EU-wide endeavours, which means that a critical mass of Member States could participate in and benefit from these projects. On the other hand, all three potential projects have a strong dual-use dimension, meaning that there may potentially be a more limited role for European defence companies and innovators in the projects. This may raise questions on the ultimate contribution of future funding from the EDIP and other EU instruments to support the growth of the EDTIB. Still, it cannot be contested that cyber defence, cloud computing and military mobility are key industrial and technological building blocks of Europe's defence ecosystem.

However, the recent EU focus on flagship defence projects or EDPCIs clouds our view of a centrally important issue for EU defence. There is a tendency to focus on specific defence technologies, such as drones or missiles, but we often overlook the need to manage and utilise such technologies within armed forces in an effective and networked manner. There exist non-kinetic forms of capability, such as Command and Control (or C2). Such structures are imperative if the Union is to act coherently and effectively in defence, especially given the Union's reliance on American-supported C2 structures (e.g. SHAPE, SACEUR). Without the C2 infrastructure provided by the US, EU Member States would find it difficult to conduct their own military operations, especially in high-intensity warfare contexts. C2 serves as the nerve centre for networked military operations and mobility, and it serves as the basis for effective political authority and direction during operations. Yet, today, the EU can only boast rudimentary C2 structures in the area of crisis management and certainly not for high-intensity warfare; for example, it relies on a mixture of national C2 capacities for CSDP military operations and the Military Planning and Conduct Capability (MPCC) for non-executive military missions – and the MPCC is still under-resourced in terms of personnel and CIS/ISR equipment. Should the US decide to decouple from European security, then Europe would have a serious C2 deficiency. For the future, having defence capabilities will mean little if C2 structures are not in place to direct them.

In this regard, the emergence of discussions on EDPCIs reflects the worsening geopolitical context for Europe, plus additional defence expenditure. A potential danger in the future is that the EU Member States and Institutions invest in defence capabilities, but neglect the C2 structures that are required to manage and use them properly. It is telling, for example, that the four EDPCIs proposed by the Commission in the 'Scoping Paper' do not go into any detail about the C2 architecture needed for ground, naval, air and space defence. Perhaps understandably so, given the sensitivities surrounding any discussion about potential EU C2 assets and how this might be deemed to duplicate NATO C2 structures. The question of C2 structures is seen as being beyond the Commission's competence, and there is a risk that this discussion will raise further objections from the Member States, but C2 is still a critical capability gap for Europeans when operating without the US. Without the guarantee of American support in the future, however, European leaders need to give more thought to how all of their planned defence capability projects will be managed on the battlefield, potentially without US leadership. If Europe does not marry its defence capability development processes with plans and procedures for battlefield effectiveness and direction (via C2), then

expensive military systems and equipment (produced in Europe, by Europeans) could operate in a less-than-effective manner, or not at all.

Undergirding all of the potential EDPCIs mentioned in this study is the need for C2 structures. In one sense, one can view most of the proposed projects as a contribution to NATO's defence and deterrence efforts. So, for example, any flagship on air defence can be seen as an EU contribution to NATO's IAMD architecture, although, even here, some thought needs to be given to how EU-funded flagships will be made interoperable with NATO processes and requirements. Should NATO's C2 structures become unavailable in future, however, Europe would be faced with yet another additional capability gap. This is challenging because C2 cannot be achieved with technology or investments alone, as C2 structures largely rely on personnel for military planning, communications and coordination. C2 also assumes a clear authority is invested in a senior military official (e.g. SACEUR). Still, even without the personnel dimensions of C2, there is scope for the Union to enhance its Communication and Information Systems (CIS) and ISR capacities (especially military intelligence). Such a step, whether considered as an ECDPI in its own right or not, would be a major contribution to the EU's security and defence.

7 Conclusions and recommendations

As this study has made clear, EDPCIs are both an EU-level political and industrial experiment in joint defence capability generation. If successful, EDPCIs could mark a decisive step in the consolidation of the EDTIB, the rationalisation of EU defence instruments and the emergence of a genuine European defence market that is less dependent on external suppliers. Yet success will not occur by institutional design alone. As this study has underlined, the translation of strategic intent into operational effect requires a combination of political commitment, financial ambition and industrial coordination that Europe has only sporadically achieved in the past. The Commission's 'Scoping Paper', as endorsed by the informal European Council in Copenhagen on 1 October 2025 and developed into a Defence Readiness 2030 Roadmap (published on 16 October 2025), marks the opening salvo on attempts to develop flagship defence projects at the EU level. This is an audacious step forward in EU defence cooperation, especially given the mixed results of past and non-EU European defence capability cooperation efforts.

The EDIP Regulation will provide the first concrete regulatory framework for EDPCIs. Now agreed, the EDIP can allow the Commission to prove its effectiveness and growing relevance in defence. Indeed, the procedural blueprint exists, and, in other areas of the Single Market, the European Commission has proven its mettle and added value. Given the sense of emergency over threats to Europe's security, agreement on the EDIP regulation comes at the right time, although there is a bigger challenge ahead on agreeing to EDIP funding over the 2028-2034 period. By working through the EU institutions, Member States have already agreed to harmonise standards in the dual-use sphere, stimulate the joint production and facilitate joint procurement of weapons. To catalyse the defragmentation and upscaling of the European defence market, the time has come for them to help the Commission select and develop European Defence Projects of Common Interest which go beyond the capacity of any single Member State.

In this study, we have set out a number of issues that require further political engagement by the Union. Accordingly, the study has pointed to capability prioritisation and interoperability concerns. Indeed, the history of European defence cooperation for capability development is mixed, and this makes the idea of joint development inherently risky. To ensure success, the EDPCIs should be closely aligned with Europe's present military requirements without neglecting future warfare needs. Ideas such as the European Drone Defence Initiative, the European Air Shield, Eastern Flank Watch and the European Space Shield all require

further thought as potential candidates for EDPCIs. Indeed, each project presupposes the development of cutting-edge sensors, radars and other technologies, but there is little clarity over how such proposed projects could be developed as part of an overall C2 structure. Nor is there clarity over whether such projects could lead to an industrial scaling up, or how they would manage to protect the vast geographical distances involved in deterring Russian aggression along the eastern flank.

This study has provided alternative EDPCI project ideas as a consequence of these concerns, with a focus on cyber defence, cloud computing, military mobility and C2. We propose these alternative EDPCI projects as a function of the need to spend more time on defining the genuine needs of EU defence. No one can deny the present pertinence of air defence, space or drones, but there is a need to also focus on defence projects that hit at the core of the structural operational/industrial deficiencies of European defence. This is especially important given the current transatlantic context, with doubts about the short- and long-term commitment of the United States to European and Ukrainian security. Should Europe be left to fend for its own security in the future, then the EDPCIs are a good way of already addressing military capability gaps that currently inhibit a more autonomous European military response to crises and conflict.

7.1 Recommendations

Financial and budgetary ambition

- There is a political imperative to ensure adequate funding under the now agreed EDIP. Without adequate financial ambition, it will not be possible to launch or sustain EDPCIs through the EDIP. This would undermine the European Council's call for more joint defence capability development in the EU. The request for EUR 131 bn under the next MFF (European Competitiveness Fund) is at the right level of ambition, but there needs to be commensurate national contributions through the noticeable national increases in defence spending.
- Now that the EDIP has been agreed, it is necessary to ensure the long-term financing of EU joint defence projects under the Programme over the 2028-2034 horizon. The 'Readiness Roadmap' for EU defence readiness states that by the end of 2028 all projects and contracts for critical capability shortfalls are placed, but this will require greater advanced clarity over the longer-term financing of the EDIP.
- The EDPCIs should be seen as EU public goods, meaning that the Union should finance defence projects to ensure collective benefits and prevent fragmentation through duplicative national defence spending routes. A strict insistence on using the common defence projects for cross-border cooperation, while also involving SMEs and mid-caps, is or paramount importance in order to avoid any 'renationalisation' of defence spending in Europe.
- EDPCIs can also be a good test-case for attracting private finance. Developing a Capital Markets Union would allow private investment in defence innovation, resilience and dual-use technologies. EDPCIs can also serve as a good framework around which to invest EIB funds, especially in supportive dual-use technologies and critical infrastructure.

Ensure the clarity and coherence of EDPCI proposals

- There is an urgent need to ensure coherence between the four EDPCIs identified in the 'Readiness Roadmap' on defence readiness. It is still unclear how the projects on air defence, space and drones will develop and function alongside the Eastern Flank Watch.

- The 'European Drone Initiative' needs greater clarity in terms of geographical scope and technological readiness. Europe will need to ramp up its investments in interceptor and neutralisation technologies and ensure that drones are produced at scale and low cost. The C2 structure behind the project is also unclear and it needs to be politically understood that no drone defence system is 100 % successful in detecting and neutralising targets, especially if offensive swarm drone strikes occur.
- The meaning and functioning of the 'Eastern Flank Watch' remain unclear, especially given its broad and ambitious scope. It is unclear how the project will integrate air, space, land, naval and cyber domains. For this reason, and given potential overlap with the common projects on air defence, drones and space, it is necessary to give the 'Eastern Flank Watch' a more precise focus on the land and naval domains (domains not covered by the other common projects).
- Developing a 'European Air Shield' in coordination with existing NATO efforts, and including Ukraine, should be encouraged, but there is a need to prioritise European technological solutions (inceptors, sensors and C2 systems). The common project can be an opportunity to rationalise the European air and missile defence industrial base and allow for scalability, cost-efficiency and sustainability (i.e. ensuring low-cost, militarily effective, defence mechanisms. The Air Shield can also encourage greater European investments in electronic warfare and directed energy capacities.
- In terms of the 'European Space Shield', the common project should lead to greater EU capacities for space situational awareness and enable a more integrated EU framework for establishing and defending space defence infrastructure. The Union must develop a coherent strategy for launch capabilities, backed by ambitious financing, and give preference to indigenous European manufacturing of satellites, sensors and other core dual-use technologies.

Selecting EDPCIs and innovation in defence

- The European Council and Commission should not rush into hasty decisions about the selection of present and future EDPCIs. While Europe is clearly under threat, and this adds pressure to act and invest, there is a need to ensure that the EU's long-term defence needs and dependencies are addressed.
- EDPCIs should avoid only exclusively capability-driven or industrial-driven approaches to project selection and management. Indeed, EDPCIs will add real value to EU defence where they enable military interoperability, contribute to the development of doctrine and help generate relevant C2 capacities.
- In light of shifts in the transatlantic partnership, EDPCIs should be geared to enhancing the Union's C2 capacities in domains such as cloud computing, cyber defence, military mobility, intelligence, communications and more. Doing so will allow Europe to address dependencies on US C2 infrastructure and C2 undergirds all of the other defence projects being proposed by the Commission.
- In advance of the 2028-2034 horizon for the EDIP, it is essential that the European Commission reinforces efforts on standardisation and dual-use research. Here, the 'Readiness Roadmap' foresees an expansion of 'capability coalition' dialogues with industry in the middle of 2026, but these dialogues need to start as soon as possible in 2025.

- The EDPCIs are an opportunity to prepare the Union for future warfare and disruptive defence technologies, as well as its strategic autonomy. As a result, EDPCIs should include a focus on strategic enablers and key enabling defence technologies such as AI, quantum and cloud computing.

Streamline EU defence governance

- There is a need to clarify the relationship between the EDIP and the SAFE loan instrument. It is unclear what role SAFE loans could play in conjunction with EDIP to help develop EDPCIs. Additionally, greater clarity is required on the potential role of EIB loans in the development of EDPCIs.
- More generally, there is a need to streamline the relationship between the EDF, EDIP, EDPCIs, SAFE and PESCO in order to prevent duplication and competition for funds. Here, clear governance and funding interfaces are required so that EDF innovation outputs feed coherently into EDPICs and SEAP-based capability programmes.
- With clear management, EDPCIs can benefit from existing EU defence funding mechanisms. Given the innovation dimensions of EDPCIs, there is a need to identify innovation developments under the EDF that could contribute to the development of EU flagship defence projects.

8 Interviews

Interview 1 — senior official from DG DEFIS, European Commission, Brussels, held in-person on 30 September 2025.

Interview 2 — senior officials from the Secretariat-General, European Commission, Brussels, held in-person on 2 September 2025.

Interview 3 — senior official from the European Defence Agency, held in-person on 2 September 2025.

Interview 4 — senior official from a leading European defence firm, held online on 8 September 2025.

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