The technical limits of the EU: Europe's defense economy as a driving force for strategic autonomy and technological sovereignty

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The technical limits of the EU. Europe's defense economy as a driving force for strategic autonomy and technological sovereignty

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Keywords: CSDP; EDA; EDF; European Defence Union; Strategic Autonomy; Ukraine

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Executive Summary

The Working Paper delves into the European Union's defense sector's evolution and current challenges, underscoring the urgency for strategic autonomy and technological sovereignty. It provides a historical backdrop of EU defense initiatives, highlighting the significant influence of recent geopolitical shifts, notably the conflict in Ukraine, on the EU's defense strategies and industrial landscape. The fragmentation of the European defense market, rising equipment costs, and hefty R&D expenses undermining competitiveness and innovation are identified as key challenges. The author focuses on the war in Ukraine as a catalyst for a consolidated defense equipment market and a surge in military expenditures and defense investments among EU nations. He scrutinizes EU's measures to foster innovation and integration in the defense market while grappling with national protectionism and divergent member state interests. Conclusively, the report advocates for an autonomous European defense capability as crucial for tackling both longstanding and emerging crises and threats. It underscores the imperative of a harmonized defense approach within the EU, highlighting its significance for the region's stability and security.

Zusammenfassung

Das Arbeitspapier befasst sich mit der Entwicklung des Verteidigungssektors der Europäischen Union und den aktuellen Herausforderungen und unterstreicht die Dringlichkeit von strategischer Autonomie und technologischer Souveränität. Es liefert einen historischen Hintergrund der EU-Verteidigungsinitiativen und hebt den bedeutenden Einfluss der jüngsten geopolitischen Veränderungen, insbesondere des Konflikts in der Ukraine, auf die Verteidigungsstrategien und die industrielle Landschaft der EU hervor. Die Fragmentierung des europäischen Verteidigungsmarktes, steigende Ausrüstungskosten und hohe F&E-Ausgaben, die die Wettbewerbsfähigkeit und Innovation untergraben, werden als zentrale Herausforderungen genannt. Der Autor konzentriert sich auf den Krieg in der Ukraine als Katalysator für einen konsolidierten Markt für Verteidigungsgüter und einen Anstieg der Militärausgaben und Verteidigungsinvestitionen in den EU-Ländern. Er untersucht die Maßnahmen der EU zur Förderung von Innovation und Integration auf dem Verteidigungsmarkt und setzt sich gleichzeitig mit nationalem Protektionismus und divergierenden Interessen der Mitgliedstaaten auseinander. Abschließend plädiert der Bericht für eine autonome europäische Verteidigungsfähigkeit, die für die Bewältigung sowohl langanhaltender als auch neuer Krisen und Bedrohungen von entscheidender Bedeutung ist. Er unterstreicht die Notwendigkeit eines harmonisierten Verteidigungsansatzes innerhalb der EU und hebt dessen Bedeutung für die Stabilität und Sicherheit der Region hervor.

Abbreviations

CARD Coordinated Annual Review

CSDP EU's Common Security and Defence Policy

DEFIS European Commission's Directorate-General for the Defence Industry and Space

EDA European Defence Agency

EDF European Defence Fund

EDIS European Defence Industrial Strategy

EDTIB European Defence Technological and Industrial Base

EDTIC European defense technological and industrial complex

EPF European Peace Facility

ESSI: European Sky Shield air defence programme

EUGS 2016 European Union Gobal Strategy

GDP Gross Domestic Product

HR/VP EU High Representative Josep Borrell, Vice-President of the Commission

PESCO Permanent Structured Cooperation

R&D Research and Development on Defence

R&T Research and Technology

SMEs medium-sized enterprises

TEU Treaty on European Union

TFEU Treaty on the Functioning of the European Union (the so-called "Lisbon Treaty")

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"Europe will be forged in crises and will be the sum of the solutions adopted for these crises"
Jean Monnet

Introduction

Forged out of the ashes of the Second World War, the EU has always seen itself as a peace project. However, the idea of collective EU defense has been around since the abortive European Defense Community of 1952. "The history of European integration is full of plans and initiatives to strengthen the EU's security and defence policy. Most have come and gone." (Strategic Compass, 2022, 7).
The changing geopolitical context and dramatic security erosion since Russia's annexation of Crimea in 2014 have called for the EU to shoulder a greater share of responsibility for its own security and to act autonomously – that is, without being dependent on other countries – in strategically important policy areas, from defence policy to the economy, and the capacity to uphold democratic values. Yet, until recently, the continent was still lacking the shared vision and organizational structures required to turn its oft-cited and much debated goal of 'strategic autonomy' into a reality. The defense realm remains exempted from the common market by virtue of article 346 TFEU,[1] which allows Member States to shield their defence industries.

The war on Ukraine, the most serious security crisis in Europe in decades, brought the debate back to hard realities and the need to react with concrete, practical action. Europe has to assume greater responsibility for its defence, and defence starts with industry.

The European defense industrial ecosystem – the so-called European defense technological and industrial complex (EDTIC) or, more trivially, the military-industrial complex - comprises a number of large multinational companies (27 of them being listed among the top 100 arms companies, such as Thales (France), Rheinmetall (Germany), Saab (Sweden) or Fincantieri (Italy) – Béraud-Sudreau *et al*., 2022, 5 & 9, Annex 1), mid-caps and over 2 000 small and medium-sized enterprises (SMEs). Defence industry is EU's economy one of the main contributors with a turnover of €100 billion/year and more

[1] "1. The provisions of the Treaties shall not preclude the application of the following rules:
(a) no Member State shall be obliged to supply information the disclosure of which it considers contrary to the essential interests of its security;
(b) any Member State may take such measures as it considers necessary for the protection of the essential interests of its security which are connected with the production of or trade in arms, munitions and war material; such measures shall not adversely affect the conditions of competition in the internal market regarding products which are not intended for specifically military purposes."

than 360,000 highly skilled jobs (Balyuk, 2021). Each Euro invested in defence generates a return of €1.6 through skilled employment, research and technology and exports (Hartley, 2023, 2).

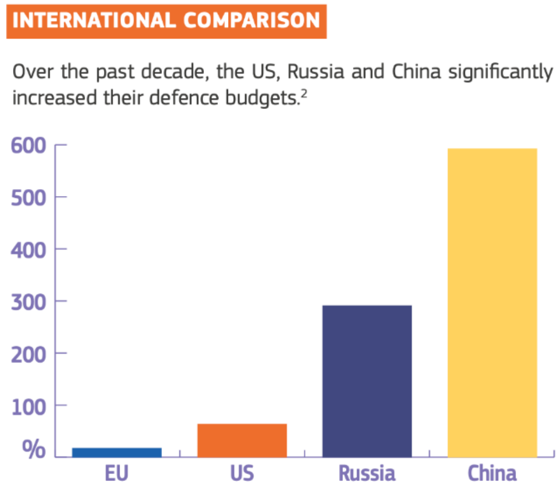
After decades of neglect and underinvestment, the current "tectonic shift in European history" (Strategic Compass, 2022, 14) has highlighted Europe's defense economy as a driving force for the region's pursuit of strategic autonomy and technical sovereignty. "A sustainable, innovative and competitive European defence industry is essential for Europe's strategic autonomy and for a credible CSDP." (EUGS, 45). Defence technologies and capability development contribute to the Union's broader external action, including its ability to deploy CSDP missions and operations and to operationalize Article 42(7), its mutual defence clause (Engberg, 2021, 11). A robust and cohesive defence industrial base stimulates EU's resilience and economic influence and allows the Union to compete with its peers and adversaries in a multilateral world. The EU's Strategic Compass, endorsed in March 2022 by Member States, marked a quantum leap forward in the shared ambition to make the EU stronger and more capable in the field of security and defence and identified the need to invest more and better, based on current and future threats and challenges (Strategic Compass, 2022, 12 & 43). The war in Ukraine has also made the costs of "non-Europe" in the defence field (Briani, 2013) in terms of duplication, fragmentation, more visible, hence unacceptable.[2]

Still, a common industry and market of defense remains difficult to achieve. The defence sector is characterised by increasing costs of defence equipment and by high research and development (R&D) costs that limit the launch of new defence programmes and have a direct impact on the competitiveness and innovation capacity of the European defence technological and industrial base (EDTIB). Until recently, stagnating European defense budget (as of 2017, all Western and East- Central European countries spent a lower share of their GDP on defence than at the end of the Cold War) made it difficult to overlook defence economics as a driver of European defence policy.[3] Europe's defence firms are criticised for being 'too small' and unable to achieve the scale and learning economies available to their U.S. rivals (Hartley, 2023, 3, table 2). U.K.'s Brexit presented another challenge and further raised the uncertainties surrounding the outlook of the European arms industry (Kleczka, Buts & Jegers, 2020, 145-148; Oleksiejuk, 2020).

[2] Keith Hartley estimates the costs of what he calls 'Non-Europe in defence' at some €26 bn to €130 bn (Hartley, 2023, 2).

[3] Meanwhile, strategic competitors such as Russia and China have increased their defence budgets by almost 300 % and 600 % respectively over the last decade, compared to an approximate 20 % increase collectively by EU Member States in the same period (Clapp, 2023, 2). See figure 1 hereafter.

Figure 1: EU's defence budget compared to the U.S., Russia and China



Source: EU Commission, 2022 b

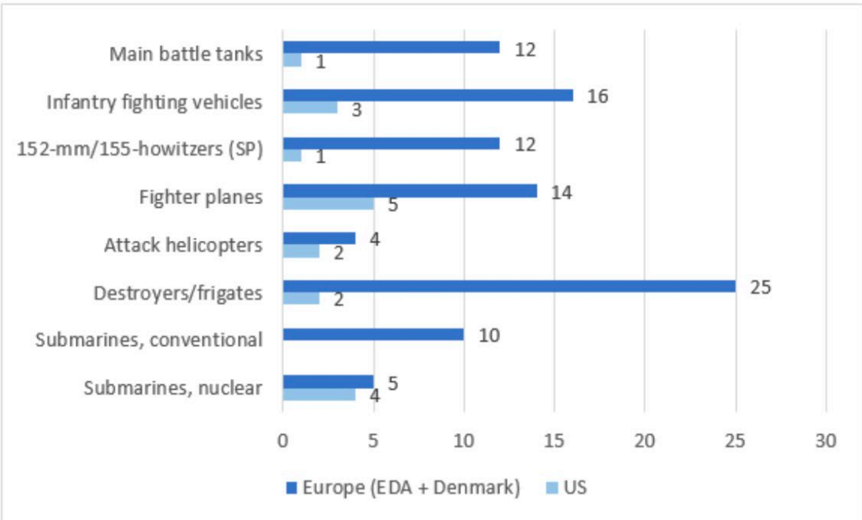
The strongest "headwind" faced by the European arms industry might be fragmentation and national protectionism (Kleczka, Buts & Jegers, 2020, 130-139). Using fragmentation as an "Ariadne's thread", this paper will start by addressing the EU's longstanding challenge in bridging the diverse interests and priorities of its member states (I). We will then examine how the war in Ukraine has been both a significant opportunity for European manufacturers and a stark reminder of the need for a unified market for defense equipment (II). We will address EU's institutional effort in support of innovation, competitiveness and resilience of the EU defence industry and to reduce the fragmentation of the defence equipment market (III). We will follow the progressive framing of an EU Defence Union, fueled by the forthcoming 'European Defence Industrial Strategy' to be issued early 2024 (IV). Finally, we will take a brief look at Austria's specific situation (V).

I The European defense industry before 2022: a patchwork of national industries and interests

The defence sector is probably the one where "member states' difficulties to think of themselves as Europeans" (Mauro, Simon & Xavier, 2021, 49) are the most visible. They have differing interests – with some, like France, stressing the importance of 'buying European' and others, like Sweden, Poland or the Netherlands, keen to maintain close industrial and security links with the U.S. They tend to adopt a protectionist attitude vis-à-vis market of defense goods and services. The EU defence landscape, therefore, has long been characterized by severe fragmentation and overprotection by exemptions to the Single Market regulations for reasons of 'national security'. An ideal pan-European defence market is in reality substituted by 27 markets fenced off with regulatory barriers aimed at protecting national defence industries.

This has led to procurement incoherence, uncoordinated defence investment, intra-EU competition, costly duplication of military capabilities, and low level of standardization, which curb growth margins for the European industry (before the war, around 80 % of defence procurement and 90 % of research and technology were run on a national basis – Kostova Karaboytcheva, 2021, 1). The problems are reflected in the differences between Europe and the U.S., leading to 154 types of weapons in the EU compared with 27 in the U.S. (Hartley, 2023, 2). In 2017, the European countries were operating 13 different systems of self-propelled guns/howitzers (calibre ≥100 mm), while the U.S. operated one only; and 16 different main battle tanks & assault guns, vs. 2 in the U.S. (Kleczka, Buts & Jegers, 2020, 135, table 2).

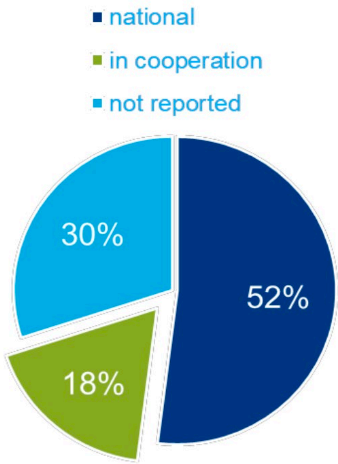
<u>Figure 2</u>: Main families of armament systems developed in Europe and in the United States



Source: Olsson, 2021, 1, Fig. 1

Figures speak for themselves. Joint defence spending in the EU stood at only 18 % in 2022, which is almost double the 2020 figure (11%), but well below the 35% benchmark agreed by member states under the European Defence Agency framework (EDA, 2022, 6). Most major military equipment contracts have continued to be awarded without an EU-wide tender.

Figure 3: Investment in defense programme



Source: EDA, 2022, 6, illustration 3

The United States has played an ambivalent role in the direction of European defence. Since the beginning of the 20th century, but especially since World War II, Europe has grown more dependent on the United States for its security guarantees. While pressuring European allies to increase their defense spending and contribute to the transatlantic Alliance on an equal basis, the American government has used its influence to deter the EU from developing defense ambitions for fear that strengthening its defensive position would devalue the power of NATO, negatively affect its own strategic ambitions and create competition for the U.S. defense industry. As a result, the EU is hesitant to bring forth projects without the full support of its most important ally (Alvarez-Couceiro, 2023; Bergmann, Lamond & Cicarelli, 2021 ; Kunz, 2020).

As a result, “the creation of a true EDTIB remains a chimera, caught in the crossfire between traditional national playgrounds, diverging interests of suppliers and suspicion both within the EU and between the EU and the US.” (Azzoni, 2022). The European Strategic Shield Initiative (ESSI) – or ‘missile shield’ –, launched by Germany in October 2022, is a case in point. This multibillion programme that would rely on U.S. and Israeli technology and compete with the development of a French-Italian air defence system, might fail to be developed as a truly European project, with important European partners, above all France and Italy, currently unwilling to follow Germany’s lead (Arnold & Arnold, 2023).

II The war momentum

Already characterised by an unstable situation in Europe's neighbouring regions for many years and a complex and challenging environment, the Union's geopolitical context has changed dramatically in light of the Russia's military aggression against Ukraine. The return of territorial conflict and high-intensity warfare on European soil requires Member States to rethink their defence plans and capacities.

Russia's war of aggression against Ukraine has been a stark reminder of the need for a unified market for defense equipment (Lannoo, 2023). Given that context, both European citizens and their political leaders share the view that more has to be done collectively. At their informal meeting in Versailles in March 2022, the EU Heads of States decided to "take more responsibility for our security and take further decisive steps towards building our European sovereignty, reducing our dependencies and designing a new growth and investment model for 2030" and to "bolster European defence capabilities". They agreed to: (a) increase substantially defence expenditures, with a significant share for investment, focusing on identified strategic shortfalls, and with defence capabilities developed in a collaborative way within the European Union; b) develop further incentives to stimulate Member States' collaborative investments in joint projects and joint procurement of defence capabilities; c) invest further in the capabilities necessary to conduct the full range of missions and operations, including by investing in strategic enablers such as cybersecurity and space-based connectivity; d) foster synergies between civilian, defence and space research and innovation, and invest in critical and emerging technologies and innovation for security and defence; e) take measures to strengthen and develop our defence industry, including SMEs, and strengthen the European defence industrial and technological base (Versailles Declaration, 3-5).

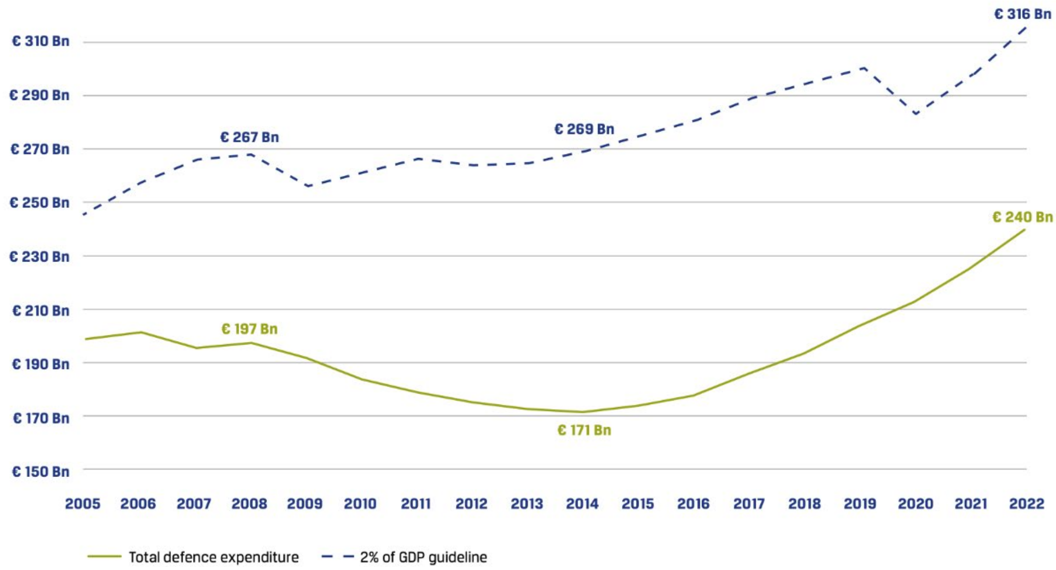
The war in Ukraine has prompted European nations to carry out a "titanic expansion" in military spending (Cohen, 2023). In his government declaration of 27 February 2022, German Chancellor Olaf Scholz spoke of a turning point in time (*Zeitenwende*) due to this war and announced a special fund of €100 billion to strengthen the country's defense capabilities (Röhl, Bardt & Engels, 2023). The combined annual defence budgets of EU Member States are expected to grow to €290 billion by 2025 (vs. €214 billion in 2021) (Clapp, 2023, 2). In 2022 only, total defense expenditure of the 27 Member States amounted to €240 billion (so a real terms growth by more than 6% compared to 2021), representing 1.5% of the gross domestic product (GDP)[4] and continuing the positive trend of eight consecutive years

[4] As a comparison, the U.S.' defence expenditure averaged 3.5% of the GDP in the past three years (EDA, Defense Data 2022, 5).

of growth.[5] A record €58 billion, or 24.2% of Member States' total defence expenditure, was allocated to defense investments (€ 52 Billion in 2021, so a robust growth of 5.9%) (EDA, 2022 b, 3-5).

The NATO steered growth-path of defence expenditure towards 2% of GDP comes in sight.

<u>Figure 4</u>: Total defence expenditures and 2% of GDP guideline (in constant 2022 prices)



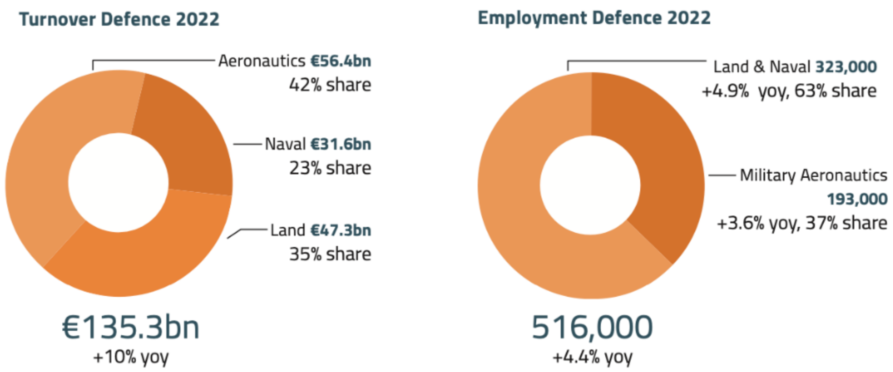
Source: EDA, 2022 b, 4, Fig. 1

Amid full-scale war in Europe, the European defence industry's vital role has become increasingly apparent. This sector generated a turnover of €135.3 billion in 2022, reflecting a 10.0% increase com-

[5] Account taken of Denmark which, after having dropped its CSDP "opt-out" in June 2022 after a positive referendum, has been included for the first time into the EU (EDA)'s statistics.

pared to the preceding year. Over the same period, the European defence industry experienced a substantial increase in employment, with the total number of jobs reaching 516,000 (4.4% increase compared to 2021). (ASD, 2023, 22). The war in Ukraine has created significant opportunities for European manufacturers to fill the void.

Figure 5



Source: ASD, 2023, 21

It makes no doubt that the 2022 shift signifies a strategic hedging approach by European countries to ensure continuity in their military readiness and to foster greater autonomy in critical areas of defense technology and capability (Melville, Darling & Bisaccio, 2023). However, the war has propelled a few structural problems to the critical edge.

The risk is high that, due to urgency, decisions could be taken in isolation without considering their medium to long-term impact on the EU defence landscape. The ambitious EDINA (European Defense in a New Age) survey processed by the German DGAP and Friedrich Neumann Foundation (FNF) could not identify clear areas of potential cooperation, despite the dramatic shift in the European security landscape generated by Russia's full-scale invasion of Ukraine (Helmonds, Mölling & Winter, 2023, 10). On the contrary, Member States might be tempted to favor individual, non-EU off-the-shelf procurements over long-term investments into R&D. There is a trend of leaning towards non-EU suppliers, further bolstered by the conflict, which entails the risk of increasing fragmentation and non-EU dependencies (EDA, 2022, para. 11). In 2022, Poland signed agreements with South Korea to purchase 1,000 K2 tanks, 672 K9 self-propelled howitzers, and 48 FA-50 light combat aircraft (Glowacki, 2022); and Germany bought over $8 billion worth of F-35 aircraft to the U.S. (Machi, 2022; Meichtry, MacDonald & Bisserbe, 2023).[6] Most States in Central and Eastern Europe are still heavily dependent on

[6] The U.S. accounted for 65 per cent of total arms imports by European NATO states and the NATO organization itself in 2018–22 (Wezeman, Gadon & Wezeman, 2023, 11). Replacing the military equipment transferred to

the United States for their defense equipment. All in all, purchases of defence equipment from EU manufacturers only amounted to €21 billion since the beginning of the war, or about 22% of the market; acquisitions from outside the EU account for 78% of EU countries’ 2022-2023 commitments, with the U.S. alone representing 63% of this share (Maulny, 2023, 2 & 17). Which is “laying the ground for tomorrow’s problems,” French President Emmanuel Macron warned at GLOBSEC’s Bratislava meeting (Macron, 2023). Urgent expenditures, in particular in stock repletion and renewal, could ultimately lead to competition and division between Member States (Angelet, 2022, 2; Helmonds, Mölling & Winter, 2023, 10).

The war-time demand has put European firms at risk (Gridneff, 2022). The European industry cannot ramp-up production without a long-term prospect of sustained demand for Europe’s Armed Forces (Angelet, 2022). Defense companies want contracts before committing to expensive expansions (Kayali, Bayer & Posaner, 2023). France is a case in point: the French industry remains reluctant to increase production capacities, as no new procurement programs were announced that would have made industry confident that higher production capacity would pay off (Helmonds, Mölling & Winter, 2023, 9).

Paradoxically, “Russia’s war against Ukraine has exposed the existence of not one single Europe, but several.”, the German DGAP and Friedrich Neumann Foundation (FNF) lucidly assessed (Helmonds, Mölling & Winter, 2023, 4). The EU’s unprecedented effort has also sent mixed messages regarding its strategic autonomy: on the one hand, there are undoubted indications that EU’s strategic autonomy is “quietly” been put into practice (Dugit-Gros, 2023). On the other hand, due to urgent decisions to be taken, “European strategic autonomy is losing momentum and importance. Even France, a traditional supporter of EU defense efforts, is now paying more attention to NATO as the backbone of its security.” (Helmonds, Mölling & Winter, 2023, 5). “Is true strategic autonomy dead or has it just been put on the shelf for a few more years?”, the representative of the *Financial Times* provocatively asked EU Council President Charles Michel during the joint press conference following the signature of the third EU-NATO joint declaration on 10 January 2023 (Simonet, 2023 b, 7-8).

Ukraine by the United States’ NATO allies could lead to roughly $21.7 billion in foreign military sales (FMS) or direct commercial sales for American industry (Brobst & Bowman, 2023).

III A substantial, yet insufficient institutional support

Faced with the Russian war of aggression against Ukraine, the Commission and the High Representative have reacted with new initiatives and industrial policy instruments to ensure that the EDTIB adapts to the new strategic context and is able to deliver what Member States and Ukraine need the most, while turning Europe into an independent military player. The four-year old Directorate-General for the Defence Industry and Space (DEFIS), established in 2019 as a symbol of the enhanced and transformed role of the European Commission in the area of European security and defence cooperation (Håkansson, 2021), has helped to unify these issues under a single umbrella.

Complementing existing tools such as PESCO,[7] three of these institutional "pushes" deserve special consideration.

- **The European Defence Fund (EDF)**. Of all European defence initiatives launched since 2016, the EDF is so far one of the most promising initiative in terms of generating the industrial basis for Europe to achieve strategic autonomy in defence in the future (Mauro, Simon & Xavier, 2021, 62). The idea of mobilising the budget of the E to nurture the competitiveness of Europe's defence industry and support collaborative defence R&D was mentioned for the first time by President of the European Commission Jean-Claude Juncker in his 2016 State of the Union speech (Juncker, 2016). Definitely established by the European Parliament on 29 April 2021, with a budget of €7,2 billion for the period 2021-2027, the EDF is the EU's key instrument to help reduce the fragmentation of investments in European defence capability development. Coined as a "game changer" (Ianakiev, 2019), it enhances industrial competitiveness, interoperability innovation, cooperation and SMEs involvement throughout Europe. The Commission has proposed to increase its funding by €1,5 billion as part of the mid-term review of the Multiannual Financial Framework.

[7] The CSDP-hosted Permanent Structured Cooperation, established in 2017, is a subset of Member States that agree to increase their cooperation on a more advanced and integrated basis, also pledging to simplify and standardize their military infrastructure. Long seen as a "Sleeping Beauty" (Juncker, 2017; Barigazzi, 2021), this framework currently gathers 68 projects (see https://www.pesco.europa.eu), but still faces a series of obstacles and debates that may lead to question its validity and future (Cózar Murillo, 2023).

Figure 6: The EDF's main objectives

Source: European Commission, 2023 d

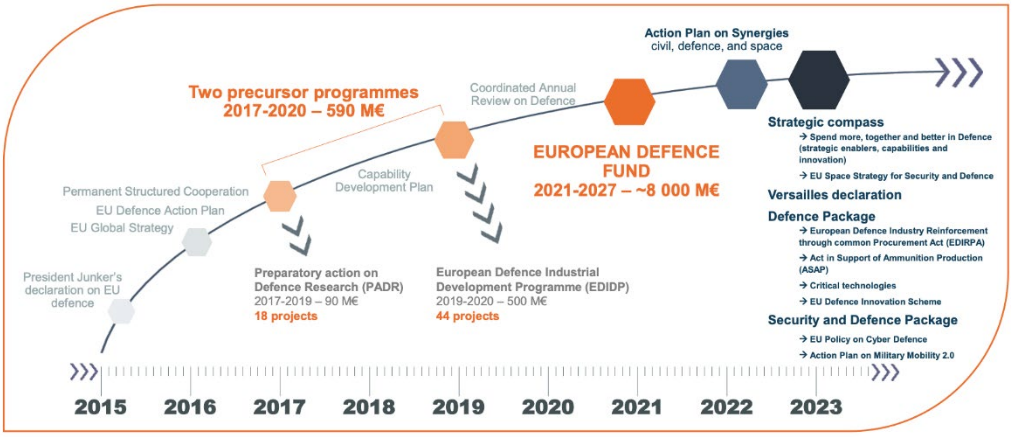
- **The Act in Support of Ammunition Production (ASAP)** was adopted in record time, on 20 July 2023, to swiftly support the 'supply' side of the market directly, with a focus on increasing the production of ammunition and missiles, allowing the European defence industry to better support Ukraine and Member States' armed forces (EU Commission, 2023 b). This €500 million programme complements the support provided through the European Peace Facility (EPF).

- Adopted on 26 October 2023, the **European Defence Industry Reinforcement through Common Procurement Regulation (EDIRPA)** is a €300 Million industrial policy instrument aiming at reinforcing defence industrial capabilities by supporting Member States' cooperation on common procurement of the most urgent and critical defence products, hence contributing to build an open and competitive European defence equipment market.

A lot has been done since Juncker's speech in 2016, but a lot remains on the agenda. The abovementioned initiatives are welcome, but have had little impact on the structure of the European defence market so far (Maulny, 2023, 3) and are not sufficient on their own to strengthen the continent's EDTIB. The Commission piecemeal approach lacks coherence and synergies. "No improved coherence of the EU defence landscape has yet been observed.", the European Defence Agency noted in 2022 (EDA, 2022, para. 3). "As crucial pieces of a puzzle are being laid on the table, no one seems to have designed the puzzle. Building blocks are put on the ground, but who designs the building?" (Angelet, 2022, 4).

Bureaucratic hurdles and slowness delay new EU instruments to facilitate joint procurement and funding, even under fast-track modalities (Kayali, Bayer & Posaner, 2023). There is still "a discrepancy between Europe's urgent needs and the common policies intended to have a long term impact on the European Defence Technological and Industrial Base (EDTIB)" (Maulny, 2023, 18). In 2023, the EU defence landscape remains fragmented, with cooperation remaining the exception rather than the norm. To get European Member States to cooperate on a more regular and frictionless basis requires more than financial incentives, especially when they are relatively limited in nature and non-transformative (Antinozzi, 2023).

Figure 7: Ramping-up EU's collaborative approach to defence capability building



Source: EU Commission, 2023 d

IV The "next chapter": a "fully-fledged European Defence Union"[8]

Almost fifteen years after the Commission first tried to regulate defence procurement with the 2009 'defence procurement directive',[9] there is still no single European defence market. Member-states continue to sidestep the framework by invoking Article 346 TFEU, which allows any government "to take such measures as it considers necessary for the protection of the essential interests of its

[8] European Defense Agency (2023 a). President von der Leyen unveils plans for defence strategy at EDA conference. https://eda.europa.eu/news-and-events/news/2023/11/30/president-von-der-leyen-unveils-plans-for-defence-industrial-strategy-at-eda-conference.

[9] Directive 2009/81/EC of the European Parliament and of the Council of 13 July 2009 on the coordination of procedures for the award of certain works contracts, supply contracts and service contracts by contracting authorities or entities in the fields of defence and security (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32009L0081). One of the very first attempts of the EU Commission to improve Europe's military capabilities, the 2009 Directive extended the goal of European integration to defense markets by establishing a common framework for defense procurements across the Member States.

security”. How can this “Janus-faced situation” whereby the European industrial field is characterised by the simultaneous presence of inter-state competition and European cooperation (Antinozzi, 2023) be turned into a common endeavor?

“We must move past recovery and towards winning the future by building a true European defence capability.” (Borrell, 2022). It is now time for the EU to evolve from emergency response to the building of the EU's long-term ability to enhance its defence readiness. The EDTIB must be more than the sum of national capabilities: it must be de-fragmented. There is a need for a coherent EU defense landscape, with simplified procedures and increased information sharing, and laid out along three axes:

- **Long-term previsibility is key**. Future military capabilities need investment now. Defence planning is therefore an important way of measuring the depth of the EU’s defence cooperation and integration (Engberg, 2021, 25). Only a common long-term (pluriannual) capability outlook for the EU defence landscape in accordance with the common strategic vision provided by the Strategic Compass will allow Member States to coordinate defence planning at EU level in the next planning horizon. Such well-structured, coordinated and more capability-driven strategy should “take on board the needs of armed forces and governments (the so-called ‘end users’).” (Fiott, 2019 a, 4) and improve coherence with Member States’ mid- to long-term defence- and procurement planning (Mauro, Simon & Xavier, 2021, 54).

- The **right projects should be prioritized**, making use of the collaborative opportunities identified by CARD, in particular those assessed as ‘most promising’, ‘most pressing’ or ‘most needed’ (EDA 2022, para. 29 f), PESCO or other collaborative frameworks, also considering potential support from the EDF. CARD’s six “focus areas” are eco-systems of projects and activities connecting capability development, innovation including R&T, and the industrial dimension. Their implementation has the potential to deliver a significant impact on Member States’ capability profiles, the overall coherence of the EU defence landscape, mitigating fragmentation, and a positive effect on the competitiveness of the EDTIB.

- **Research and Development is fundamental for both industrial competitiveness and the security of the EU**. Coupled with uncoordinated defence investment, the insufficient level of R&D / R&T investments poses a challenge to the coherence of the European defence landscape, increasing the risk of fragmentation. European collaborative defence R&T expenditure reached €237 million in 2022, a €24 million decrease from 2021 to 2022 (EDA, 2022 b, 3 & 15). "This, we cannot afford.", HR/VP Borrell made clear at the EDA annual conference in 2023. To foster technological sovereignty, the EU must

invest in defence innovation, as the HR/VP strongly emphasized (Borrell, 2021; Benaich, 2023), and prioritize coherent and persistent investments in selected key technologies (Pie, 2020, 2).
What Raluca Csernatoni calls "the alignment of planets" in the sky of the European defence (Csernatoni, 2021, 3f) could be achieved through three different and parallel processes:

- **A European Defence Industrial Strategy (EDIS).** As announced in President von der Leyen's State of the European Union 2023, it is now time to engage in a strategic reflection to return to a more structural, long-term approach (Von der Leyen, 2023). On 27 October 2023, the Commission and the High-Representative launched a comprehensive stakeholder engagement process to inform the new EDIS. The strategy will give further impulse to developing Member States' defence capabilities, underpinned by a modern and resilient European defence technological and industrial base, establishing a strategic framework for the coming years. This will not only allow Member States to restock and acquire new defence equipment but also strengthen the EU as a security and defence actor in the long-term, in line with the ambition set out in the Strategic Compass. On the basis of this comprehensive consultation, the aim is to present EDIS in early 2024 (EU Commission, 2023 c).

- **A European Defence Union.** The aim of creating a Defence Union is inscribed in the Lisbon Treaty. Article 2(4) TFEU allocates the EU competence "to define and implement a common foreign and security policy, including the progressive framing of a common defence policy". Article 42(2) TEU specifies that "this will lead to a common defence, when the European Council, acting unanimously, so decides." This provision includes a commitment to progress in the direction of common defence, even if its exact structure and timing is left open (Leino Sandberg & Ojanen, 2022). This is why the EU should strive towards a fully-fledged 'European Defence Union' (EDA, 2023 a). An ambitious investigation conducted by the Bruegel Institute suggests that creating a EU-wide genuine defence union would probably be welcomed by Western Europeans (Burgoon B., Van Der Duin D. & Nicoli F., 2023, 19). A limited Treaty review would probably be required to abolish defence's exemption as contained in Article 346 TFEU (Lannoo, 2023).

- **More NATO-EU coordination.** The third joint EU-NATO declaration, signed on 10 January 2023, "recognise(s) the value of a stronger and more capable European defence that contributes positively to global and transatlantic security and is complementary to, and interoperable with NATO" (Simonet, 2023 b). Ensuring that European funding programmes are synchronised and complementary to NATO and the Alliance's 2022 Strategic Concept (Besch, 2019; Simonet, 2023 a) should benefit to both institutions.

V A word on Austria

Bound to neutrality by the 1955 Austrian State Treaty and its constitution, Austria, together with Finland, Sweden and Ireland, imposed the formulation of Article 42 TEU which specifies that the EU's defence policy "shall not prejudice the specific character of the security and defence policy of certain Member States". Until 24 February 2022, Austria was severely judged by experts for its inability to fulfil its defence commitments and its limited ambitions (Gressel, 2021). Total defense expenditure in Austria represented €3.3 Billion in 2021; the country's total defense investments €398.9 Million. Defense spending represented 0.8 per cent of Austria's GDP, the fourth lowest percentage after Ireland (0.2%), Malta (0.4%) and Luxembourg (0.6%). Austria featured among the ten Member States which saw their defense expenditures decreasing from 2021 to 2022 (- 0.5%). Its defense investment rate was the EU's lowest in 2022 (9.5%)[10] (EDA, 2022 b, 4 & 10). Austria's participation in PESCO has been rather limited, exception made **of t**he Austrian-lead project CBRN Surveillance as a Service (CBRN SaaS) which aims to provide a rapidly deployable 24/7 chemical, biological, radiological and nuclear (CBRN) surveillance capability.

Austria, though, might have learned from the return of war in Europe. Its nominal defense budget increase has been particularly steep between 2022 and 2023, above 20% (Maulny, 2023, 2 & 5).[11]

Figure 8

	Evolution of defence budgets				Evolution of defence investments				Inflation 2022
	Budget 2022[6] excluding extensions (Billion €)	Budget 2023 (Billion €)	Evolution (Nominal values)	Evolution (Real values)	Invest. 2022 (Billion €)	Invest. 2023 (Billion €)	Evolution (Nominal values	Evolution (Real values)	
Austria	2.71	3.38	+24.3%	+12.26%	0.428	0.712	+66.2%	+49.73%	11.1%

Source: Maulny, 2023, 6, Table 1

[10] To keep the same references, Ireland was at 10,7%, Luxembourg at the record of 53.5% and Malta at 13.2%.
[11] Interestingly, beside Austria, only the Baltic states, Finland and Sweden, a region strongly concerned by Russia's hostility, have registered such strong increase of 20% or more (Maulny, 2023, 5).

With Sweden's and Finland's accession to NATO, Austria finds itself isolated. NATO and the EU will be more closely aligned in terms of their membership: 23 over 27 EU members will be NATO members; 96% of the EU population will live in a NATO country. Of the four remaining non-NATO EU countries, Austria will be the only one located not at the EU's northern or southern periphery, but in Europe's very geographical heart. As a neutral country, Austria will see its influence diminish; in particular, the WEP-5 group (the five Western European partners Austria, Finland, Ireland, Sweden and Switzerland), which had an active and fruitful cooperation and regularly liaised with the Atlantic Alliance, will lose two prominent members.

Although this project might not be considered the best example of intra-European collaboration (see above p. 10), Austria's participation in the Germany-led ESSI might signal Vienna's willingness to increase its engagement into EU defence (Alipour, 2023). Whereas it is true that the future of EDTIB will be driven by the Western European states with large industries and countries that can invest significantly in future defense procurement and innovation, the benefits of a strong EDTIB are also relevant for smaller countries with a more limited and/or highly specialised industrial capacity. Having internationally competitive European companies ensures that smaller countries like Austria have multiple procurement options, rather than facing a monopoly supplier situation from a third country. A strong EDTIB gives those countries the option to join European cooperative development programmes. This enables them to gain a degree of access to sensitive technical and operational aspects of the capability and to technological know-how that would not be available via an off-the-shelf procurement. Such partnering arrangements also provide smaller countries with important security of supply benefits that result from the mutual dependence intrinsic to cooperative programmes and with priority access to additional production lots at the same economic conditions (Pie, 2023, 2).

Therefore, Austria might be well-advised to keep a close eye at the ongoing "shift" in the EU defence. The ongoing update of its 2013 security strategy, amid increasing threats and ongoing Russian aggression against Ukraine, will demonstrate whether the country's enhanced security, independence, and freedom go through the nascent European Defence Union.

Conclusion

The impact of the conflict in Ukraine on the European economy is likely to be more than just a flash in the pan. Among many converging predictions, experts from McKenzie believe that, even if Russia had not heightened security concerns by invading Ukraine, European defense spending would have risen from €296 billion in 2021 to €337 billion in 2026—an increase of 14 percent. In their low scenario, which factors in the invasion’s impact on defense funding, spending increases by 53 percent over the same period to reach €453 billion. In their high scenario, which assumes a bold defense funding response, spending increases 65 percent from 2021 through 2026, reaching €488 billion (Cavendish *et al*., 2022). The endorsement of the main ground combat system (*MGCS*, a main battle tank accompanied by robots and artificial intelligence, aiming to replace the fleets of *Leclerc* and *Leopard* tanks) by the French and German Defence Ministers, in September 2023 (Abboud & Pfeifer, 2023), soothes the ESSI rebuff and ends 2023 on a promising note.

“Call it a European Defence Union, Strategic Autonomy, Common Defence, or even European Army, the concept remains the same: Europe desperately needs an autonomous capacity at least to solve crises in its neighbourhood that impact it directly or indirectly (e.g. Syria) and, to all extent possible, to take an active part in its own defence, be it against old or new threats.” (Mauro, 2020)

Bibliography

All the sources referenced below have been accessed between 1 November and 15 December 2023

- Abboud L. & Pfeifer S. (2023). France and Germany back 'milestone' development in joint tank project. *Financial Times*. https://www.ft.com/content/1c6d9c06-508e-4f4c-92af-6fdd44cc6ff9.
- Alipour N. (2023). Neutral Austria, Switzerland join European Sky Shield. *Euractiv*. https://www.euractiv.com/section/defence-and-security/news/neutral-austria-switzerland-join-european-sky-shield/.
- Alvarez-Couceiro P. (2023). Europe at a Strategic Disadvantage: A Fragmented Defense Industry. *War on the Rocks*. https://warontherocks.com/2023/04/europe-at-a-strategic-disadvantage-a-fragmented-defense-industry/.
- Angelet B. (2022). The War against Ukraine and European Defence: When will we square the circle?. Egmont Policy Brief 292.- 6 p. https://www.egmontinstitute.be/the-war-against-ukraine-and-european-defence-when-will-we-square-the-circle/.
- Antinozzi I. (2023). European Defence Industry Cooperation: The Problem with Current Incentives. Royal United Services Institute (RUSI). https://rusi.org/explore-our-research/publications/commentary/european-defence-industry-cooperation-problem-current-incentives.
- Arnold S. & Arnold T. (2023). Germany's Fragile Leadership Role in European Air Defence. SWP Comment No 6.- 8 p. https://www.swp-berlin.org/10.18449/2023C06/.
- ASD (The Aerospace, Security and Defence Industries Association of Europe) (2023). Facts & Figures 2023. https://www.asd-europe.org/news-publications/facts-figures.
- Azzoni A. (2022). European Defence: Time to Act. Istituto Affari Internazionali (IAI). https://www.iai.it/it/pubblicazioni/european-defence-time-act.
- Balyuk A. (2021). European Defense Industry 2021: Challenges and Trends. Epicflow. https://www.epicflow.com/blog/european-defense-industry-2021-challenges-and-trends/.
- Barigazzi J. (2021). EU military projects face delays, leaked document shows. Politico. https://www.politico.eu/article/leaked-document-shows-delays-in-eu-military-pact/.
- Benaich N. (2023). European governments need to start taking defence innovation seriously. *Financial Times*. https://www.ft.com/content/2bb42436-c85f-42b9-a945-9cd0464a9c37.
- Béraud-Sudreau L. *et al*. (2022). The SIPRI Top 100 arms-producing and military services companies, 2021. SIPRI Fact sheet. https://www.sipri.org/publications/2022/sipri-fact-sheets/sipri-top-100-arms-producing-and-military-services-companies-2021.

- Bergmann M., Lamond J. & Cicarelli S. (2021). The case for EU Defense. A New Way Forward for Trans-Atlantic Security. Center for American Progress. https://www.americanprogress.org/article/case-eu-defense/.
- Bergmann M., Morcos P., Wall C. & Monaghan S. (2022). Transforming European Defense. Center for Strategic & International Studies, CSIS Brief, https://www.csis.org/analysis/transforming-european-defense.
- Besch S. (2019), "Can the European Commission develop Europe's defense industry?", Centre for European Reform, https://www.cer.eu/insights/can-european-commission-develop-europes-defence-industry.
- Briani V. (2013). The costs of non-Europe in the defence field. Istituto Affari Internazionali (IAI).- 48 p. https://www.iai.it/sites/default/files/CSF-IAI_noneuropedefence_april2013.pdf.
- Brobst R. & Bowman B. (2023). Database: Replacing weapons NATO Allies sent to Ukraine could yield $21.7 billion in U.S. sales. Foundation for Defence of Democracies (FDD). https://www.fdd.org/analysis/2023/01/20/database-replacing-weapons-nato-allies-sent-to-ukraine-could-yield-217-billion-in-us-sales/.
- Burgoon B., Van Der Duin D. & Nicoli F. (2023). What would Europeans want a European defence union to look like? Bruegel, Working Paper 09. https://www.bruegel.org/working-paper/what-would-europeans-want-european-defence-union-look.
- Cavendish G. *et al.* (2022). Invasion of Ukraine : Implications for European defense spending. McKinsey & Company. https://www.mckinsey.com/industries/aerospace-and-defense/our-insights/invasion-of-ukraine-implications-for-european-defense-spending#/.
- Clapp S. (2023). European defence industry reinforcement through common procurement act (EDIRPA). European Parliamentary Research Service. https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2023)739294.
- Cohen P. (2023). A Rush to Build Defenses in Europe, but Little Consensus on How. *The New York Times.* https://www.nytimes.com/2023/09/12/business/economy/europe-defense-military-spending.html.
- Cózar Murillo B. (2023). Bring back the spirit of PESCO! Egmont Policy Brief 308. https://www.egmontinstitute.be/app/uploads/2023/06/Beatriz-Cozar-Murillo_Policy_Brief_308.pdf?type=pdf.
- Csernatoni R. (2021). The EU's Defense Ambitions: Understanding the Emergence of a European Defense Technological and Industrial Complex. Carnegie Europe, Working paper. https://carnegieeurope.eu/2021/12/06/eu-s-defense-ambitions-understanding-emergence-of-european-defense-technological-and-industrial-complex-pub-85884.
- Dugit-Gros L. (2023). How Europe is quietly putting 'strategic autonomy' into practice. *The Hill*. https://thehill.com/opinion/international/3890729-how-europe-is-quietly-putting-strategic-autonomy-into-practice/.

- Engberg K. (2021). A European defence Union by 2025? Work in progress. Swedish Institute for European Policy Studies (SIEPS), Policy overview. https://www.sieps.se/globalassets/publikationer/temasidor/european_defence_union_policy_overview.pdf.
- Fiott D. (2019 a), "Strategic Investment. Making geopolitical sense of the EU's defense industrial policy", EU Institute for Security Studies (ISS), Chaillot paper 156, 44 p., https://www.iss.europa.eu/content/strategic-investment-making-geopolitical-sense-eus-defence-industrial-policy.
- Fiott D. (2019 b). What Does it Mean To Be A European defence Company Today? Ifri, editorial. https://www.ifri.org/sites/default/files/atoms/files/fiott_european_defense_company_2019.pdf.
- Glowacki B. (2022). Poland buying Korean made MLRS, continuing Seoul spending spree. *Breaking Defense*. https://breakingdefense.com/2022/10/poland-buying-korean-made-mlrs-continuing-seoul-spending-spree/#:%7E:text=Since%20late%20July%2C%20Poland%20has,with%20the%20MLRS%20announcement%20today.
- Gressel G. (2021). Free-rider for life: Austria's inability to fulfil its defence commitments. In: 7-14.Cramer C. S. & Franke U. (Ed.). Ambiguous Alliance: Neutrality, opt-outs, and European Defence. European Council on Foreign Relations (ECFR). https://ecfr.eu/publication/ambiguous-alliance-neutrality-opt-outs-and-european-defence/.
- Gridneff I. (2022). Why Europe's defense industry can't keep up. *Politico*. https://www.politico.eu/article/europe-defense-military-industry-keep-up-demands/.
- Håkansson C. (2021). The European Commission's new role in EU security and defence cooperation: the case of the European Defence Fund. *European Security*, 30(4), 589–608.
- Hartley K. (2023). European Defence Policy: Prospects and Challenges. *Defense and Peace Economics*. 1-12.
- Helmonds S., Mölling C. & Winter T. (2023). European Defense In A New Age (#EDINA). Geostrategic Changes and European Responses Shaping the Defense Ecosystem. DGAP Report No 6.- 69 p. https://dgap.org/system/files/article_pdfs/DGAP-Report-2023-6-EN-EDINA%20.pdf
- Ianakiev G. (2019). The European Defence Fund. A Game Changer for European Defence Industrial Collaboration. Armament Industry European Research Group (ARES), Policy Paper 48.- 24 p. https://www.iris-france.org/wp-content/uploads/2019/11/ARES-48.pdf.
- Kleczka M., Buts C. & Jegers M. (2020). Addressing the "headwinds" faced by the European arms industry. *Defense & Security Analysis*, 36(2). 129-160.
- Kostova Karaboytcheva M. (2021). European Defence Fund 2021–2027. European Parliamentary Research Service. https://www.europarl.europa.eu/RegData/etudes/ATAG/2021/690558/EPRS_ATA(2021)690558_EN.pdf.
- Kunz B. (2020). Europe's Defense Debate Is All About America. *War on the Rocks*. https://warontherocks.com/2020/03/europes-defense-debate-is-all-about-america/.

- Lannoo K. (2023). After one year of war, the EU must create a single market for defence. CEPS. https://www.ceps.eu/after-one-year-of-war-the-eu-must-create-a-single-market-for-defence/.
- Leino-Sandberg P. & Ojanen H. (2022). Time for Military Integration in the EU? Verfassungsblog on Matters Constitutional. https://verfassungsblog.de/time-for-military-integration-in-the-eu/.
- Macchiarini Crosson D. (2021). EU Defence Projects. Balancing Member States, money and management. Center for European Policy Studies (CEPS), Policy Brief. https://www.pubaffairsbruxelles.eu/opinion-analysis/policy-insight-eu-defence-projects-balancing-member-states-money-and-management/.
- Machi V. (2022). State Department approves $ 8.4 billion F-35 sale for Germany. *DefenseNews*. https://www.defensenews.com/air/2022/07/29/state-department-approves-84-billion-f-35-sale-to-germany/.
- Macron E. (2023). Closing speech by the President of the French Republic. GLOBSEC Summit in Bratislava. https://www.elysee.fr/en/emmanuel-macron/2023/06/01/globsec-summit-in-bratislava.
- Meichtry S., MacDonald A. & Bisserbe N. (2023). Europe's Defense Dilemma: To Buy, or Not to Buy American. *The Wall Street Journal*. https://www.wsj.com/articles/europes-defense-dilemma-to-buy-or-not-to-buy-american-1576c2f4.
- Maulny J.-P. (2023). The impact of the war in Ukraine on the European defense market. Institut de Relations Internationales et Stratégiques (IRIS), Policy Paper. https://www.iris-france.org/wp-content/uploads/2023/09/19_ProgEuropeIndusDef_JPMaulny.pdf.
- Mauro F. (2020). European defence: Challenges ahead. Institut de Relations Internationales et Stratégiques (IRIS). https://www.iris-france.org/143892-european-defence-challenges-ahead/.
- Mauro F., Simon E. & Xavier A. I. (2021). Review of the Preparatory Action on Defence Research (PADR) and European Defence Industrial Development Programme (EDIDP): lessons for the implementation of the European Defence Fund (EDF). Study requested by the EU Parliament. https://op.europa.eu/en/publication-detail/-/publication/a947b7d9-d951-11eb-895a-01aa75ed71a1/language-en.
- Melville A., Darling D. & Bisaccio D. (2023). From Crisis to Opportunity: Europe's Defense Industry Transformation in the Post-Ukraine Crisis. Defense and Security Monitor. https://dsm.forecastinternational.com/2023/08/02/from-crisis-to-opportunity-europes-defense-industry-transformation-in-the-post-ukraine-crisis/.
- Oleksiejuk M. (2020). The Impacts of Brexit on the Security and the Defence Industry in the European Union and the United Kingdom. Warsaw Institute, Special report. https://warsawinstitute.org/wp-content/uploads/2020/04/RS_15-04-2020_EN-3.pdf.
- Olsson P. (2021). The European Defence Market – Unevenly Fragmented. FOI, Swedish Defence Research Agency, Memo 7730. https://www.foi.se/rest-api/report/FOI%20Memo%207730.

- Pie J. (2020). Industry considerations on Technological Sovereignty. Aerospace and Defence Industries Association of Europe (ASD), concept paper.- 13 p. https://www.asd-europe.org/industry-considerations-on-technological-sovereignty-concept-paper.
- Pie J. (2022). Considerations on developing the future European defence industrial and technological base. Aerospace and Defence Industries Association of Europe (ASD), Note. https://www.asd-europe.org/considerations-on-developing-the-future-european-defence-industrial-and-technological-base?msg_pos=3.
- Pie J. (2023). Why Europe needs its defence industry. Aerospace and Defence Industries Association of Europe (ASD), Narrative. https://asd-europe.paddlecms.net/sites/default/files/2023-10/ASD%20Defence%20Industry%20Narrative.pdf.
- Röhl K.-H., Bardt H. & Engels B. (2023). A new era for the defense industry?. Institut der Deutschen Wirtschaft (IW), Policy Paper 1/2023, 28 p. https://www.iwkoeln.de/fileadmin/user_upload/Studien/policy_papers/PDF/2023/IW-Policy-Paper_2023-A-New-Era-for-the-Defense-Industry.pdf
- Scortecci G. (2020).The European Defense Industry: From Fragmentation to Innovation. Master's Degree in International Relations, Libera Università Internazionale degli Studi Sociali Guido Carli (LUISS). 154 p., accessed on https://tesi.luiss.it/28498/1/637242_SCORTECCI_GIANMARCO.pdf.
- Simonet L. (2023 a). NATO's 2022 Strategic Concept: Analysis and implications for Austria. Oiip, working paper 115. https://www.oiip.ac.at/publikation/natos-2022-strategic-concept-analysis-and-implications-for-austria/.
- Simonet L. (2023 b). The third EU-NATO joint declaration (10 January 2023): Was it worth the delay? Oiip, policy analysis. https://www.oiip.ac.at/publikation/the-third-eu-nato-joint-declaration-10-january-2023-was-it-worth-the-delay/.
- Wezeman P. D., Gadon J. & Wezeman S. T. (2023). Trends in international arms transfers, 2022. SIPRI Fact Sheet. https://www.sipri.org/publications/2023/sipri-fact-sheets/trends-international-arms-transfers-2022#:~:text=Imports%20of%20major%20arms%20by,fell%20by%205.1%20per%20cent.

EU documents

- Borrell J. (2021). Defence innovation or defence irrelevance is the choice to make. https://www.eeas.europa.eu/eeas/defence-innovation-or-defence-irrelevance-choice-make_en.
- Borrell J. (2022). Foreign Affairs Council (Defence): Press remarks by High Representative Josep Borrell after the meeting. https://www.eeas.europa.eu/eeas/foreign-affairs-council-defence-press-remarks-high-representative-josep-borrell-after-meeting_en.
- EU Global Strategy (2016) "Shared Vision, Common Action: A Stronger Europe". https://www.eeas.europa.eu/sites/default/files/eugs_review_web_0.pdf.

- European Commission, Directorate General Defense Industry and Space (DEFIS), https://commission.europa.eu/about-european-commission/departments-and-executive-agencies/defence-industry-and-space_en.
- European Commission (2022 a). Defense Investment Gap Analysis and Way Forward. JOIN(2022) 24 Final, https://commission.europa.eu/system/files/2022-05/join_2022_24_1_en_annexe_autre_acte_conjoint_cp_part1_v1.pdf.
- European Commission (2022 b). Investment gaps in EU Defence. Factsheet. https://ec.europa.eu/commission/presscorner/detail/en/FS_22_3145.
- European Commission (2023 a). Commission launches comprehensive consultation process with stakeholders aiming to deliver a European Defence Industrial Strategy. Press Release, 27 Oct. 2023, https://ec.europa.eu/commission/presscorner/detail/en/IP_23_5364.
- European Commission (2023 b). Act in Support of Ammunition Production (ASAP). https://defence-industry-space.ec.europa.eu/eu-defence-industry/act-support-ammunition-production-asap_en#.
- European Commission (2023 c). Commission launches comprehensive consultation process with stakeholders aiming to deliver a European Defence Industrial Strategy. https://ec.europa.eu/commission/presscorner/detail/en/ip_23_5364.
- European Commission (2023 d). European Defence Fund, Information Days. https://defence-industry-space.ec.europa.eu/system/files/2023-07/EDF%20Info%20Days%202023%20-%2028%20June.pdf.
- EDA, Defense Data Portal, https://eda.europa.eu/publications-and-data/defence-data (accessed on 12 Dec. 2023).
- EDA (2022). 2022 Coordinated Annual Review on Defense (CARD) Report. https://eda.europa.eu/docs/default-source/eda-publications/2022-card-report.pdf
- EDA (2023 a). President von der Leyen unveils plans for defence strategy at EDA conference. https://eda.europa.eu/news-and-events/news/2023/11/30/president-von-der-leyen-unveils-plans-for-defence-industrial-strategy-at-eda-conference.
- EDA (2023 b). Defense Data 2022. https://eda.europa.eu/publications-and-data/brochures/eda-defence-data-2022.
- EDA (2023 c). EDA brings together 25 countries for Common Procurement of Ammunition. https://eda.europa.eu/news-and-events/news/2023/03/20/eda-brings-together-18-countries-for-common-procurement-of-ammunition.
- Juncker J.-C. (2016). State of the Union Speech “Towards a better Europe – A Europe that protects, empowers and defends”. https://commission.europa.eu/strategy-and-policy/strategic-planning/state-union-addresses/state-union-speeches/state-union-2016_en.
- Juncker J.-C. (2017). Speech at the Defence and Security Conference Prague: In Defence of Europe. https://ec.europa.eu/commission/presscorner/detail/fr/SPEECH_17_1581.

- EU Strategic Compass for Security and Defence (2022). "For a European Union that protects its citizens, values and interests and contributes to international peace and security". https://www.eeas.europa.eu/sites/default/files/documents/strategic_compass_en3_web.pdf.
- Versailles Declaration of the Informal meeting of the Heads of State or Government, 10 and 11 March 2022, https://www.consilium.europa.eu/media/54773/20220311-versailles-declaration-en.pdf.
- Von der Leyen U. (2023). 2023 State of the Union Address by President von der Leyen. https://ec.europa.eu/commission/presscorner/detail/en/speech_23_4426.