

Advancing the inclusion of SMEs in the European Defence Technological and Industrial Base



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ABSTRACT

Against the backdrop of Russia's war against Ukraine, and the rapid battlefield adaptation that it has led to, defence innovation and small and medium-sized enterprises (SMEs) are being seen as key contributors to Europe's industrial preparedness, production scalability and security of supply. To this end, recent European Union (EU) policy and financial initiatives have specifically targeted SMEs in the defence sector, to address the financial, regulatory and industrial bottlenecks facing SMEs in Europe. However, SMEs still face considerable challenges and barriers. This Study examines the evolving role of SMEs within the European Defence Technological and Industrial Base (EDTIB). It specifically analyses the persistent barriers preventing SMEs from entering the defence market in Europe, and, once present, from scaling their innovation, services and products. The Study argues that, despite the growing political recognition of SMEs as sources of technological and disruptive innovation, SMEs still face considerable financial, regulatory and political barriers to access the EDTIB.

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Executive summary

The European Union's (EU) renewed focus on defence readiness has elevated the importance of the European Defence Technological and Industrial Base (EDTIB). While the debate often concentrates on major defence contractors and large procurement programmes, small and medium-sized enterprises (SMEs) are increasingly central to Europe's defence readiness. SMEs account for the overwhelming majority of firms operating within the European economy and play a critical role in the development of emerging technologies such as artificial intelligence (AI), autonomous systems, advanced materials, quantum technologies, cyber capabilities and space-based services. As the war in Ukraine has demonstrated, defence increasingly depends on the rapid adaptation and deployment of innovative technologies, many of which originate outside traditional defence industrial structures. The experience of the war on Ukraine raises several examples of how the EU could improve its support of SMEs in the EDTIB. Strengthening the participation of SMEs within the EDTIB is therefore not simply an industrial objective, but an essential component of Europe's overall defence readiness, especially in a period of elevated defence spending.

Despite their importance, SMEs face a series of structural barriers that limit their ability to contribute fully to the European defence sector. Financial constraints remain particularly acute. Defence innovation requires long development cycles, extensive testing and certification processes and often years of investment before any procurement contract materialises. This tends to discourage private investors and create funding gaps that many SMEs struggle to overcome. Regulatory barriers compound these challenges. Fragmented national certification systems, differing procurement rules and security clearance requirements impose disproportionate costs on SMEs seeking to operate across borders. Political obstacles further constrain participation. National procurement preferences, industrial sovereignty considerations and established relationships between governments and major defence contractors can restrict opportunities for innovative SMEs, regardless of technological merit.

In recent years, the EU has significantly expanded its support for defence SMEs. The European Defence Fund (EDF) has become the Union's principal mechanism for financing collaborative defence research and development, while the EU Defence Innovation Scheme (EUDIS) provides targeted support for start-ups and SMEs through innovation challenges, acceleration programmes and investor engagement. More recent initiatives, including the European Defence Industry Programme (EDIP), the Fund to Accelerate Defence Supply Chain Transformation (FAST), the Defence Equity Facility (DEF), the Hub for European Defence Innovation (HEDI), the Programme for Agile and Rapid Defence Innovation (AGILE) and Security Action for Europe (SAFE), seek to address specific financing, innovation, procurement and industrial scaling challenges. Collectively, these initiatives represent the most comprehensive effort ever undertaken by the EU to support SMEs within the defence sector.

However, while there is an increased level of defence investment in Europe, this Study finds that SMEs still require support in reaching the certification, contract, production and operational deployment phase of defence procurement. To strengthen SME participation within the EDTIB, this Study advances a series of policy recommendations. Not only does it call for greater financial commitment under the next Multiannual Financial Framework (MFF) for existing financial tools (e.g. EDF and EDIP), and stronger links between all of these tools, but it argues that the EU should be bolder on supporting access to defence testing and certification facilities, including the creation of a system of mutual recognition for defence certifications across Member States. Additionally, policymakers should continue to seek ways to reduce regulatory fragmentation and simplify procurement procedures.

List of abbreviations

AGILE	Programme for Agile and Rapid Defence Innovation
AI	Artificial intelligence
ASD	Aerospace, Security and Defence Industries Association of Europe
DEF	Defence Equity Facility
DIANA	NATO's Defence Innovation Accelerator for the North Atlantic
ECF	European Competitiveness Fund
EDA	European Defence Agency
EDF	European Defence Fund
EDIP	European Defence Industry Programme
EDIN	European Defence Innovation Network
EDPCIs	European Defence Projects of Common Interest
EDTIB	European Defence Technological and Industrial Base
EIB	European Investment Bank
EIC	European Innovation Council
EIF	European Investment Fund
ESG	Environmental, social and governance
EU	European Union
EUDIS	EU Defence Innovation Scheme
FAST	Fund to Accelerate Defence Supply Chain Transformation
HEDI	Hub for European Defence Innovation
MFF	Multiannual Financial Framework
SAFE	Security Action for Europe
SEAPs	Structures for European Armament Programmes
SMEs	Small and medium-sized enterprises
STEP	Strategic Technologies for Europe Platform
TEVV	Testing, evaluation, verification, validation and certification

1 Introduction

Small and medium-sized enterprises (SMEs) occupy an increasingly central, if still constrained, position within Europe's defence industrial landscape. Sometimes treated as peripheral actors embedded in national supply chains, SMEs are now recognised as critical vectors of innovation, flexibility and technological resilience. Yet, their structural position in the European defence market remains shaped by political and financial asymmetries such as limited access to finance, restricted entry into high-value procurement and dependence on prime contractors that continue to dominate Europe's fragmented defence markets (Struys, 2004). The result is that SMEs are rhetorically seen as the backbone of defence innovation in the European Union (EU), but they remain constrained in the market.

The challenges facing SMEs in the European defence sector are rooted in the political economy of the defence market, where debates over consolidation, security of supply and innovation remain unresolved. On the one hand, consolidation – often justified in terms of economies of scale and global competitiveness – has reinforced the position of large national champions. Russia's full-scale invasion of Ukraine has injected new urgency into debates about Europe's industrial preparedness, particularly in scaling production and ensuring security of supply (Becker and Kempin, 2025; Aries, Giegerich and Lawrenson, 2023; European Commission and HR/VP, 2025). Indeed, the war on Ukraine has given rise to a need for mass production for defence equipment, which only primes can organise and manage.

On the other hand, an excessive concentration in a handful of prime firms risks stifling innovation by narrowing the industrial base and limiting entry points for new technological actors. Such a concentration of supply chains may also reinforce the very defence market fragmentation that is said to stymie economies of scale in Europe. Again, Russia's war has underscored the importance of rapid adaptation, technological agility and battlefield-driven innovation: from drones and autonomous systems to software-defined capabilities (Fiott, 2024a; Calcara, Gilli and Gilli, 2023). In this context, SMEs in Ukraine have demonstrated their value as sources of disruptive solutions and rapid prototyping. The shorter defence innovation cycles that have emerged in Ukraine increase the need for EU Institutions and EU Member States to reframe Europe's defence innovation patterns, processes and objectives.

However, SMEs are expected to drive disruptive innovation, but within ecosystems that often privilege scale over experimentation. While large firms remain indispensable to any defence development programme, their dominance can crowd out smaller, more agile actors. Since Russia's war on Ukraine, we can observe the growing importance of prime firms and mid-caps to help boost Europe's defence production, especially as these firms dominate in terms of manufacturing capacity and potential. However, even if we accept the premise that there will be more consolidation in the European Defence Technological and Industrial Base (EDTIB) in future, there is still a need to consider the costs of crowding out SMEs, industrial diversity and technological dynamism.

The EU's gradual engagement with the defence sector reflects an attempt to manage this tension. Early efforts by the EU have focused on market opening and regulatory harmonisation, but these have proved insufficient to generate a genuinely competitive and innovative EDTIB. Over time, EU policy has shifted towards more interventionist instruments aimed at capability development and industrial integration and defragmentation. Within this evolving framework, SMEs are increasingly seen as moving away from being beneficiaries of subcontracting opportunities to active innovators and disruptors.

The European Defence Fund (EDF) has represented a turning point in this regard because it seeks to directly integrate SMEs in cross-border defence innovation projects and European value chains (Fiott,

2019: p. 38). Dedicated calls for SMEs and financial bonuses for their inclusion in larger consortia signal a deliberate effort to rebalance industrial participation. What is more, initiatives such as the Programme for Agile and Rapid Defence Innovation (AGILE) seek to reduce the lead times of innovation. Yet, the requirement to operate within multinational consortia can also dilute the autonomy of SMEs, raising concerns about intellectual property, strategic direction and long-term scalability. Other initiatives, such as the European Defence Industry Programme (EDIP) and the Security Action for Europe (SAFE) loan instrument, go further by addressing structural bottlenecks in financing and production. These measures aim to improve access to capital, streamline regulatory requirements and facilitate scaling-up from prototyping to production. In principle, this marks a shift from project-based support to systemic industrial policy. In practice, however, SMEs continue to encounter risk-averse financial institutions, administrative complexity and uneven access to infrastructure across EU Member States.

Ultimately, the future of SMEs in the EDTIB will depend on how effectively policymakers navigate the trade-offs between scale and innovation and short-term capability needs versus long-term defence innovation. Instruments such as the EDF, AGILE, EDIP and SAFE indicate a growing awareness of the need to cultivate a more inclusive and resilient industrial ecosystem. However, unless persistent barriers to finance, market access and scaling are addressed, SMEs risk remaining structurally subordinate within a system that depends on them for innovation but does not fully enable their growth.

1.1 Scope of analysis

It is imperative to focus on the unique position of SMEs in the EDTIB and assess how SMEs navigate EU policy and financing processes, as well as engage in national defence innovation processes. This Study observes that, despite a proliferation of EU-level instruments, significant bottlenecks persist across the defence production cycle. These include gaps in access to finance, regulatory complexity and the enduring fragmentation of national procurement practices, all of which disproportionately affect smaller and non-traditional actors (Carril, 2026: p. 11). The Study examines how these constraints interact and the extent to which they undermine the EU's broader ambition to foster a more innovative and resilient industrial base. In particular, the Study focuses on the structural challenges that continue to inhibit defence SMEs from transitioning from early-stage innovation to full-scale production and operational delivery.

1.1.1 Research questions

The overall aim is to provide a targeted and policy-relevant assessment that can inform the EU's general policy debate on Europe's defence industrial future. The Study will, therefore, be driven by a limited number of analytical questions that link structural constraints to policy effectiveness. The main research question that drives this study is: 'To what extent do current EU defence industrial policies enable SMEs to scale up and be more integrated within the EDTIB?'. This overarching question gives rise to four related sub-questions:

- Where are the most critical financial, regulatory and industrial bottlenecks in preventing SMEs from integrating into the EDTIB?
- How effectively do EU instruments address these bottlenecks, particularly in terms of access to finance and market entry?
- To what extent does the fragmentation of national procurement systems continue to limit SME participation and cross-border scaling within the EDTIB?

- What targeted policy reforms at the EU and Member State level would most effectively enable SME scale-up while balancing the trade-off between industrial consolidation and innovation?

1.1.2 Methodology

Methodologically, the Study draws on academic and policy literature to capture both analytical depth and policy insights. The Study will analyse existing studies and primary and secondary sources, including relevant official EU documents, industrial strategies and policy and academic literature. Use will be made of reliable media pieces, too, wherever relevant. In addition to the desk research, the Study benefits from the use of publicly available data provided by DG DEFIS, the European Commission, under the European Defence Fund. This Study also makes use of existing stakeholder surveys and interviews conducted by the European Commission (2024a) and consultancy firms such as PWC (2024). While no direct interviews were conducted for this Study, two closed-door expert working group sessions were held in Brussels under the direction of the author of this Study on 22 May 2026 (26 participants) and 4 June 2026 (16 participants). At these working group sessions, which addressed the EDTIB, various representatives of European industry and institutions were able to share their views on the challenges facing firms in the EDTIB and to provide their reaction to some of the recommendations in this Study.

1.1.3 Structure of the study

This Study is organised in three main substantive chapters. Chapter one looks at the structural barriers facing SMEs in the EDTIB today, and it discusses a number of the constraints that SMEs face when seeking to do international business in the European defence sector. The chapter focuses on financial barriers such as a lack of private investment, regulatory barriers resulting in high compliance costs and political barriers related to national procurement practices and the interests of prime contractors. Chapter two turns to an overview and analysis of existing EU defence industrial tools that are designed to stimulate defence innovation and support SMEs. This chapter charts the development of EU policy responses, and it probes the opportunities and limitations of such financial and policy initiatives. Chapter three then specifically turns to two major constraints for SMEs in the EDTIB: 1) how best to learn specific lessons about defence innovation from the war on Ukraine; and 2) the challenges associated with testing and certification, which can stymie the ability of SMEs to develop technologies and products and sell them in the EDTIB. Finally, the Study ends with concluding remarks and ten specific policy recommendations to support SME access to the EDTIB.

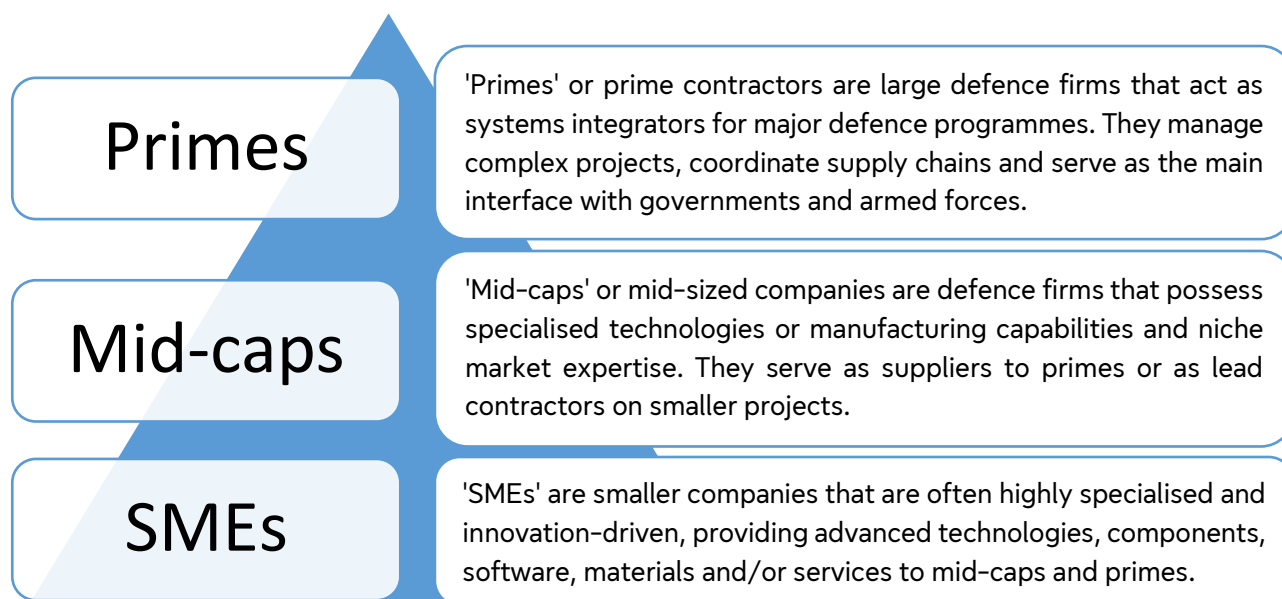
2 Structural barriers facing SMEs in defence

According to the European Commission, SMEs represent 99 % of all businesses in the EU. SMEs are defined by the EU as firms that employ 250 or fewer individuals and have an annual turnover of less than EUR 50 million or a balance sheet of EUR 43 million or less.¹ Despite making up the large swathe of firms in the EU, SMEs find themselves in a relatively precarious position. When such enterprises grow beyond a certain size, they can face substantial difficulties in managing compliance obligations (European Commission, 2025b). In the defence sector, several challenges present themselves before an SME ever reaches a phase of growth to a certain size. In Europe's defence market, SMEs form a major element of Europe's defence supply chains and innovation. It is estimated that more than 2 500 SMEs in Europe currently supply major prime firms such as Airbus, Thales, Rheinmetall, Leonardo and more (Koh, 2025).

¹ EU Recommendation 2003/361.

Furthermore, Aerospace, Security and Defence Industries Association (ASD) of Europe (2026) estimates that SMEs are also responsible for about 50 % of Europe's GDP, and in the defence sector, SMEs provide approximately 70 % of the total value of European defence systems. As Figure 1 shows, the EDTIB is composed of three main tiers of firms that are all integral to defence production and innovation.

Figure 1: The EDTIB and three tiers of firms



Source: Author's own.

Primes, mid-caps and SMEs have an interdependent relationship in the EDTIB, as together they form the basis for the defence production supply chain. Of course, primes and mid-caps are constantly scoping the market to acquire SMEs or to absorb them into supply chains for the benefit of technological advantage and supply resilience in the defence market. One study points to the fact that there is 'frequent ownership transfer of innovative SMEs. Larger companies show a particular preference for acquiring SMEs operating in nanotechnology, cybersecurity, big data analytics, and artificial intelligence (AI) fields' (Giacomello and Preka, 2023: p. 550). In this sense, primes and mid-caps recognise the importance of SMEs for their own potential to innovate and produce cutting-edge defence systems. Additionally, SMEs are key to ensuring Europe's overall defence resilience and preparedness. It has been observed that SMEs can help governments manage preparedness and resilience by increasing the supply chain options of governments and primes and mid-caps (Wiley, 2013: p. 108). In this regard, it is often too easy to classify SMEs as innovators, while simultaneously ignoring the broader role they play in the EDTIB and the wider European economy.

Many SMEs are not only suppliers to the defence sector, but also undertake business in the commercial sphere. Indeed, for many SMEs, civilian markets remain the principal source of revenue, with defence representing an additional – rather than exclusive – commercial opportunity that can result in significant commercial benefits in the market (Callado-Muñoz et al., 2024; Hartley, 2011). This dual-use orientation of many SMEs provides resilience by diversifying demand and sustaining innovation cycles, but it also exposes firms to different regulatory, certification and procurement requirements (Europe Economics, 2024). Selling into defence markets typically requires long investment horizons, security clearances, rigorous qualification processes and the ability to meet demanding standards of reliability and supply continuity. By contrast, dual-use markets are generally characterised by faster product cycles, greater commercial

flexibility and broader customer bases. The strategic challenge for EU policy is, therefore, not simply to increase SME participation in defence procurement, but to create the institutional and financial conditions that allow innovative firms to transition successfully from civilian innovation to defence production without undermining their commercial competitiveness in wider dual-use markets.

2.1 Understanding SMEs and internationalisation

SMEs have been the focus of economic inquiry and studies. The economic literature refers to a series of models that can help explain how SMEs develop their business models. One model² looks at how SMEs can increase their export activities through increased marketing and/or the establishment of overseas subsidiaries or production units (Johanson and Vahlne, 1977). This model implies that SMEs have the resources to dedicate to marketing, plus the financial, administrative and cultural capital required to deal with the linguistic, cultural and political differences found in various markets. Another assumption this model makes is that SMEs have an optimum level of knowledge on how to operate in overseas markets, but the reality is that such knowledge is not freely available to SMEs and neither do they necessarily have the ability to learn about how different markets, in this case the European defence market, operate and function. It is not easy for SMEs to learn about the social, cultural and political dynamics that make different defence markets in Europe function. Market knowledge is in short supply for many SMEs in Europe, especially given the relatively fragmented nature of the EDTIB. Furthermore, a lack of market knowledge can inherently increase the level of risk involved in internationalisation strategies by SMEs.

This model, born of business practices in the late 1970s, has long been critiqued for misunderstanding how contemporary markets work, with the present business environment made up of networks rather than a strict customer-supplier relationship. In this respect, it has been possible to refine the original model of business internationalisation by looking at how knowledge and trust between firms are embedded in networks (Johanson and Vahlne, 2009: p. 1414). This revision builds on empirical evidence to suggest that successful internationalisation strategies by SMEs are dependent on the relationships they build over time with customers and other suppliers. In this sense, it is clearer today that a socialisation of SMEs with other firms can lead to knowledge production and trust, which increases the likelihood of internationalisation in overseas markets. In the defence sector, however, such socialisation is rarer, as firms are reluctant to exchange information and knowledge on technology and industrial processes and, in some cases, they may be legally constrained from sharing information (e.g. secrecy classifications).

Another development in the study of SME internationalisation is that there has been a growth in 'born global' firms, which are defined as SMEs that are inherently international at their inception, meaning that they are more accustomed to managing and growing the internationalisation of their business practices. Here, it is assumed that firms that engage in export business within two years of being established as a company tend to perform better in international markets (Moen and Servais, 2002, p. 50; Cavusgil and Knight, 2015). According to the empirical findings in the field, a major factor in achieving success in internationalisation is greater flexibility and agility along value chains, and for SMEs to enhance their collaboration with 'customers to not only develop new products and services, but also to enable more effective buyer interactions and optimize the customer experience' (Cavusgil and Knight, 2015: p. 12). We are yet to see substantial evidence of the creation of 'born global' or 'born European' firms in the EDTIB,

² The so-called 'Uppsala Model'.

with exports to other EU countries as a basis for their business. In many cases, SMEs are still dependent on national governments or primes/mid-caps for business opportunities.

Whichever theory of SME internationalisation is preferred, there appears to be a consensus on the importance of market knowledge as a basis for an SME to engage in international business opportunities. The importance of market knowledge cannot be understated, as the accumulation of knowledge in the market can contribute, over time, to the refinement of existing human capital and a greater awareness of market trends and a subsequent ability to anticipate market shifts. Market knowledge can occur at three stages of the life of an SME: 1) market entry knowledge, where a firm gains information about how to navigate a new market (i.e. funding opportunities, in(formal) market rules and norms); 2) local market knowledge, where a firm gains knowledge about local business models and opportunities and uses this information to help build an international strategy; and 3) international market knowledge, whereby a firm uses knowledge it has gained from local and international markets to develop competitive advantages and enhance performance to compete with international competitors (adapted from Fletcher, Harris and Richey, 2013: pp. 50–51). Market knowledge can be acquired in two main ways: first, through learning about the market, or second, by directly purchasing knowledge (Lamb and Liesch, 2002: p. 9). Again, the EDTIB is marked by a reluctance to share knowledge given the nature of defence, but tools such as the EDF are playing an important role in knowledge production and knowledge exchange in the European defence market.

However, knowledge acquisition in the EDTIB is subject to variation as different defence markets in Europe embody different business climates, requirements and cultures. Therefore, knowledge is not a linear variable in internationalisation, and it may require SMEs operating in the EDTIB to develop knowledge of multiple national defence markets at the same time. Such knowledge variation can lead to further costs for SMEs (Eriksson et al., 2000: p. 27). Again, schemes such as the EDF have benefited SMEs, as they have gained opportunities to work, in a cross-border manner, with other SMEs and innovators. Such EU initiatives are generating knowledge within the EDTIB, which can be directly fed into the commercial strategies and competitiveness of SMEs in the defence sector. This is especially true for SMEs that are considered latecomers to the defence sector, with the bulk of their past business coming from the commercial sector. We should also acknowledge here that SMEs may need to attain knowledge of defence markets in Europe, as well as maintain their knowledge and access to information in commercial sectors, especially if they do business in both the defence and commercial markets.

Based on this structural condition facing SMEs, it is possible to discern a range of challenges and solutions that exist at three specific levels: 1) individual; 2) regional; and 3) international (see Asheim et al. 2003).

Individual level

Challenge: As smaller enterprises, SMEs can struggle to commercialise their innovations because of a lack of early investment and lower administrative capacities to manage bureaucratic processes (i.e. tax, auditing, compliance).

Solution: At the individual firm level, SMEs can take a range of internal management and business steps to improve their commercialisation and innovation advantages. They can try to attract seed and venture capital investment, and remodel their business model to take advantage of R&D subsidies and/or tax incentives (Asheim et al. 2003). SMEs can also conduct internal audits to monitor progress and conduct benchmarking activities to support business strategies. Here, external advice through consultancies can be solicited, depending on available resources and time. To promote innovation within an SME, it may also pay

for a business to create technology or innovation centres or officers within the firm, especially to better position the firm for potential funding opportunities at the EU level (e.g. EDF) and/or industrial partnerships.

Regional level

Challenge: Once established, SMEs may struggle to find and integrate into existing regional clusters, which lowers their potential for information exchange and market knowledge.

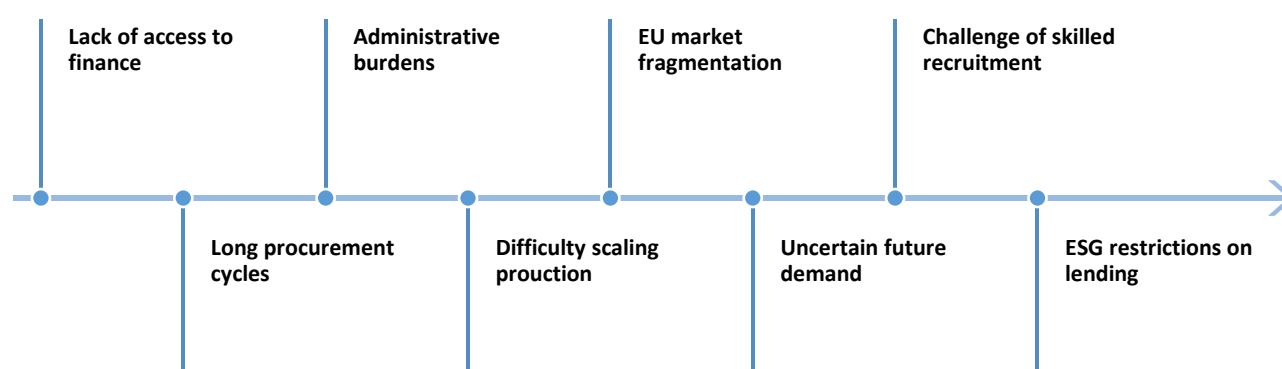
Solution: Moving to the regional level, SMEs can try to benefit from regional cluster initiatives, should they exist. Such regional clusters bring together key stakeholders and innovators, and they allow networking between firms in a defined geographical area. Depending on resources, SMEs can choose to relocate to such regional clusters, especially when such clusters specialise in specific technology domains or products (Asheim et al. 2003). These regional clusters can also be better placed to attract private capital and investment, and they can promote industrial and innovation match-making.

International level

Challenge: SMEs may struggle to internationalise their business because of funding constraints and low participation in international cooperative schemes.

Solution: The international level reveals the need for cross-border technology sharing and development. This can be partly done by encouraging cooperation between regional clusters and firms across national borders (Asheim et al. 2003). Such cooperation can be stimulated via funding schemes (e.g. the EDF) and cross-border grant schemes for projects and technologies. Additionally, international support can come in the form of information exchange schemes between SMEs, midcaps and primes, the funding of innovation prizes, the organisation of defence trade fairs and/or labour and skill mobility schemes.

Figure 2: Surveyed challenges facing SMEs in the EDTIB



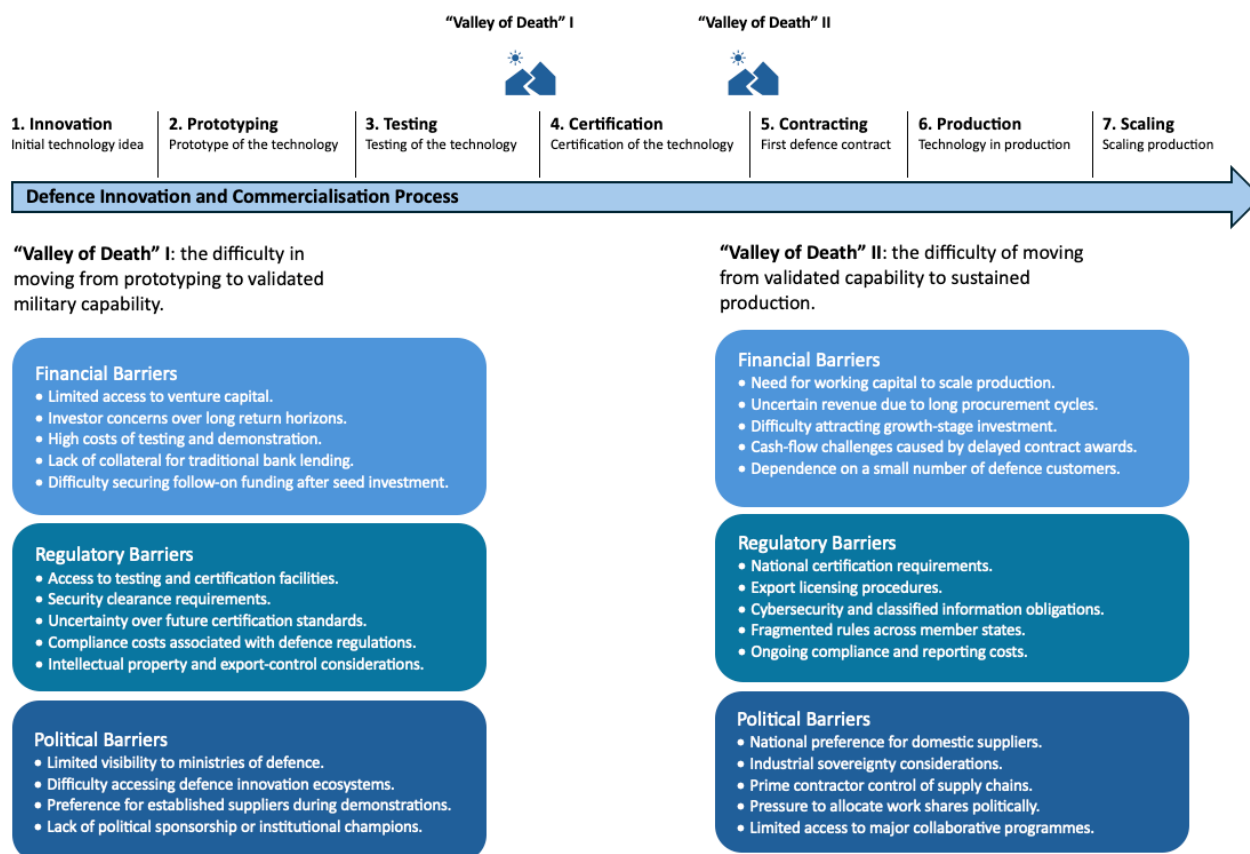
Source: These are the main challenges listed by SMEs in the EDTIB as surveyed as part of stakeholder consultations organised or sponsored by the European Commission. See (European Commission, 2024a) and (PWC, 2024).

2.2 Barriers and constraints facing SMEs in the EDTIB

Although knowledge and information asymmetries can greatly dent an SME's ability to operate in the EDTIB, these are not the only barriers facing such companies in the European defence sector. In fact, in addition to information asymmetries, SMEs are faced with a range of financial, regulatory and political barriers and constraints (van Driel, Gelderman and Semeijn, 2026). To understand these constraints, it is important to acknowledge the structural and operational differences between commercial markets and the

defence market. While commercial markets are driven by consumer demand, price competition and the pursuit of market share by firms, defence markets are shaped by government requirements, national security considerations and longer-term strategic planning. In Europe, governments are not merely regulators of the defence sector; they are its principal customers. Defence firms therefore operate in a market where purchasing decisions are often influenced by political priorities, security-of-supply concerns and sovereign industrial interests rather than purely commercial calculations. This reality creates a fundamentally different environment for innovation, investment and business growth.

Figure 3: Barriers to entry for SMEs in the EDTIB



Source: Author's own, 2026.

These differences are particularly pronounced for SMEs. In commercial markets, innovative firms can often bring products directly to customers, secure private investment on the basis of expected demand and scale rapidly, if successful. SMEs operating in the EDTIB face a much more complex landscape. Entry barriers are typically higher due to stringent security requirements, certification procedures and procurement regulations. Even highly innovative companies can struggle to access defence customers because procurement cycles are lengthy, contract values are concentrated among a relatively small number of buyers and market access is frequently mediated through larger prime contractors. For many SMEs, technological excellence alone is insufficient because success also depends on navigating intricate institutional and industrial networks.

The defence sector also imposes unique financial and operational burdens on smaller firms (van Driel, Gelderman and Semeijn, 2026). Product development timelines are often measured in years rather than months, while testing, validation and certification requirements can require substantial upfront investment before any revenue is generated. Unlike commercial markets, where customer feedback and sales can

quickly validate a product, defence innovations frequently require extensive trials, demonstrations and qualification processes before adoption. For SMEs with limited financial resources, these requirements can create significant cash-flow pressures and increase reliance on external support mechanisms. Access to testing infrastructure, certification facilities and demonstration opportunities therefore becomes a critical determinant of success.

At the same time, the distinction between defence and commercial markets is becoming increasingly blurred. Emerging technologies such as AI, autonomous systems, advanced software and space-based capabilities are often developed first in the commercial sector before finding defence applications. This trend has created new opportunities for dual-use SMEs to enter defence markets. However, companies accustomed to rapid product cycles and venture-capital financing often encounter a defence market characterised by slower procurement processes, a lack of financing, fragmented demand and complex regulatory requirements. As Europe seeks to strengthen its EDTIB, reducing these barriers will be essential to ensuring that SMEs can contribute effectively to defence capability development without abandoning the agility that makes them valuable in the first place. In the subsections that follow, each of the main barriers and constraints — financial, regulatory and political — is probed further.

2.2.1 Financial barriers and constraints

Financial constraints remain among the most significant barriers facing SMEs in the European defence sector. For example, a Commission survey of the financial constraints facing SMEs in the defence sector showed that approximately 40 % of SMEs found access to finance difficult, with many SMEs simply refraining from seeking debt financing (European Commission, 2024a). Unlike firms operating in purely commercial markets, defence SMEs must often sustain lengthy development cycles before generating revenue. Defence technologies typically require extensive testing, certification and demonstration before they can be integrated into military capabilities, and procurement processes can take several years from initial concept to any contract being awarded. As a result, SMEs are frequently required to absorb substantial upfront costs while facing considerable uncertainty about when, or indeed whether, a procurement opportunity will materialise. This financing gap can be particularly acute for companies developing novel technologies that have yet to establish a proven customer base.

Access to private investment remains a persistent challenge. Although venture capital and private equity investment in defence and dual-use technologies has increased in recent years, European defence SMEs continue to attract significantly less private capital than their counterparts in sectors such as digital technologies, healthcare or clean energy. Investors are often deterred by the distinctive characteristics of defence markets: long procurement timelines, limited numbers of customers, dependence on government budgets and the unpredictability of defence acquisition decisions. For many investors, the prospect of waiting years for a return on investment compares unfavourably with commercial sectors where products can be brought to market and scaled far more rapidly.

Reluctance among investors is also linked to broader regulatory and reputational concerns. For many years, environmental, social and governance (ESG) investment frameworks contributed to uncertainty over whether defence-related activities were compatible with responsible investment principles. While perceptions have begun to substantially shift following Russia's full-scale invasion of Ukraine and growing recognition of defence as a public good, many financial institutions remain cautious. Internal compliance policies, concerns about reputational risk and a lack of specialised expertise in defence technologies continue to limit the flow of private capital into the sector. Smaller firms are particularly affected because

they often lack the established track record, collateral or long-term contracts that investors and lenders typically seek.

The financing challenge is further compounded by the structure of the EDTIB itself. Many SMEs occupy lower tiers of defence supply chains and rely on larger prime contractors to access major programmes. This position can limit their visibility to investors and reduce confidence in future revenue streams. Moreover, fragmentation across national defence markets means that SMEs frequently face difficulties scaling their businesses across Europe, thereby constraining growth prospects and making investment opportunities appear less attractive. The result is a persistent funding gap in which many innovative firms struggle to secure the capital required to transition from prototype development to industrial production.

These constraints have important implications for the EU's defence industrial ambitions. The Union increasingly relies on innovative SMEs to deliver emerging technologies in areas such as AI, autonomous systems, advanced materials, quantum technologies and space capabilities. Yet without adequate access to finance, many of these firms risk remaining trapped in a cycle of small-scale innovation without achieving commercial or military adoption. Addressing this challenge therefore requires more than public funding alone. It also demands measures that reduce investor uncertainty, improve access to risk capital and create clearer pathways for innovative defence SMEs to scale their technologies within the European Defence Technological and Industrial Base.

2.2.2 Regulatory barriers and constraints

Regulatory barriers constitute another major challenge for SMEs operating in the European defence sector. While regulation is essential for ensuring security, safety and accountability, the cumulative weight of compliance can be particularly difficult for smaller firms to manage. Unlike large defence companies with dedicated legal, compliance and export-control departments, SMEs often lack the internal resources needed to navigate complex regulatory requirements. As a result, compliance costs can consume a disproportionate share of their financial and human resources, reducing their ability to invest in innovation, production and market expansion.

One of the most significant challenges stems from the fragmented nature of Europe's defence regulatory environment. Despite efforts to strengthen defence cooperation at the EU level, defence procurement, licensing and security regulations remain largely national competencies. SMEs seeking to operate across borders must therefore contend with differing national requirements related to procurement procedures, security clearances, industrial participation obligations and certification standards. For smaller firms, the administrative burden associated with understanding and complying with multiple regulatory regimes can be considerable. Fragmentation also increases market-entry costs and reduces opportunities to scale innovative products across the European market.

Export controls represent a further constraint. Defence SMEs developing technologies with military applications frequently require licences to transfer products, components or technical data across borders. Although export controls are a legitimate instrument of national security policy, licensing procedures can be lengthy, complex and difficult to predict. This uncertainty can create commercial risks for SMEs, particularly when dealing with international partners or participating in multinational defence programmes. Delays in obtaining licences can affect delivery schedules, increase costs and undermine the competitiveness of smaller firms that are already operating with limited financial margins.

Security requirements also create barriers to entry. Participation in defence projects often requires companies and personnel to obtain security clearances, comply with information-security regulations and

demonstrate the ability to handle classified information. These requirements are necessary given the sensitive nature of defence technologies, but they can impose substantial costs on SMEs. Obtaining and maintaining the necessary clearances may require investments in secure facilities, specialised personnel and cybersecurity measures that are difficult for smaller companies to absorb. For start-ups and newer firms, these requirements can become a significant obstacle to engaging with defence customers and supply chains.

Regulatory challenges are particularly evident in the development and certification of new technologies. Emerging capabilities such as autonomous systems, AI, cyber tools and advanced materials often operate in areas where regulatory frameworks are still evolving. SMEs are therefore required to navigate uncertainty regarding standards, certification and future compliance obligations. In some cases, the absence of harmonised European standards can delay market entry and discourage investment in innovative technologies. This challenge is especially acute for dual-use companies attempting to adapt commercial innovations for defence applications, as they frequently encounter regulatory requirements that differ substantially from those found in civilian markets.

Taken together, these regulatory constraints contribute to a broader challenge for Europe's defence innovation ecosystem. While large firms are generally better equipped to absorb compliance costs and navigate regulatory complexity, SMEs often face significant barriers to growth and market participation. Reducing unnecessary administrative burdens, promoting greater harmonisation of standards and procedures, and improving regulatory guidance for smaller firms will therefore be essential if Europe is to fully harness the innovative potential of SMEs operating in the EDTIB. In this respect, regulatory simplification is not merely an industrial policy objective, as it is increasingly a strategic requirement for strengthening Europe's defence technological and industrial capacity.

2.2.3 Political barriers and constraints

SMEs operating in the EDTIB face political barriers and constraints. However, political barriers are often less visible than financial or regulatory constraints, although they can have a profound effect on the ability of SMEs to participate in the European defence market. Defence remains one of the most politically sensitive sectors of economic activity, and governments continue to view defence industrial capabilities through the lens of national security, strategic autonomy and employment (Cernat, Guinea and Preuss, 2025). As a result, procurement decisions are not always driven solely by considerations of technological merit or cost-effectiveness. For SMEs, this creates a market environment in which political relationships, national industrial priorities and government preferences can be just as important as innovation and competitiveness.

One manifestation of this challenge is the persistence of national bias within European defence markets (Cernat, Guinea and Preuss, 2025). Although the EU has sought to promote cross-border industrial cooperation and a more integrated EDTIB, many Member States continue to favour domestic suppliers when making procurement decisions or allocating defence investment. Such preferences are often justified on the grounds of security of supply, sovereign control or industrial resilience. However, they can create obstacles for SMEs seeking to enter other European defence markets, particularly when those firms lack established relationships with national ministries of defence or major domestic contractors. Consequently, innovative SMEs may find that access to opportunities in other Member States remains constrained despite the existence of EU-level initiatives designed to foster greater industrial integration.

Political dynamics also shape relationships within the defence industrial ecosystem itself. In most European defence markets, SMEs gain access to major programmes through supply chains controlled by the large prime contractors. While governments and EU institutions increasingly seek to broaden SME participation in defence projects, prime contractors frequently argue that supply-chain management should remain a matter for the company. From their perspective, the ability to select suppliers, manage industrial relationships and allocate work packages is central to programme delivery, cost control and risk management. Accordingly, many primes resist attempts by public authorities to impose specific SME participation targets or intervene directly in supply-chain decisions.

This tension reflects a broader debate about the future structure of Europe's defence industrial base. On the one hand, governments and EU institutions increasingly recognise that SMEs are important sources of innovation, technological agility and industrial resilience. On the other hand, prime contractors often prioritise trusted suppliers with proven track records, particularly in programmes involving significant technical, financial or operational risk. For SMEs, this can create a structural disadvantage. Even when political initiatives encourage greater inclusion, smaller firms may struggle to secure meaningful roles in major programmes if primes perceive them as higher-risk partners or if established industrial relationships continue to dominate supplier selection.

Political fragmentation at the EU level further complicates matters. Member States do not always share the same industrial priorities, threat perceptions or views on defence cooperation. As a result, efforts to strengthen cross-border participation by SMEs can become entangled in wider debates about industrial sovereignty, burden-sharing and the distribution of economic benefits (*juste retour*) from collaborative programmes. Governments often seek tangible national returns from defence investments, which can lead to pressure for work shares to be allocated according to political considerations rather than industrial competitiveness (Cernat, Guinea and Preuss, 2025). In such circumstances, SMEs located outside the participating countries may find themselves excluded from opportunities irrespective of the quality of their technologies or products.

These political barriers underscore a central dilemma facing Europe's defence industrial policy. The Union increasingly depends on innovative SMEs to strengthen technological competitiveness and expand defence production capacity, yet the sector continues to operate within a political environment shaped by national interests and entrenched industrial structures. Overcoming these constraints will require more than additional funding or regulatory reform. It needs, ultimately, a greater willingness by governments to view SMEs from across Europe as contributors to collective defence capabilities rather than solely as foreign competitors, while also encouraging prime contractors to adopt more open and transparent approaches to supplier engagement. Without addressing these political dynamics, efforts to build a genuinely integrated and innovative EDTIB will remain incomplete.

2.2.4 The two 'Valleys of Death'

When we bring together all of the financial, regulatory and political constraints facing SMEs in the EDTIB, and combine it with some of the structural challenges facing these firms (i.e. lack of market knowledge), two critical moments appear in the defence development and procurement cycle that can make or break the business model of SMEs. These two critical moments are often termed 'Valleys of Death': a situation where technologies or products cannot be carried through to commercialisation or production because of a series of constraints (Henneke, 2023). The concept of the 'Valley of Death' originated in innovation and technology policy to describe the gap between scientific research and commercial application. It emerged

from the observation that many promising technologies fail not because they lack technical merit, but because they are unable to secure the resources, support or market access needed to progress from development to commercialisation (Fiott, 2019: p. 30). Over time, the concept has become particularly relevant to the defence sector, where innovation cycles are long, there are fewer customers and procurement processes are highly regulated. In an EU context, the notion of the 'Valley of Death' has gained increasing prominence as policymakers seek to understand why innovative SMEs often struggle to translate technological breakthroughs into operational military capabilities and sustainable business growth (European Commission, 2025a).

As Figure 3 above shows, for defence SMEs the first 'Valley of Death' lies between technological development and capability validation. At this stage, firms have typically moved beyond basic research and have developed a prototype or proof of concept, but they have yet to demonstrate that their technology can meet military requirements under operational conditions. This phase is particularly challenging because it demands significant investment in testing, demonstration and validation activities. Yet it is precisely at this point that many firms encounter difficulties securing finance. Private investors often remain cautious due to the long timelines associated with defence procurement, while public support mechanisms are frequently insufficient to bridge the gap between innovation and demonstration. The result is that many promising technologies fail before they establish their military relevance, regardless of their technical potential.

In the European defence sector, the first 'Valley of Death' is further deepened by structural challenges. SMEs frequently struggle to gain access to testing facilities, military end-users and certification infrastructure. Demonstrating a new autonomous system, AI application or advanced sensor often requires access to specialised facilities and operational environments that are beyond the reach of smaller firms. Without opportunities to test and validate technologies under realistic conditions, SMEs can find themselves trapped in a cycle where they are unable to generate the evidence needed to attract investors, defence customers or industrial partners. In this respect, the challenge is not simply one of technological development but of access to the broader defence innovation ecosystem.

Yet even those firms that successfully navigate this first valley often encounter a second and, in many respects, more difficult obstacle. The second 'Valley of Death' emerges between validated capability and market adoption and uptake. At this stage, a defence technology may have demonstrated its value, but the SME must secure procurement contracts, integrate into existing defence supply chains and scale-up production. For many SMEs, this transition proves exceptionally difficult and costly. Defence procurement cycles remain lengthy, demand is fragmented across national markets and access to major programmes is often mediated through large prime contractors. Prime contractors may favour established partners with whom they have long-standing industrial relationships. Thus, both of the 'Valleys of Death' show that the innovation of SMEs is insufficient to succeed in accessing the EDTIB, especially if firms cannot progress from the initial technology demonstration phase to procurement and production.

3 EU policy instruments and SME integration

Although SMEs face considerable challenges in accessing the EDTIB, a range of EU policy responses have emerged to address the specific constraints facing SMEs. Since 2016, the EU has accelerated its role in defence innovation policy, not least through the strategic use of the EU budget. Before the official introduction of the EDF in 2017, the EU engaged in support for SMEs in the defence sector in a much more limited manner. To the extent it was involved in supporting SMEs, the EU used legislative and policy tools

to try to reduce fragmentation in the European defence market. In this regard, legislative tools like the defence procurement directive (2009/81/EC) and the defence transfers directive (2009/43/EC) sought to apply the rules and principles of Internal Market law (i.e. non-discrimination on grounds of nationality in procurement, and the dismantling of non-tariff barriers between EU Member States) to reduce defence market fragmentation. The overriding approach was to ensure that SMEs were not locked out of cross-border opportunities because of complex and discriminatory national laws and procurement procedures.

Still, even without dedicated EU funding lines to support SMEs in the EDTIB, the EU nevertheless availed itself of a range of policy tools and initiatives that were a foretaste of the present-day approach to SMEs. For example, before the EDF, the EU conducted supply chain integration initiatives via the European Defence Agency (EDA), which rested on a mapping of SMEs in the EU, matchmaking events, databases and networking platforms and the possibility of participation in EDA-led capability projects. Furthermore, even though the EU did not have a dedicated funding line for defence industrial cooperation before 2017, as it does today, it sought to support SMEs indirectly through its civilian research programmes (i.e. FP7 or Horizon 2020). Here, SMEs could seek financial support for dual-use technologies such as space applications, advanced materials, cybersecurity and robotics. The EU also had, from 2014 to 2020, a more general programme for SMEs under COSME³, which used EUR 2.3 billion to improve access to finance for SMEs, as well as to support such firms with internationalisation efforts. Such tools came with the major drawback that they were not specifically geared to defence SMEs or indeed the EDTIB.

As we will see in this chapter, since 2017, with the introduction of the EDF, the EU has been able to more directly target defence SMEs and the EDTIB with financial support. While we should recognise that financial support is not the only way to support defence SMEs, it is a major development that has allowed the Union to experiment with new cooperation formats and incentive structures for European cooperation. Looking to the post-2027 period, with the introduction of the next MFF and European Competitiveness Fund (ECF), there is an opportunity for the EU to increase its financial support for SMEs and to do so on a more sustainable and effective basis. In what follows, we look at the major support schemes for defence SMEs operating in the EDTIB. The chapter concludes with a summation of the EU's approach to SME support and a series of reflections on how best to utilise the future ECF to support SMEs in the EDTIB.

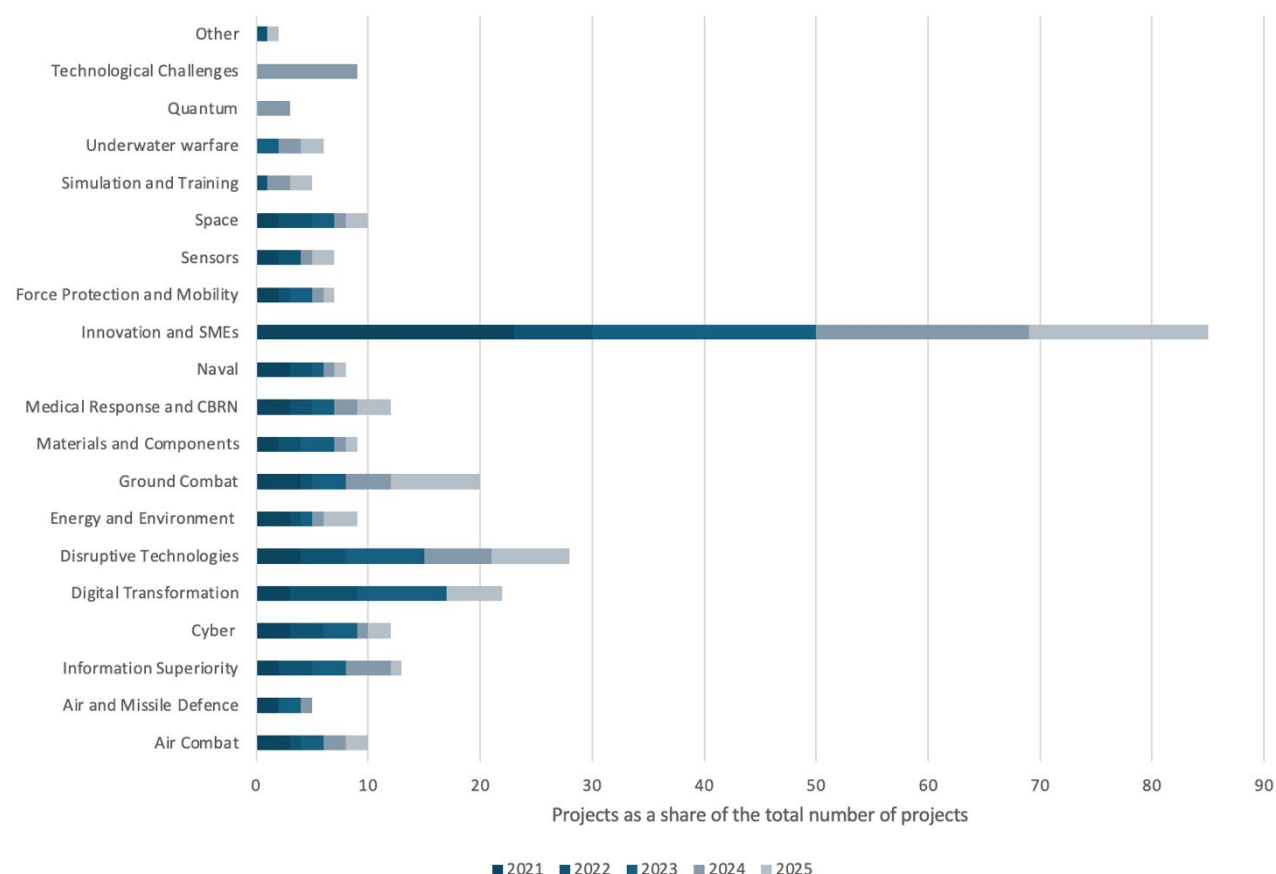
3.1 European Defence Fund

Since its introduction in 2017, the European Defence Fund (EDF) has represented a significant shift in the EU's approach to defence industrial policy. In creating the EDF, the EU sought to address the needs of SMEs and the fragmented European defence market characterised by national preferences, limited cross-border cooperation and high barriers to entry. Concretely, the EDF seeks to offer SMEs an opportunity to develop defence technologies and to eventually access major defence programmes. By providing dedicated funding for collaborative defence research and development, the EDF has become one of the EU's most important instruments for strengthening SMEs' participation in the EDTIB. The EDF has now been active for five years, and the results show that cooperation among (defence) SMEs has certainly increased in Europe. Since the first EDF call in 2021, the EU has invested EUR 5.2 billion in 282 projects that count on the participation of over 3 000 individual entities or partners (Fiott, 2026). As Figure 4 shows, innovation and SMEs projects are the most frequent type of projects supported under the EDF, with 85 projects dedicated to this project line out of the total number of 282 projects. In financial terms, from 2021-2025 the project line 'Innovation and SMEs' has received over EUR 360 million, which equates to

³ The programme for Competitiveness of Enterprises and Small and Medium-sized Enterprises (2014 – 2020).

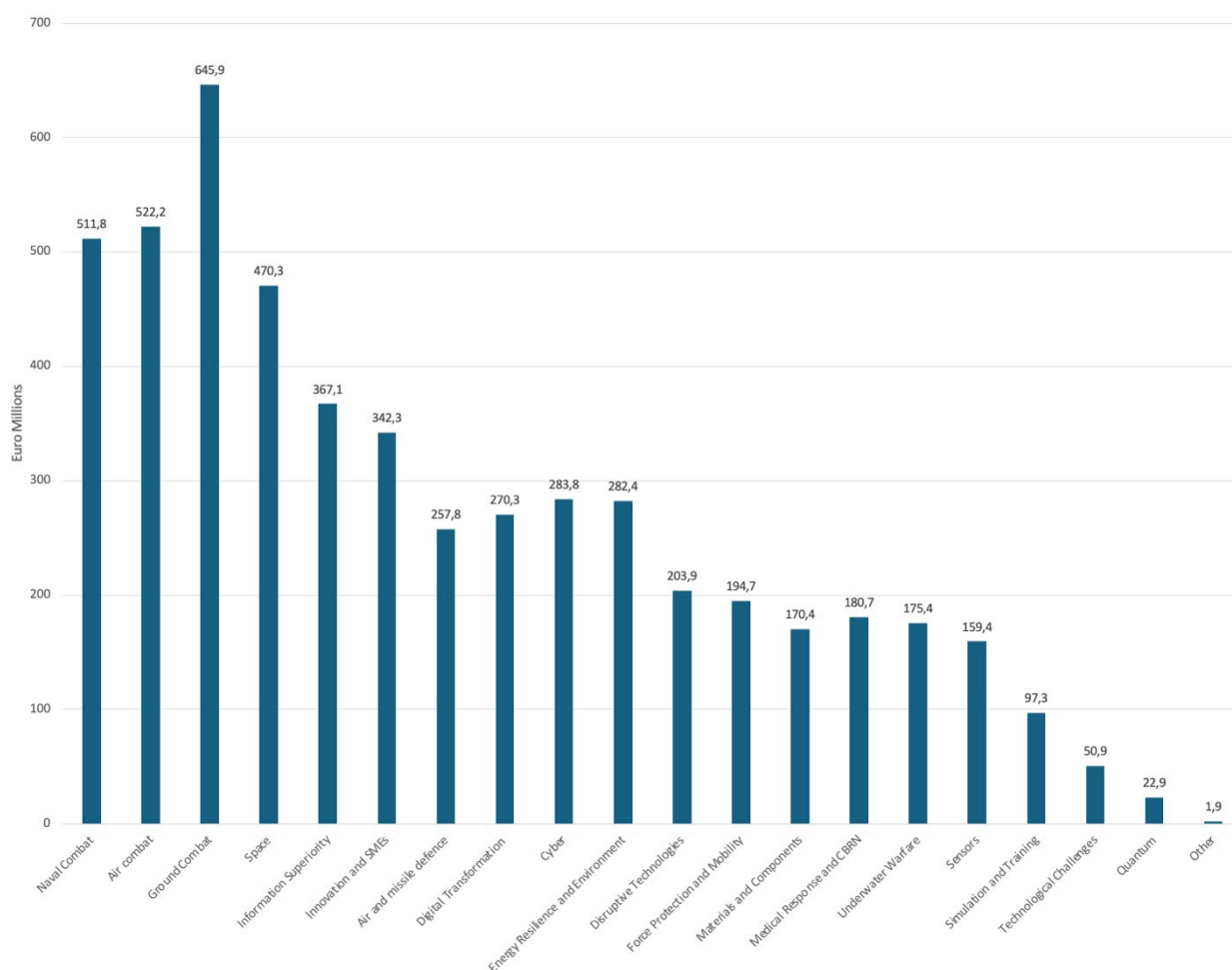
about 7 % of the total EUR 5.2 billion currently invested through the Fund. Yet, we should be careful with such data, as the total number of EDF projects does not automatically equate to the highest value in terms of EU financial support. For example, although only 16 'ground combat' projects have been funded by the EDF out of a total of 282 projects since 2021, the total financial investment made by the EU in this domain is over EUR 700 million since 2021, or 13.5 % as a share of EUR 5.2 billion. See Figure 5 for total investment per domain.

Figure 4: EDF Projects per domain, 2021-2025



Source: European Commission, 2021-2026.

The importance of the EDF for SMEs stems from its ability to tackle a persistent market failure in the European defence sector. Defence innovation is costly, risky and often dependent on long-term investment horizons that smaller firms are ill-equipped to absorb. Unlike their larger counterparts, SMEs frequently lack the financial reserves, political visibility and industrial networks needed to participate in multinational defence projects. The EDF reduces these obstacles by sharing development costs and creating incentives for cross-border industrial cooperation. In effect, the Fund lowers the threshold for participation and enables innovative firms to contribute technologies that might otherwise remain confined to national markets or fail to reach maturity altogether.

Figure 5: EDF investment per domain, 2021-2025

Source: European Commission, 2021-2026.

Importantly, the EDF is not merely open to SMEs but is rather designed to encourage their involvement alongside primes, midcaps and even research institutes. Higher funding rates under the EDF are available for projects that include SMEs, while the evaluation of proposals by the European Commission takes account of the extent and quality of SME participation. The Fund also promotes cross-border engagement among smaller companies and places particular emphasis on disruptive technologies, digital solutions and emerging capabilities where SMEs are often at the forefront of innovation. These provisions reflect a broader recognition that Europe's defence industrial competitiveness cannot rely solely on a small number of prime contractors. Rather, it requires a varied industrial ecosystem capable of generating innovation across multiple technological domains and geographical regions.

The EDF is helping to reshape the position of SMEs within the European defence landscape. Beyond providing financial support, participation in EDF projects offers smaller firms access to industrial partnerships, European supply chains and future procurement opportunities that might otherwise remain out of reach. This is particularly relevant as Europe seeks to strengthen defence preparedness, reduce critical dependencies and accelerate capability development. Of course, while the EDF alone cannot overcome all the structural challenges facing defence SMEs, it has nevertheless established a framework through which smaller companies can become more deeply embedded in Europe's collective defence effort. In this respect, the Fund not only contributes to the business potential of SMEs, but also to the resilience of the EDTIB by increasing the Union's defence innovation potential.

SME experiences in the European Defence Fund

As part of its interim assessment of the EDF in 2024, the European Commission requested a study from PWC (2024) to survey how SMEs engage with the EDF. The study, based on a stakeholder questionnaire and consultations, reveals that SMEs believe that the Fund's greatest added value is its support for boosting cross-border industrial networks and partnerships. Surveyed SMEs revealed that such networks allow them to establish relationships with large system integrators and primes and government stakeholders, which would have been extremely difficult through national-centric programmes. Surveyed SMEs also reported that participation in the EDF enhances firms' credibility and visibility within the EDTIB, and EDF participation can serve as a 'quality label' that improves SMEs' reputation with customers, investors and potential consortium partners. SMEs further reported that collaborative EDF projects accelerate technological development by facilitating knowledge exchange, access to complementary expertise and the sharing of specialised infrastructure, while also helping firms mature technologies. The EDF has enabled many SMEs to diversify into new defence markets, expand their customer base beyond their home Member State and integrate into European defence value chains. Participants also highlighted improvements in internal capabilities, including project management, intellectual property management and experience of managing complex multinational R&D projects. Importantly, SMEs considered the EDF to reduce technological and financial risk by co-financing high-risk research that would otherwise have been beyond their own investment capacity. Nevertheless, the evaluation notes that these benefits are tempered by concerns over administrative complexity, the cost of preparing proposals and uncertainty over whether successful R&D projects will ultimately translate into procurement contracts or commercial market opportunities.

However, while the EDF has proven effective at stimulating collaborative research and early-stage capability development, it remains relatively modest when measured against the scale of Europe's defence industrial ambitions. The Fund is often expected to simultaneously drive innovation, strengthen supply chains, support SMEs, foster industrial integration and contribute to strategic autonomy, all with resources that are limited (EUR 8 billion) when compared to national defence budgets or the scale of investment being made by global competitors. More fundamentally, the EDF still struggles with the perennial challenge of converting successful research projects into scalable industrial production. Too many projects risk ending at the prototype stage, with insufficient avenues towards procurement, certification and market uptake.

Under the next Multiannual Financial Framework (MFF) (2028-2034), the priority should therefore not simply be to increase the EDF's overall budget, however necessary this is. Instead, a key task is to deepen the Fund's strategic role within a broader defence-industrial ecosystem. Greater resources should be devoted to technology maturation, testing and certification infrastructure, rapid innovation schemes and follow-on funding mechanisms that help bridge the gap between development and production. The Fund should also be more closely linked to demand-side instruments such as SAFE and EDIP, ensuring that successful EDF projects have a clearer route towards procurement and deployment. If the EDF was initially about creating cooperation under the present MFF (2021-2027), the next phase (2028-2034) should focus on ensuring that cooperation delivers industrial scale, operational capability and long-term competitiveness for the EDTIB.

3.1.1 EU Defence Innovation Scheme

While the EDF provides an important mechanism for financing defence innovation, many start-ups and SMEs continue to face significant barriers when attempting to enter the defence sector. As shown, these obstacles range from limited access to finance and testing facilities to a lack of familiarity with defence end-users and procurement processes. In this respect, the EU Defence Innovation Scheme (EUDIS) was established in 2022 to address this gap. As an innovation-focused and integral pillar of the EDF that represents approximately 20 % of the EDF's annual budget (European Commission, 2025a: p. 3), the scheme seeks to broaden participation in the European defence ecosystem by targeting smaller firms, non-traditional defence actors and technology innovators. EUDIS seeks to support firms throughout the innovation cycle, helping them mature technologies, validate use cases, attract investment and connect with potential customers in the defence sector. By lowering entry barriers and supporting firms at different stages of development, the scheme seeks to ensure that promising technologies are not lost before they reach operational users.

EUDIS offers a broad range of support instruments specifically tailored to the needs of SMEs and start-ups. These include dedicated innovation calls, business acceleration programmes, coaching services, technological challenges, hackathons, cascade funding mechanisms and matchmaking opportunities with investors, defence companies and military end-users. The scheme also promotes the transfer of technologies developed through civilian research programmes into defence applications through so-called 'spin-in' initiatives. Importantly, EUDIS is expected to mobilise close to EUR 2 billion in investment by 2027, including EUR 1.46 billion from the EDF and an additional EUR 400–500 million leveraged from public and private sources. In the 2025 EDF Work Programme alone, EUR 336.6 million was allocated to EUDIS measures, while the 2026 programme foresees a further EUR 231 million in support from the EDF. Here, it is important to recall that the EUDIS does not *per se* represent fresh EU financial support, as the small proportion of investment dedicated to EUDIS is drawn as a small financial resource from the EDF.

3.1.2 BraveTech EU

In July 2025, the EU and Ukraine announced a new defence innovation initiative called 'BraveTech EU', which is part of the EU-Ukraine defence partnership through the Task Force on Defence Industrial Cooperation and EU-Ukraine Defence Industry Forum. In many respects, this scheme is truly innovative as it is the first time that the EU has decided to work in a structured and ambitious manner with a non-EU state on defence innovation. BraveTech EU is designed to accelerate the EU's and Ukraine's defence innovation potential, with the main objective of giving battlefield-tested innovations in Ukraine a wider market. In this sense, BraveTech EU is seen as a partnership mechanism for Ukraine's own BRAVE1 initiative. BRAVE1 is a Ukrainian-designed coordination platform to promote collaboration between the government and the defence industry in Ukraine, and it uses an online portal to allow SMEs to add their proposals and innovations for military stakeholders to scan and potentially procure (Government of Ukraine, 2026a). Brave1 has, so far, made grants of approximately EUR 25 million (UAH 1.3 billion) for over 3 500 different innovations, all made in line with over 260 NATO standards (Government of Ukraine, 2026b). There are already indications that BRAVE1 has led to the mass procurement of low-cost drones, and Ukraine is now even positioning itself as a drone exporter to American investors (Government of Ukraine, 2026c).

Funded through the EDF and EUDIS on the EU's side, BraveTech EU seeks to align Ukraine's and the EU's defence innovation ecosystems to provide a platform for the marketing and uptake of new defence innovations. The scheme is worth EUR 100 million, jointly financed through a 50-50 split between the EU and Ukraine (European Commission, 2026f). From the perspective of SMEs, BraveTech EU is another scheme that will be introduced in a phased approach. Phase I, which lasted in 2025, was built around hackathons, tailored business support, R&D funding and matchmaking activities. These are now standard tools that are used to promote the technologies of SMEs, and the focus is clearly on improving product marketing opportunities, seed funding and defence industry collaboration. As of 2026, in Phase II, Ukraine has been fully associated with BraveTech EU initiatives, with specific support directed towards Ukrainian start-ups and scale-ups. Indeed, under BraveTech EU, the partners have launched a specific EU4UA Defence Tech project worth EUR 3.3 million (from September 2025 to February 2027), to encourage the validation of technologies, the development of prototypes and testing/certification (EEAS, 2025). Additionally, we should note that the EU and Ukraine's defence innovation partnership is supported by the work of the EU Defence Innovation Office in Kyiv, which serves as the Union's principal defence innovation interlocutor for Ukrainian stakeholders (European Commission, 2024b).

Within the context of BraveTech EU, the EU and Ukraine are also experimenting with innovation in specific defence technology domains such as drones. Indeed, within the context of the EU's Defence Readiness Roadmap 2030, the European Commission launched an 'EU-Ukraine Drone Alliance', which is designed as an industry-led initiative for the development of drone and counter-drone technologies. Again, one of the Alliance's core objectives is to promote industrial cooperation between EU and Ukrainian SMEs. In seeking to connect EU and Ukrainian innovators, start-ups and SMEs, the EU-Ukraine Drone Alliance wants to help accelerate research, development and deployment of advanced drone technologies. This Alliance is not just a scheme for defence industrial cooperation with Ukraine, but also a direct response by the EU to a series of hostile violations of EU airspace with drones. In this respect, the European Commission has opened a call for applications for founding members of the Alliance, with the hope that the Alliance's activities will be underway in 2026 (European Commission, 2026a).

3.2 Programme for Agile and Rapid Defence Innovation

Although the EDF and EUDIS are directed specifically to supporting SMEs, the EU Defence Industry Transformation Roadmap of 2025 specifies the need for faster technology and innovation acquisition times. Learning lessons from the war on Ukraine, the Roadmap called for a mindset shift based on greater risk-taking and speed in defence innovation in the EU. Accordingly, the new EU Programme for Agile and Rapid Defence Innovation (AGILE) will complement existing SME-support instruments with an initial pilot budget of EUR 115 million to support some 20 to 30 projects (European Commission, 2026d), financed via reallocations in the MFF between the EDF, EDIP and EU Space Programme. The pilot phase for AGILE will take place in 2027 and serve as a test bed for the EU's ability to speed up the defence innovation process with Union support. AGILE will focus on streamlining procedures and a targeted time-to-grant of approximately four months, significantly reducing the period between proposal submission and project launch.

The AGILE programme is specifically designed to support a broader range of so-called 'new defence players', including SMEs, start-ups and scale-ups. According to the European Commission, AGILE aims to foster a more dynamic innovation ecosystem that can respond rapidly to emerging capability requirements. AGILE reflects a shift in European defence policy from supporting innovation as an end in itself towards accelerating the adoption and deployment of innovation, and a key test for AGILE will be whether it can, in

reality, reduce innovation development and uptake times. For SMEs and defence start-ups, this is particularly important because it will help smaller firms develop technologies without becoming trapped in lengthy development cycles. A question that should be addressed, however, is the relationship between AGILE and the EUDIS. In principle, both EU schemes address SMEs, although AGILE is geared to more rapid technology uptake. Still, there is a clear overlap between EUDIS and AGILE, even if EUDIS is geared to the broader defence innovation ecosystem. However, given that EUDIS and AGILE are both drawing financial resources from pre-existing instruments from the MFF, it is necessary — at the bare minimum — to ensure coherence between the two schemes and instruments. Here, we should acknowledge that the proliferation of EU support schemes does not necessarily make it easier for SMEs to navigate or benefit from EU financial support channels.

3.3 European Defence Industry Programme

The European Defence Industry Programme (EDIP) marks an important evolution in the EU's approach to defence industrial policy. Whereas earlier initiatives such as the EDF focus primarily on research and development, the EDIP seeks to address the transition from innovation and cooperation to industrial production and procurement. The programme is intended to strengthen the competitiveness, responsiveness and resilience of the EDTIB, while helping Member States overcome the fragmentation that continues to characterise much of Europe's defence market. In this sense, the EDIP reflects a growing recognition that Europe's defence challenge is not only about developing technologies, but also about ensuring that industrial capacity exists to produce and deliver capabilities at scale⁴. For SMEs, the EDIP is significant because it focuses on the defence industrial environment in which they operate. By encouraging common procurement and strengthening European supply chains, the EDIP seeks to create more predictable market opportunities for smaller companies. The programme also addresses issues such as supply security, industrial readiness and access to critical components, all of which actively involve SMEs.

Backed by EUR 1.5 billion from the EU budget for the period 2025–2027, the EDIP will not only support common procurement and the development of the European Defence Projects of Common Interest (EDPCIs), plus the creation of attractive Structures for European Armament Programmes (SEAPs) designed to create a legal framework for cooperation with favourable tax and financial bonuses, but it will also invest some of its budget into the Union's Defence Equity Facility (see section 3.4). Of course, one of the criticisms today about EDIP is its small financial scale of EUR 1.5 billion until 2027, and this is why the Union must be bold in the level of investment it allocates to the EDIP in the next MFF. Another challenge will be ensuring coherence between the array of EU innovation instruments and the EDIP. Indeed, the EDIP will be geared to joint development and procurement, but these processes cannot succeed without a sound defence innovation base. In this sense, the success of EDIP will be partially linked to its ability to farm and integrate innovations developed by SMEs in the EU. In this respect, there is an urgent need to ensure that all innovation developments taking place at the level of the EDF, EUDIS and AGILE are fully integrated into the Union's joint development and procurement efforts. This is not to say that every single defence innovation project funded under the EDF, EUDIS or AGILE should feed into the EDIP, but rather that the EDIP should be used to help SMEs internationalise their innovation efforts within an EU framework.

⁴ European Union, 'Regulation Establishing the European Defence Industry Programme and a Framework of Measures to Ensure the Timely Availability and Supply of Defence Products (EDIP)', 2025/2643, 16 December 2025.

3.3.1 Fund to Accelerate Defence Supply Chain Transformation

The Fund to Accelerate Defence Supply Chain Transformation (FAST), which is part of the EDIP, is designed to improve access to capital for defence SMEs and mid-caps. FAST's intended role is to strengthen supply-chain resilience, support manufacturing expansion and mobilise private investment into defence innovation ecosystems. Interestingly, FAST seeks to address the persistent 'Valleys of Death' between technological innovation and industrial-scale production within the EDTIB. In this sense, an initial amount of EUR 100 million (until 2027) from the EDIP will be dedicated to FAST, and the aim is to ensure that this investment makes its way to smaller defence firms to help them scale their products and technologies (European Commission, 2026f). FAST will operate in conjunction with the Union's wider EUR 1 billion Defence Equity Facility (see section 3.4), and it is in line with the objectives of the EU's Defence Industry Transformation Roadmap, which seeks to ensure the creation and safeguarding of critical supply chains for advanced technologies. FAST will be an important feature of the EDIP, because it will directly attempt to ensure a link between the Union's innovation efforts in the EDF, EUDIS and AGILE with the internationalisation efforts of SMEs, which includes the objective of increasing industrial scale and production capacity. Again, however, FAST has a relatively low financial commitment under the current EDIP until 2027, and it is yet another scheme that SMEs will need to invest resources and time into understanding.

3.4 EU Defence Equity Facility

The growing involvement of the European Investment Bank (EIB) Group and the European Investment Fund (EIF) in the defence sector marks an important shift in the EU's approach to financing security and defence. Historically, defence companies have faced considerable difficulties in accessing private capital due to regulatory uncertainty, investor caution and restrictions within financial institutions. In recent years, however, the EIB Group has progressively expanded its support for security and defence-related investments, recognising that innovation and industrial readiness require access to finance as much as public funding. For defence SMEs, access to capital remains one of the most significant constraints on growth. Many firms possess promising technologies but struggle to attract investment during the critical stages between research, commercialisation and industrial scaling.

The EIB and EIF therefore play an increasingly important role in filling financing gaps that traditional defence programmes cannot address. Concretely, the Defence Equity Facility (DEF), launched under InvestEU in 2024, represented the clearest example of the EIB group's shift. The facility combined EUR 100 million from the EDF with EUR 75 million from the EIF, creating a EUR 175 million investment vehicle. Rather than investing this amount directly in companies, the facility supported venture capital and private equity funds investing in European firms that were developing innovative defence and dual-use technologies. This approach helped expand the pool of private capital available to defence SMEs while strengthening Europe's wider defence innovation ecosystem. During its initial period of operation, the DEF backed 9 funds in total, including: Omnes RealTech II, Ventures V, Keen European Defence & Security Tech Fund I, DayOne CEE Fund II, Sienna Hephiastos and Nazca Aerospace and Defence Fund I (European Investment Fund, 2025a and 2025b).

Such was the initial success of DEF, the EIB Group decided to create a second Defence Equity Facility (DEF 2.0). This second facility has been created with an initial target size of EUR 1 billion to support pan-European venture capital, private equity and credit for defence. The EIF states that it seeks to support approximately 25–30 portfolio funds with DEF 2.0 (European Investment Fund, 2026). DEF 2.0 will operate as a 'fund-of-funds' to support defence-directed private equity, venture capital and private debt for

disruptive defence technologies. On top of investments from the EIF in DEF 2.0, the EU will also make contributions to the Facility via the Union's FAST scheme, with EUR 100 million from this scheme being allocated to DEF 2.0 (European Commission, 2026f).

However, even if the DEF has increased in financial scale since 2024, efforts to entice private investment into the defence sector face several challenges. Obviously, ESG criteria are still assessed by private investors when deciding to invest in the defence sector, and there are still reservations about investing in the defence sector. Here, the DEF can play a critical role in demonstrating to private investors that a financial bet on the defence sector is also about investing in cutting-edge technologies that may have significant dual-use applications. However, the other major constraint beyond ESG criteria is how private investors assess the trajectory of the European defence sector: clearly, in the next few years we should expect greater defence investments by governments, but investors naturally question what defence investment would look like in Europe should a 'peace deal' be reached with Russia. Here, private investors can see that European defence investment before Russia's war on Ukraine was relatively stagnant, and hardly attractive for private capital. An assessment by investors that Europe may decrease defence spending in the future based on more positive prevailing geopolitical circumstances can also influence present-day investment decisions (Matelly, 2025: p. 9).

3.5 Hub for EU Defence Innovation

In addition to the concrete steps being taken by the European Commission in support of SMEs, a Hub for European Defence Innovation (HEDI) was established by EU Defence Ministers in 2022 as part of the Strategic Compass. Hosted by the European Defence Agency (EDA), HEDI serves as a platform for connecting innovators, defence ministries, armed forces, investors and industry (Möhring, 2024). Its purpose is to accelerate the adoption of emerging technologies and shorten the timeframe between innovative ideas and operational military capabilities. For SMEs, HEDI addresses one of the less visible barriers to defence innovation. Indeed, many smaller firms possess innovative technologies but lack relationships with defence users, procurement authorities and military organisations. HEDI seeks to bridge this gap through innovation challenges, experimentation activities, networking initiatives and engagement with end-users. By creating opportunities for interaction between innovators and defence stakeholders, the Hub can help SMEs understand operational requirements and demonstrate the value of their technologies.

Unlike financial instruments such as the EDF, HEDI's contribution is measured by its ability to facilitate collaboration and technology adoption (Möhring, 2024). The Hub functions as an intermediary within the European defence innovation ecosystem, helping innovative firms gain visibility, access testing opportunities and connect with potential customers and partners. This role is particularly important for SMEs seeking to navigate the complex and highly regulated defence market. By linking innovators with military users and fostering experimentation through hackathons, demonstrator activities and more, HEDI seeks to reduce this gap. Seeking to develop these activities further, the EDA is now developing HEDI 2.0, which will additionally focus on the speed of technology development and acquisition and greater opportunities for real-world testing of technologies with military end-users (European Defence Agency, 2026). HEDI 2.0 will build on a four-pronged approach including: 1) an early warning analysis of technologies and innovations (the Defence Frontier Insights (DFI); 2) an 'Innovators Forge' that links innovators to EDA expert and operational groups; 3) innovation uptake, allowing field-based campaigns to test technologies; and 4) developing connections with the European Defence Innovation Network (EDIN) and a series of events and match-making activities.

3.6 SAFE instrument

The Security Action for Europe (SAFE) instrument represents an ambitious EU defence financing initiative. Established in response to growing concerns about European defence readiness, SAFE provides up to EUR 150 billion in EU-backed loans to Member States for common defence procurement. The instrument is designed to accelerate investment in critical defence capabilities while strengthening Europe's industrial base and reducing the fragmentation that has long characterised defence spending across the Union. Rather than funding research or innovation directly, SAFE focuses on generating demand for defence products through large-scale procurement programmes. For SMEs, the importance of SAFE lies in its potential to stimulate industrial demand. By supporting common procurement among Member States, SAFE can help create larger and more predictable markets for European defence products, providing SMEs with greater confidence to invest, expand production and enter new supply chains. While funding is directed to Member States rather than individual companies, the hope is that increased procurement spending will generate substantial opportunities throughout the EDTIB, including for SMEs that supply components, technologies and specialised services.

In this sense, SAFE should be seen as more of an indirect support mechanism for SMEs, as it seeks to create opportunities for firms in the EDTIB. However, if there is scope for a second iteration of SAFE (e.g. 'SAFE 2.0') in the future, it is advised that the Union takes a stronger approach to including SMEs in the loan instrument. Indeed, in the SAFE Regulation, SMEs were not structurally included in the core aims of the loan instrument, except — under Article 7(3) — when the Regulation remarks '[w]here relevant, Member States shall include a description of activities to strengthen security of supply and resilience, in particular by facilitating access to the defence market for SMEs, mid-caps and new defence players' (Council of the EU, 2025). This is a very light-touch approach to the inclusion of SMEs in the SAFE initiative, and potential future iterations of SAFE should include support to SMEs as a more significant assessment criteria within national loan applications to SAFE.

3.7 Defence Omnibus

The EU's Defence Readiness Omnibus marks an important shift in the Union's approach to defence industrial policy. Unlike EU-funded programmes such as the EDF and EDIP, the 'Defence Omnibus' is geared to removing the regulatory and administrative frictions that have accumulated over decades and which increasingly constrain Europe's ability to produce defence capabilities at speed. The rationale behind the initiative is straightforward enough. Following Russia's full-scale invasion of Ukraine and the growing emphasis on defence readiness, it became apparent that financial resources alone would not be sufficient to expand industrial output. Even where funding was available, defence projects were often delayed by lengthy permitting procedures, fragmented procurement rules, burdensome reporting obligations and regulatory uncertainty surrounding finance, environmental requirements and cross-border industrial cooperation.

The 'Defence Omnibus' is therefore an attempt to adapt a largely peacetime regulatory framework to the realities of a deteriorating security environment. Functionally, the Omnibus operates as a broad simplification package spanning both defence-specific and wider areas of EU law. It will help streamline access to EDF funding, simplify defence procurement procedures and establish faster permitting procedures for defence-related industrial projects. The package also addresses areas that traditionally sit outside defence policy, including competition rules, sustainable finance and access to private investment. For SMEs operating within the EDTIB, the 'Defence Omnibus' may potentially help firms better manage the

costs, uncertainty and time associated with permits, certification requirements and regulatory compliance. This could lead to a reduction of transaction costs, an acceleration of market access and improved participation in both EU-funded projects and wider defence supply chains.

Yet its impact should not be overstated. During political negotiations for the Omnibus, two main successful elements emerged: first, agreement on the need to simplify the management and implementation procedures of the EDF; and second, accelerated EU-wide permits for the development of new or expansion of existing defence manufacturing facilities (European Parliament, 2026a). However, there was no agreement under the Defence Omnibus to harmonise and deregulate intra-EU transfers of defence products. Such a step to facilitate intra-EU transfers of defence equipment would have made a substantial contribution to the potential of SMEs to internationalise their products and business in the EU. It is indeed regrettable that one of the major ways to support the EDTIB was excluded from the Omnibus package, but it is of utmost importance that the Union ensures the proper revision and implementation of Directive 2009/43/EC on defence transfers. Finally, it is important to recognise that simplification can help to remove obstacles, but it cannot substitute for demand, access to finance or industrial scale. In this respect, SMEs are likely to enjoy certain benefits from the Defence Omnibus, but more streamlined administrative procedures are never an outright substitute for additional funding.

3.8 European Innovation Council

A final EU scheme that seeks to support SMEs in the EDTIB is the European Innovation Council's (EIC) 2026 decision to financially support defence and dual-use technologies. The EIC makes use of an 'EIC Accelerator' and a 'Strategic Technologies for Europe Platform (STEP) Scaleup' fund, which is funded under the EU Horizon Europe programme. The EIC has a budget of EUR 10.1 billion, and, in 2026, the EIC Accelerator's overall budget is EUR 220 million, and the STEP Scaleup fund is worth EUR 300 million in 2026. As of 2026, each of these EIC funding lines will be open to the defence sector, which marks a substantial shift in the way the Union uses its Horizon Europe programme, and allows European defence start-ups and SMEs that are developing dual-use technologies (e.g. AI, quantum, advanced materials and robotics) to apply for up to EUR 2.5 million in grants and 30 million in equity investments for defence (European Innovation Council, 2026). What is more, the EIC has established a EUR 100 million EIC STEP Defence Scale Up call, which will allow companies based in EU Member States associated with Horizon Europe and Ukraine to benefit from up to EUR 30 million in direct equity financing (European Innovation Council, 2026). The EIC's involvement in supporting SMEs should not be underestimated, and in many respects the EIC Accelerator and STEP Scaleup can become the bridge between SMEs doing business in the defence and dual-use sectors. Yet again, however, a key challenge will be ensuring that the EIC's finances and efforts are seamlessly combined with existing defence innovation support tools such as the EDF, EUDIS, AGILE and more.

Figure 6: EU policy responses to the needs of SMEs

Problem statement 'A lack of...'	EU Policy Response	Financial commitment
<i>... funding opportunities for defence innovation and/or possibilities for European cooperation.</i>	European Defence Fund (EDF): provides financial support for SMEs to work on common R&D projects with primes and mid-caps.	EUR 8 billion (2021 – 2027)

Problem statement 'A lack of...'	EU Policy Response	Financial commitment
<i>... targeted financial support for the specific needs of SMEs operating in the EDTIB.</i>	EU Defence Innovation Scheme (EUDIS): targeted support for SMEs with specific project calls, coaching, hackathons, match-making events, etc. Fund to Accelerate Defence Supply Chain Transformation (FAST): targeted support for SMEs with a specific funding stream to help scale-up defence technologies. European Innovation Council (EIC): targeted support for SMEs via the EIC Accelerator and STEP Defence Scaleup Call.	EUR 2 billion (2021 – 2027) EUR 100 million (2021 – 2027) EUR 130 million (2021 – 2027)
<i>... private investment in the defence sector, especially funds targeting SMEs.</i>	Defence Equity Facility (DEF) 2.0: EU financial investments in private investment and venture capital funds specifically targeting private in the defence sector.	EUR 1 billion
<i>... opportunities for EU-based SMEs to cooperate with Ukraine.</i>	BraveTech EU: a specific support mechanism for EU – Ukraine defence innovation cooperation.	EUR 50 million (2021 – 2027)
<i>... support to ensure reduced acquisition times for technologies and innovation.</i>	Programme for Agile and Rapid Defence Innovation (AGILE): a tool designed to drastically reduce technology uptake timelines and to provide financial support for rapid technology development.	EUR 115 million (2021 – 2027)
<i>... steps to reduce the administrative and compliance burdens on SMEs operating in the EDTIB.</i>	'Defence Omnibus': a simplification agenda designed to reduce unnecessary administrative and compliance burdens on firms operating in the European defence sector.	N/A
<i>... opportunities to promote technologies to Military End-Users.</i>	Hub for European Defence Innovation (HEDI): primarily seeks to help connect SMEs and Military End-Users through match-making activities and technology foresight.	N/A
<i>... demand for defence programmes.</i>	European Defence Industry Programme (EDIP): a common procurement grant-making scheme designed to provide greater demand for defence products and technologies in the EU. Security Action for Europe (SAFE): a common procurement loan facility designed to provide greater demand for defence products and technologies in the EU.	EUR 1.5 billion (2021 – 2027) EUR 150 billion

3.9 Concluding observations on EU initiatives

The EU's approach to supporting SMEs in the defence sector has undergone a profound transformation over the past decade. Before the creation of the EDF, SMEs benefited indirectly from initiatives designed to reduce fragmentation in the European defence market, improve cross-border transfers and encourage participation in civilian research programmes, but there was little in the way of dedicated support for defence innovation or industrial cooperation. Since 2017, however, the EU has progressively constructed an architecture of financial instruments, innovation programmes and regulatory reforms aimed at embedding SMEs more deeply within the EDTIB. The EDF has helped create a more interconnected industrial landscape, exposing SMEs to European supply chains, industrial partnerships and future procurement opportunities that would otherwise have remained inaccessible. For many SMEs, participation in an EDF project is often the first opportunity to operate beyond national markets and engage directly with larger industrial actors across the Union.

Complementary initiatives such as the EUDIS, AGILE, FAST, DEF 2.0 and EIC funding demonstrate that policymakers increasingly understand that SMEs face multiple barriers to accessing the EDTIB. This includes access to finance, limited testing opportunities, weak connections with military end-users, lengthy development cycles and difficulties attracting private investment. Each of these instruments attempts to address a specific segment of this challenge. EUDIS seeks to widen access to the defence ecosystem for non-traditional actors and start-ups. AGILE reflects growing concern that European innovation cycles remain too slow compared to the pace of technological adaptation witnessed in Ukraine. FAST, DEF 2.0 and the EIC seek to bridge the financing gaps that emerge when companies move beyond research and enter the more demanding phase of industrial scaling. The EDIP and SAFE also seek to ensure that correct demand signals are sent to the market, to hopefully stimulate more private investment in the defence sector and create many more opportunities for SMEs through common procurement.

However, the central challenge will be ensuring that the EU continues to support SMEs with a greater volume of investment under the next MFF. The logical next step is to create a more integrated defence innovation ecosystem in which research funding, venture capital, testing infrastructure, certification pathways and procurement incentives operate in a more mutually reinforcing manner. There should be stronger and more coherent links between instruments such as the EDF, EUDIS, AGILE, FAST, DEF 2.0 and EIC efforts, but this will require some institutional re-engineering to ensure that the various tools do not duplicate or confuse efforts. What should be avoided is the creation of further tools that consume smaller financial shares of existing funded programmes, as this will dilute the overall effectiveness of funding schemes. Ultimately, it will be necessary to join up more coherently EDF, EUDIS, AGILE, FAST, DEF 2.0 and EIC efforts and to then anchor these initiatives within the flagship initiatives driven forward by the EDIP and SAFE.

Essentially, it is welcome that the EU has developed so many financial and support schemes for SMEs in the defence sector, but it is important not to lose sight of the structural constraints facing the SMEs in the EDTIB. More funding opportunities are welcome, and the EU has made over EUR 10 billion directly available for defence innovation and SME support via the aggregate total made available by tools such as the EDF, EDIP, EIF and EIC. However, for SMEs these potential streams come with the challenges of: a) first understanding what each EU tool does; b) mobilising the company resources to apply for them; and c) finding a range of commercial partners to participate in each specific scheme. The blunt observation is that, in the EU's steps to create new SME support tools, the Union has potentially made the innovation landscape even more difficult to navigate. To remedy these challenges, in future the EU should attempt to create a

structured (or even centralised) and easy-to-navigate support scheme for SMEs that comes with an additional amount of finances.

3.9.1 The European Competitiveness Fund and SMEs

To date, many of the existing EU SME support and defence innovation tools rely on repurposed or reallocated funds from existing tools. In particular, the European Competitiveness Fund (EDF) has been used to finance tools such as EUDIS and AGILE. In this respect, there has been a form of 'cannibalisation' of existing defence funding sources in the EU. While we should acknowledge that individual EU financial support schemes come with their own funding rules and legal bases, there is perhaps already scope to consolidate the proliferation of support schemes (e.g. consolidating EUDIS, AGILE and EIF and EIC initiatives). This would make it far easier for SMEs to understand EU engagement in defence innovation efforts and plan for funding applications. What is more, the EDF has been used as a way to launch specific SME schemes, but it should be acknowledged that the EDF is not only designed to support SMEs, as many European mid-cap and prime firms are involved and even lead EDF projects. In this respect, the EDF is targeting the EU's more general defence innovation landscape, but the future may call for a dedicated funding instrument for SMEs that is designed to meet their specific needs. Indeed, AGILE may already be the precursor funding tool for SMEs, but, with ambition, there is a need to build on AGILE with a dedicated funding line for defence SMEs that does not rely on the recycling or repurposing of finances from existing funding tools such as the EDF or EDIP.

The next MFF (2028-2034), and, more specifically, the European Competitiveness Fund, is a golden opportunity to put on a sustainable and ambitious footing financial support for Europe's SMEs in the EDTIB. The negotiations over the next MFF will provide a real test of whether the EU is prepared to align its long-term budget with its expanding defence and industrial ambitions. The proposed ECF, with a financial request of EUR 234 billion, and EUR 125.2 billion dedicated to resilience, security, defence and space, is intended to simplify the Union's fragmented funding landscape by bringing together a range of programmes under a more strategic investment framework – bringing some 14 programmes under a single framework (European Parliament, 2026b). However, in its drive to consolidate investments, the ECF is at risk of blurring the lines between existing investment mechanisms. What must be avoided is an ECF that is used to only modestly increase the Union's investment in defence, and where there is more competition for ECF funding between sectors (defence, security, space) that are, in reality, linked.

In this sense, there needs to be an unambiguous commitment to tools such as the EDF and EDIP, with a larger share of investment dedicated to these instruments under the ECF. The EDF should be increased substantially from the EUR 8 billion allocated to the Fund from 2021-2027, as the Fund is a long-term investment in the EU's defence innovation potential. Likewise, if the EDIP is to make an impact on the EDTIB, then it needs a huge scale of investment on a par with the size of SAFE. Without credible, large-scale investments in the EDF and EDIP by the European Competitiveness Fund, then the Union's credibility in defence will be sorely undermined. What is more, there is a need under the ECF to ringfence a dedicated amount of financial support for SMEs. The Commission has requested EUR 125.2 billion for resilience, security, defence and space, but it is unclear what share of this amount will, in reality, end up being dedicated to SMEs operating in the EDTIB. For this reason, and if the Union is serious about supporting SME access to the EDTIB, there should be a dedicated funding line in the ECF for SMEs in the defence sector. The most obvious way to organise and manage this dedicated funding would be to build on AGILE with a more permanent SME-support tool that can interface with, but be distinct from, the EDF and EDIP.

4 From innovation to production: Policy gaps and choices

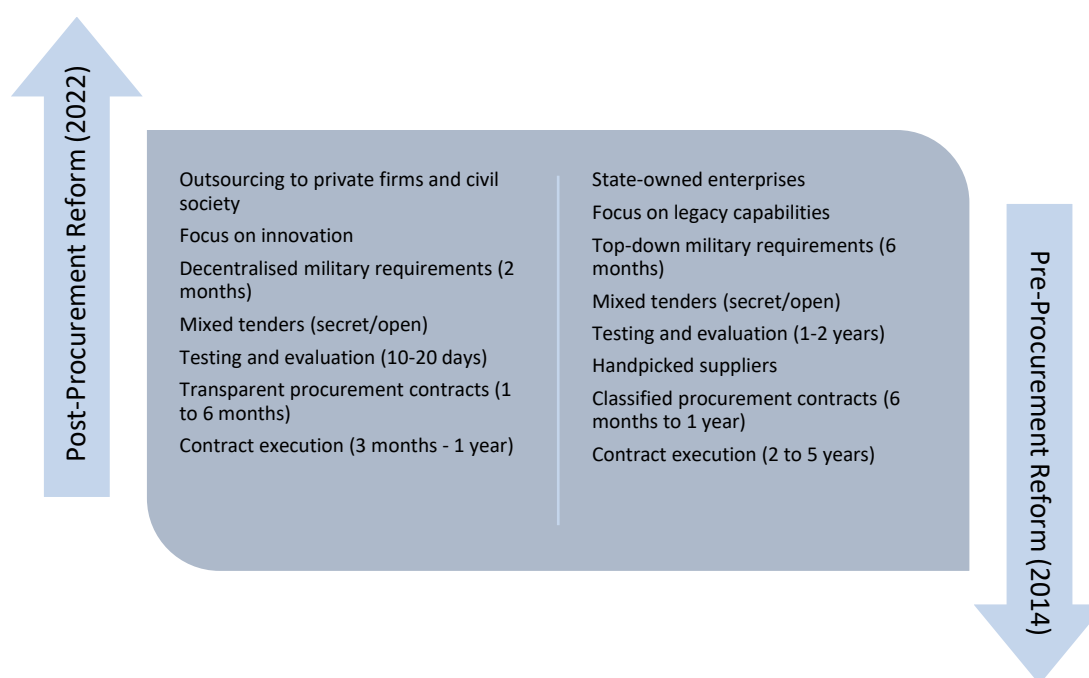
In the previous two chapters, we observed the specific constraints facing SMEs in the EDTIB and outlined some of the key measures the EU is undertaking to support SME access to the European defence market. This chapter will build on this analysis by analysing areas of policy that may require further action on the part of the EU. The first part of the chapter will focus on the war on Ukraine and the lessons that can be learned for the EU's own defence innovation efforts. As we have seen, experiences from Ukraine have already influenced EU policy tools such as AGILE and FAST, but here we argue that the more general lessons from Ukraine point to a need for more reform of national procurement systems in the EU. The second part of the chapter will focus on a critical bottleneck in the defence innovation and procurement cycle, related to the first 'Valley of Death' and the problems SMEs face in testing and certifying technologies.

4.1 Lessons from Ukraine

As has been stated in one study that followed direct empirical work in Ukraine, the country's real ingenuity lies not so much in the development of new military technologies, but rather in the application of existing technologies in novel ways on the battlefield (Sweijts et al., 2026: p. 26). The study remarks that there are few actual technological breakthroughs in the field in Ukraine, but there are a multitude of cases where existing technologies, such as drones, have been adapted to deliver tactical advantages (Sweijts et al., 2026). Still, research shows that Ukraine has undertaken reforms to deal with the more effective entry of SMEs into the Ukrainian defence market. Not only has the government sought to lower the entry costs for SMEs, but it also serves as an important information-sharing node for government, military and industry. Because Ukraine is at war, such efforts have also seen the rise of NGOs in society to help stimulate defence innovation and production. One example is the NGO Dignitas, which has developed an online course called 'Victory Drones', designed to train any Ukrainian citizen in the ways of producing and using drones (Sweijts et al., 2026: p. 26). In this sense, Ukraine's most important asset is not necessarily technology or innovation, but how it uses innovation to nurture talented civilian and military personnel (Jones, McCabe and Palmer, 2023: p. 7).

The major development in Ukraine that has sought to fast-track and balloon defence innovation is the Brave1 initiative. Brave1 is a government-designed scheme that aims to significantly shorten the time for defence technology development and uptake. Essentially, Brave1 addresses the need to compress the interlinkages among innovators, developers, and end-users on the battlefield. One study states that Brave1 has helped reduce defence certification from about 2-3 years to 2-3 months (Sweijts et al., 2026: p. 26), but, perhaps more importantly, Brave1 has established a direct communication and learning loop between innovators, producers and the military on the frontline. Indeed, one study states that such battlefield innovations have helped drastically reduce 'sensor-to-shooter' cycles — from 2022 to 2024, the cycle has been reduced by about 30 minutes (Radin et al., 2025: p. 11). This is due to a sophisticated meshing of sensors, drones and satellites, which have helped improve Ukraine's situational awareness. Applications such as 'Brave 1 Market' have also allowed Ukraine to establish a sort of 'Amazon for defence', where military personnel can access the secure app and buy directly the products and technologies that have been listed by SMEs and innovation, and which, in time, will come with user reviews for individual products (Government of Ukraine, 2026d).

Figure 7: Shifts in Ukraine's defence procurement



Source: Based on Bondar, 2025a: p. 7.

Data portals and apps have aided greatly in stimulating such communication, but we should not overlook the important regulatory shifts that have been undertaken in Ukraine since the war started. One of the major regulatory shifts that has taken place in Ukraine is the move away from a Soviet-era, heavy defence procurement system to one that is more decentralised and open to private companies, innovators and entrepreneurs. This has seen a move away from a 'state-run' logic to one more directed by market forces (Bondar, 2025a: p. 2). The dual incentive of winning the war and making profits has seen a whole swathe of SMEs emerge in Ukraine. One immediate result of this practice is that Ukraine's procurement system was streamlined to reduce bureaucratic hurdles and compress development and uptake timelines. For example, Ukraine has moved to a procurement model where military units on the frontline can procure the equipment and technologies they require directly from suppliers without too much intervention by the central government. Given past corruption in the military procurement process, Ukraine also moved to institute a more transparent and streamlined contracting process for weapons and technology delivery (Bondar, 2025b: p. 3). Overall, one study calculates that Ukraine's reform of its procurement processes has reduced acquisition times from 1–3 months to about 1–2 weeks in some areas (Bondar, 2025b: pp. 5 and 6).

4.1.1 Implications for the EU and national procurement systems

Ukraine has certainly emerged as a source of inspiration for EU efforts to enhance the speed and uptake of defence innovation. Overall, the European Defence Industrial Strategy (2024) and White Paper on the Future of European Defence — Readiness 2030 (2025) have been guided in procurement and innovation ambitions by the experiences of Ukraine. Subsequent EU initiatives have been more directly inspired by defence innovation reforms in Ukraine. For example, AGILE reflects a growing recognition that Europe's traditional defence innovation model is poorly adapted to the speed and volatility of contemporary warfare. Based on experiences in Ukraine, AGILE seeks to reduce the time between technological development, testing and operational deployment by supporting high-readiness defence technologies, SMEs and non-traditional innovators. In this sense, the initiative seeks to move the EU away from lengthy development cycles, towards rapid experimentation, scalable production and battlefield relevance. AGILE is particularly

significant because it implicitly acknowledges that innovation is no longer driven solely by large prime contractors, but increasingly by start-ups, software firms and agile technology ecosystems capable of adaptation.

However, the full potential of defence innovation cooperation with Ukraine has clearly not been reached yet. In fact, one survey of all EU Member States' defence industrial relations with Ukraine concludes that while there is evidence of firms in smaller Member States seeking closer innovation ties with Ukrainian firms and innovators, Europe's larger firms are still largely focused on cooperation on military systems such as tanks and ammunition, especially in the area of maintenance, repair and overhaul (Fiott, 2024b: p. 26). Nevertheless, the issue is not solely about the opportunities that SMEs in the EDTIB have for business cooperation with Ukrainian counterparts. In fact, the enduring challenge facing the Union in its policies on defence innovation and SMEs is that it is not at all placed to make the radical and wholesale reforms needed to national defence procurement regulations and processes. Ukraine has unleashed the potential of its defence innovators and SMEs by overhauling its defence procurement ethos and processes, but EU Member States still preside over procurement systems that reflect past geostrategic and defence industrial realities (Hackett and Schreer, 2025: p. 56). If the EU is to assist SMEs in fully integrating into the EDTIB, then a similar radical shift in EU Member States, that is, national defence procurement, will be required.

The Russian invasion of Ukraine has forced European governments to confront the uncomfortable reality that, while defence budgets can be increased, transforming military capability development and defence innovation increasingly calls for reform of defence procurement systems. Today, defence procurement systems at the Member State-level were largely designed for a peacetime context (Hackett and Schreer, 2025: p. 57). Across Europe, it is becoming clearer that the principal bottleneck is no longer a lack of funding alone, but the speed at which requirements are generated, contracts are awarded, production capacity secured and equipment delivered to Military End-Users. As a result, procurement reform has emerged as a central pillar of Europe's wider rearmament effort, even if the EU has a limited role in supporting such national reform efforts. Early national reform efforts have led to some marginal improvements in the speed of procedures, but it is also clear that reforms have come up against fears about transparency, competition, risk and compliance with EU law (Hellberg, 2023). What is more, reformed defence procurement systems depend not only on administrative reforms, but on a reshaping of organisational behaviours and cultures to better appreciate and manage risk (Hackett and Schreer, 2025: p. 57).

Defence procurement systems were originally designed to minimise financial, legal and technical risk. However, the war on Ukraine has certainly exposed the limitations of this traditional procurement model, and Ukraine's battlefield experience has demonstrated the military value of rapid uptake and deployment, particularly in areas such as drones, software-defined systems and electronic warfare. Consequently, several European governments are seeking to create procurement systems that are better suited to emerging technologies and SMEs, while still ensuring that products delivered meet time, quality and performance criteria (Hellberg, 2023). However, even as procurement procedures become faster, shortages in skilled labour, manufacturing capacity and critical components can still delay delivery schedules. Thus, without further defence procurement reforms at the national level that are more conducive to the rapid uptake of defence technologies and a more open and competitive tendering approach to SMEs operating in the Internal Market, SMEs operating in the EDTIB will still struggle to create innovation partnerships, secure contracts and upscale their business.

4.2 Testing and certification

Access to testing, evaluation, verification, validation and certification (TEVV) facilities is a vital determinant of whether a defence SME ever reaches the defence market with its technologies and products. In defence, technological innovation is rarely sufficient on its own. A company must demonstrate that a system performs reliably under realistic operational conditions, complies with military standards, can survive environmental and electronic warfare stresses and is interoperable with existing equipment. For large prime contractors, access to proving grounds, laboratories and certification bodies is often built into their business model. For SMEs, however, testing infrastructure is typically expensive, scarce and controlled by governments or major industrial players. This is very much part of the first 'Valley of Death' described in Chapter Two, where there is a perilous gap between prototype development and commercial adoption. Without access to testing facilities, SMEs struggle to raise investment, convince military customers, obtain certification or demonstrate technology readiness. Innovation ecosystems need testbeds and demonstration environments to reduce technological risk, generate performance data and accelerate adoption by end users.

For defence SMEs specifically, testing facilities perform three critical functions. First, they enable technological validation: proving that a product works under realistic operational conditions. Second, they provide credibility because armed forces are more willing to procure systems that have been independently tested and certified. Third, they facilitate investment: venture capital funds, defence investors and public authorities are far more likely to back technologies that have demonstrated performance beyond laboratory conditions. This logic explains why both NATO's Defence Innovation Accelerator for the North Atlantic (DIANA) and EUDIS place such emphasis on access to testing environments. DIANA's network now includes more than 200 test centres across the Alliance, specifically designed to help innovators 'de-risk, demonstrate and validate' technologies and accelerate pathways to market. Likewise, EUDIS has incorporated technological challenges and innovation test hubs intended to provide common testing environments for SMEs and start-ups (Möhring, 2024).

The war in Ukraine has dramatically reinforced the importance of testing infrastructure, but with somewhat of a twist: the battlefield itself has become the ultimate testing facility in Ukraine. One of the clearest lessons from Ukraine is that technologies developed solely in laboratory settings often fail when confronted with electronic warfare, contested communications, harsh weather and rapid tactical adaptation. Ukrainian innovation programmes such as Brave1 have institutionalised continuous testing cycles involving soldiers, developers and procurement authorities. Systems are evaluated, modified and re-tested in weeks rather than years. Hundreds of foreign companies have reportedly sought opportunities to test systems in Ukraine because combat conditions provide data that cannot be replicated in conventional proving grounds. Defence executives increasingly argue that technologies which are not continuously tested in operational environments rapidly become obsolete, particularly in areas such as drones, electronic warfare and autonomous systems.

Several concrete examples illustrate how access to testing environments can create commercialisation opportunities. The Ukrainian drone manufacturer Skyeton accumulated hundreds of thousands of operational flight hours for its Raybird UAV through wartime deployment. This extensive operational testing enabled the company to refine the platform against Russian electronic warfare, establish a strong performance record and expand international partnerships. Similarly, NATO DIANA's accelerator model provides selected start-ups not only with funding but also access to specialised laboratories and test centres. Companies such as cybersecurity start-ups Hushmesh, Goldilock and LevelQuantum were able to

move beyond proof-of-concept development through NATO-supported testing programmes, making them more attractive to both government customers and private investors. A further example comes from Ukraine's FPV drone ecosystem, where regular field-testing events organised by the Ministry of Defence and Brave1 allow multiple SMEs to test competing designs in common operational environments. Systems that demonstrate performance can move rapidly toward codification, procurement and scaled production, substantially shortening the route from prototype to market.

In Europe, discussions about defence innovation often focus on finance, venture capital and procurement. Yet the Ukrainian experience suggests that access to testing and certification infrastructure may be equally important. An SME with funding but no ability to validate its technology remains commercially constrained. Conversely, an SME with access to realistic testing environments, military users and certification pathways can generate the evidence needed to attract investors, win contracts and scale production. This is one reason why initiatives such as 'EUDIS Innovation Test Hubs' are likely to become increasingly important components of Europe's defence-industrial strategy. EU Innovation Test Hubs are a decentralised concept that calls on willing project partners to make available testing facilities. Such steps are important, as we know that there are existing testing sites in the EU, but they are not always accessible to SMEs. It is important to note that the EU has already tried to pool such testing centres in the past, especially through schemes such as the European Network of Defence-related Regions (ENDR), which was launched in 2016 and now includes some 105 entities across 23 Member States and Norway (European Commission, 2026b).

One option to improve European SME access to testing centres is to partner more closely with the European test centres already affiliated to NATO's DIANA initiative. In 2026, 178 of the total 222 accelerator sites and test centres currently affiliated to DIANA are located in EU Member States. These include: Belgium (18); Bulgaria (4); Croatia (1); Czechia (5); Denmark (4); Estonia (8); Finland (4); France (10); Germany (24); Greece (4); Hungary (11); Italy (18); Latvia (2); Lithuania (6); Luxembourg (6); Netherlands (1); Poland (10); Portugal (2); Romania (3); Slovakia (5); Slovenia (18); and Spain (14) (NATO DIANA, 2026). Although NATO's DIANA scheme should be lauded for identifying the importance of test centres for defence SMEs, the EU can learn from some of the inherent challenges of DIANA's testing network. First, DIANA is backed only by the EUR 1 billion NATO Innovation Fund (NIF) spread over 24 allies across a 15-year timeframe (NATO, 2022), meaning that the capital available is modest to say the least. Second, it is questionable whether all of the test centres identified as part of DIANA can, in reality, certify technologies and products required in high-pressure military scenarios, as a large number of DIANA-affiliated test centres are dual-use or civilian in nature.

There are, however, several DIANA-affiliated test centres that do specifically test and certify defence technologies, especially in EU Member States such as France (DGA test sites), Germany, Italy, Spain, Sweden, The Netherlands, Belgium, Finland, Poland, Czechia, Austria, Denmark, Greece, Romania and more. Testing sites in these countries are largely publicly owned, but they also include testing sites developed and managed by individual defence firms such as Rheinmetall, Leonardo and Patria. The EUDIS and EDF already utilise financial incentives and grants to help SMEs access such testing sites, yet several challenges persist. There are testing centres in Europe that are open to SMEs, but SMEs face at least three core challenges: 1) testing centres may be too costly to access, especially for repeated use; 2) testing centres may give rise to administrative burdens such as security clearances, export control requirements, insurance obligations, etc.; and 3) testing centres may be unavailable at a given time or have testing and certification backlogs. We should also acknowledge that national testing centres may also be obligated to

certify the technologies and products by nationally developed firms and innovators over other firms, which may also create barriers to accessing testing centres.

4.2.1 Proposals for new EU financial and legal tools for testing and certification

Given the growing EU-level finances for defence, the creation of a dedicated 'EU Defence Testing Access Facility' could help streamline all EU efforts to improve access to testing and certification for SMEs. This could, for example, include and build on the existing EUDIS Innovation Test Hubs initiative. Such a scheme could seek to develop and finance subsidised testing vouchers for SMEs or even dedicated SME quotas at existing test sites, financially supported by the EU. The facility could also seek to finance the creation of new test and certification centres in Europe specifically for the defence sector. It could begin with a federated approach among existing centres, but, in time, it could make sense to ensure a minimum level of geographical access to defence technology testing centres in the EU. Test centres should ideally be located with some geographical proximity to SMEs across the Union, and not pose insurmountable transport costs, times or distances to access test sites. The EU is, in any case, developing a range of test centres for other economic and technological domains such as agri-food (agrifoodTEF), healthcare (TEF-Health), manufacturing (AI-MATTERS) and smart cities/communities (Citcom.AI) (European Commission, 2026c). In this sense, it may also be wise to co-locate future defence testing sites close to or adjacent to regional defence innovation clusters, to ensure the growth of defence and dual-use technology clusters in multiple locations across the EU.

Any EU Defence Testing Access Facility should be based on some form of harmonised certification scheme that would allow SMEs to have a product or technology certified in one Member State for circulation throughout the EU Internal Market. One way of doing this, at a very basic level, is to introduce a quality assurance scheme for certain defence products and technologies. NATO, for example, recently announced a 'NATO Innovation Badge' scheme, which is designed to help producers of drone and counter-drone technologies market their products across the Alliance (Allison, 2026). We should note that the new 'NATO Innovation Badge' is not a formal certification of a defence technology or product, but it will, in time, provide Allied nations with a more reliable manner in which to identify defence systems that have at least undergone some degree of testing against standardised operational use cases (Allison, 2026). While such a scheme cannot replace a formal certification scheme, it is designed to provide a minimum level of quality assurance so that Military End-Users have greater security when operating these systems, meaning that there is a greater chance of procurement and defence contracting.

Such an approach can help inspire the Union's own efforts on testing and certification, and the fact that the EU can avail itself of a range of legislative tools means that it can perhaps be bolder in promoting a more harmonised approach to testing and certification in the EU. While the EU is politically and rhetorically emphasising the importance of administrative and legislative simplification, it may seem counter-intuitive to propose the creation of new legislative tools. However, it may be interesting to study the possibility of creating a new Directive designed to harmonise certification standards across the EU. Some form of Defence Certification and Testing Directive could be conceived around the simple principle of mutual recognition of military certification. Under such a framework, a defence product, component or technology that has successfully completed testing and certification within an accredited facility in one Member State would automatically receive recognition across the Union. The objective would not be to create a single European military standard for every defence capability, which would be politically unrealistic and operationally undesirable. Rather, the Directive would establish a common baseline of testing

methodologies, accreditation procedures and certification requirements, coupled with a legal obligation for Member States to recognise certifications issued by approved facilities elsewhere in the Union.

Such an approach could help reduce costs for SMEs. Instead of navigating multiple testing regimes, certification authorities and national qualification procedures, firms would be able to access a broader European market through a mutually recognised certification. This would potentially shorten commercialisation timelines, reduce duplication and improve the attractiveness of defence innovation for private investors. One of the less appreciated challenges facing European defence start-ups is that investors frequently view defence certification processes as unpredictable and fragmented. Greater regulatory certainty could therefore have effects extending beyond defence procurement into the financing ecosystem that underpins technological innovation. In this respect, any such new Directive for defence certification and testing should be fully evaluated in relation to the existing Directive 2009/43/EC on defence transfers. While Directive 2009/43/EC relates to transfers of defence products and goods between operators across Member States, a new directive for defence certification and testing could greatly improve the timelines, volume and reliability of defence products and technologies being transferred within the EU.

Yet the political and practical challenges of such a proposal should not be underestimated. Defence certification is not simply a technical exercise; it is also a matter of trust. Armed forces are ultimately responsible for deploying capabilities in combat, and many governments remain reluctant to outsource judgements about military performance and safety to external authorities. A certification awarded in one Member State may satisfy technical criteria but still fail to convince Military End-Users elsewhere. The challenge is therefore not only regulatory harmonisation but the creation of confidence among procurement authorities and armed forces that testing conducted abroad reflects their own operational requirements. Certification standards often reflect national doctrines, operational concepts and historical procurement practices. Any new Directive could therefore encounter resistance from governments concerned about losing discretion over military qualification processes. To avoid such concerns, perhaps any future legislative tool for certification could proceed incrementally, focusing initially on selected technology domains such as cyber systems, software, sensors, communications equipment or dual-use technologies where common standards are more readily achievable.

5 Conclusion

The debate on Europe's defence industrial readiness is often framed in terms of production capacity, procurement budgets and strategic autonomy. Yet this Study has argued that the long-term competitiveness and resilience of the EDTIB will depend on the ability of SMEs to participate in defence innovation, production and procurement. SMEs are not peripheral actors within the EDTIB. They are increasingly the source of technological advances in areas such as AI, autonomous systems, advanced software, space technologies and novel materials. At a time when military effectiveness is becoming more closely tied to technological adaptation, Europe's ability to harness its SMEs is emerging as a strategic imperative.

Despite this, SMEs continue to face a series of mutually reinforcing barriers. Financial constraints limit their ability to sustain lengthy development cycles. Regulatory fragmentation increases compliance costs and complicates cross-border expansion. Political preferences for national suppliers and established industrial relationships can restrict access to markets and major programmes. While the EU has made considerable progress through instruments such as the EDF, EUDIS, EDIP, FAST, DEF 2.0, HEDI, SAFE and the EIC, the

central challenge remains that, while Europe has become increasingly effective at supporting innovation, it is less effective at ensuring that innovation reaches certification, procurement, production and operational deployment.

The next phase of EU defence industrial policy should therefore be to create a market environment that allows SMEs to move from concept development to commercialisation, without encountering repeated financial, regulatory and market barriers at each stage of the innovation cycle. If current EU defence industrial initiatives have succeeded in stimulating cooperation and technological development between SMEs, mid-caps and primes, the next successful phase of EU engagement should be measured against the ability to deliver industrial scale, market access and more rapid military-technological adoption. To ease the way to such a future EU approach to SMEs and the EDTIB, this paper is proposing ten policy recommendations.

5.1 Policy recommendations

- Streamline the EDF, EUDIS, AGILE, EDIP, FAST, SAFE and EIC efforts. Where feasible, consolidate existing funding platforms and simplify procedures for SMEs by reducing the number of individual tools they should navigate, without reducing the overall financial level of ambition. What is more, successful projects supported through the EDF should receive privileged access to EDIP-supported procurement initiatives and SAFE-financed acquisition programmes. Innovation and procurement support should be treated as part of a single industrial pipeline of activities.
- Short of an ambitious streamlining of existing SME support instruments, the EU should facilitate the establishment of a dedicated virtual platform (e.g. a specialised app) to provide SMEs with information on procurement opportunities, certification requirements, testing facilities, export procedures and industrial partnerships across the Union. One of the recurring challenges identified in this Study is not merely access to funding, but access to knowledge and networks. The reality is that the EU's raft of support measures, while welcome, can confuse SMEs, which have limited resources and time to understand and apply for each single EU financial support measure.
- The 'Defence Omnibus' will enable the European Commission to streamline the procedures of the EDF, which can help SMEs with the administrative burden of accessing EU funds for defence. However, the Omnibus failed to meet its promise of accelerating reform in the harmonisation of licensing and defence procurement. This is, regrettably, a missed opportunity. One of the most significant forms of support available to SMEs is not solely financing, but market rules that simplify procurement procedures, reduce administrative burdens and promote greater transparency in defence acquisition processes. In terms of intra-EU defence transfers, an opportunity has been missed to support first-time defence suppliers and dual-use firms by simplifying the rules of selling defence products in the Union. It is of the utmost importance that the Union redouble its efforts in facilitating intra-EU trade in defence products and technologies, and the forthcoming Communication on the Defence Single Market is a good opportunity to meet this challenge.
- As part of the EU's future legislative agenda in the area of the Single Market for Defence, the Union should develop a Defence Certification and Testing Directive based on the principle of mutual recognition. The Commission could explore legislation establishing common accreditation standards and mutual recognition of defence certifications. Technologies certified in one accredited Member State facility should be recognised throughout the Union, reducing duplication, lowering costs and accelerating market access for SMEs.

- Even in the absence of such a new Directive, the Union should establish a European Defence Testing and Certification Initiative. The EU could support the creation of a network of accredited defence testing and certification facilities accessible to SMEs across the Union. Further financial support could be made available through EDF and EUDIS mechanisms to subsidise testing, validation and demonstration activities for smaller firms. Such an approach to a more federated grouping of testing centres may also form the basis of future cooperation with NATO and its DIANA initiative.
- The Union should ensure SME access requirements within major European defence programmes. Without undermining industrial competitiveness, major collaborative programmes receiving EU support should demonstrate meaningful SME participation throughout supply chains. The emphasis should be placed on technological contribution and value creation rather than symbolic participation targets. A core test of this approach will emerge with the EDPCIs, where it will be necessary to ensure the effective inclusion of SMEs from across the Union in major collaborative defence efforts. Any future iteration of SAFE ('SAFE 2.0') should be far more ambitious on the conditions surrounding the inclusion of SMEs in SAFE loan allocations.
- The EU needs to expand the financial scale of its support for SMEs in the EDTIB. Under the present MFF (2021-2027), the Union has invented new policy and financial tools, which is welcome, but this has led to a 'recycling' or 'cannibalisation' of existing funds, meaning that tools such as the EDF have been used to help create specific funding lines and tools. This approach, while understandable from the perspective of creating and testing pilot schemes in an initial phase, is not sustainable for the future needs of SMEs or the EDTIB. The EU should avoid repurposing or recycling funds in the future, as this does not increase the overall level of EU investment in defence innovation and SMEs.
- Use the next MFF and the ECF to increase the financial scale of AGILE as a core tool of the EU's defence innovation landscape and support to SMEs. Given the urgent focus on reducing the time-to-grant period for defence products and technologies, AGILE should be further developed as the EU's core tool for experimentation and risk in defence innovation in the future. Currently, AGILE is financially supported by repurposed existing EU funds, but this is unsustainable in the future. AGILE should have its own dedicated funding line under the next MFF and ECF.
- Enhance SME access to military end-users. The EDA should expand HEDI's experimentation, demonstration and operational testing activities. SMEs require earlier and more frequent engagement with military end-users to ensure that technologies are developed against real operational requirements and can secure user confidence before procurement decisions are taken. It will be important to ensure an effective policy and cooperation interface between HEDI and AGILE, as this will be an effective way of ensuring that reduced lead times for SME innovations are rapidly absorbed by military end-users.
- The EDA and Commission could build on past EU SME databases and networks to create a secure EU market application based on the experiences of Ukraine's 'Brave1 Market' app. The app should be a secure system that allows SMEs to list on a digital marketplace products and technologies, with the aim of military personnel in national procurement agencies being able to procure products from the app and directly from SMEs. Such an app could be used as part of the EDIP's 'Military Sales Catalogue' initiative, which will be a 'single, centralised and up-to-date catalogue of European and Ukrainian defence products' (European Commission, 2026f).

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