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Europe's military programmes: Strategies, costs and tradeoffs

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LEM Working Paper Series

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Abstract

This paper investigates the expansion of EU military activities, involving the European Commission, other EU-related institutions and Member States. Expenditure on EU military programmes – defence-related R&D, arms production, joint procurement, military mobility, and the supply of lethal weapons to third countries – has skyrocketed since 2021, well before the Russian invasion of Ukraine, with an increase of about 350% from 2021 to 2024. The European Commission is playing a growing role in developing initiatives in the defence domain, with programmes such as the European Defence Fund that supports research into and production of new weapons systems. In 2025, it announced the plan *ReArm Europe*, later renamed *Readiness 2030*, to sustain the further militarization of the EU.

The largest arms-related programme, however, is the European Peace Facility that is funded by EU Member States – as opposed to previous actions funded by the EU budget – for the supply of weapons, ammunitions and equipment to non-EU countries; Ukraine has obtained $\[Engline{\epsilon}\]$ 5.6 billion of military supplies from the European Peace Facility since the start of the war with Russia. EU military programmes have spent a total amount of $\[Engline{\epsilon}\]$ 8.2 billion in 2023, as opposed to $\[Engline{\epsilon}\]$ 200 million in 2019.

The largest part of Europe's military expenditure, however, is still found in national budgets. In 2024, NATO EU countries spent €346 billion in their military budgets, with an increase in real terms of 66% between 2013 and 2024. When we consider the total spending of NATO EU countries and the major EU economies – Germany, France, Italy and Spain – we find that in the last decade the expansion of national military budgets, and particularly the acquisition of new weapons and equipment, has dramatically outpaced growth in GDP, total public expenditures and spending on the environment, education and health.

In a context of widening conflicts, current political developments – in US policy and within the EU - are accelerating the militarisation of European policies without an adequate debate on real security needs, on the model of EU integration in defence and on the economic dimensions of the process.

Keywords: EU programmes, military technologies, arms expenditure, economic performance

JEL codes: O30, O33, 038

1. The context of EU security and defence policies

The emergence of the European Union (EU) as a foreign policy actor in the 1990s was seen by many observers as the rise of a civilian power in a landscape characterised by growing multilateralism, interlocking security institutions and the widening of the security agenda well beyond its traditional military core. The term *civilian* denoted a contribution to global governance that was not based on military might, but also emphasized its role in a *civilisation* process - i.e. the alleviation of unnecessary human suffering in accordance with international humanitarian law and related ethical considerations – and a new policy focus on human security.²

Three decades on, Europe's security architecture appears to be changing rapidly in an international context that is deeply affected by growing geostrategic rivalries, the weakening of multilateralism, the spread and the deepening of regional conflicts, the absence of credible mediation/settlement efforts and a growing reliance on the unilateral use of military force, as well as rapid technological advances in weapons systems that lead to deep changes in warfighting. Russian assertiveness in Eastern Europe and the military aggression against Ukraine in 2014, with parallel responses from the US, NATO and some European countries, have raised the spectre of escalation and war. The inauguration of a new US Presidency under Donald Trump, in January 2025, shook the traditional foundations of the transatlantic security community, leading to an urgent need to rethink European security, EU defence strategies and the tools for conflict resolution and for building a peaceful order in Europe.

Since the 'Schuman declaration' of 1950, announcing a plan to pool markets for German and French coal and steel, the European process of integration itself can be seen as a path that stems from the collpase of the first attempt to create a European Defence Community in 1954. With the end of the Cold War, in the process of defining its foreign and security policy, the European Union has been moving towards a stronger foreign and security policy.

Considering EU treaties, it must be remembered that the Maastricht treaty of 1992 introduced the issue of defence as a goal of its foreign and security policy, envisioning some operational capabilities of the Union through civilian and military capacity means. Article 42.7 of the Lisbon EU Treaty of 2007 (mutual assistance clause) obliges Member States to assist each other by all means available in the event of armed attack. Such steps towards an EU-wide security policy have not substantially changed the principles that defence is a core area of member states' sovereignty, and that unanimity is necessary for decisions to be taken in this domain.

Considering the defence policy debate, an important step was the 1998 Franco-British St. Malo Declaration on European Defence. Then in December 2003, the adoption of a Security Strategy³ laid the foundations for a comprehensive multilateral approach integrating different dimensions of external action, from trade to aid and defence. In 2004, the European Defence Agency (EDA) was established to support Member States and the Council in their efforts to improve European defence capabilities.

In more recent years, the pressure to develop a proper defence profile for the EU was accelerated by the first election of Donald Trump to the US presidency in 2016: Trump has questioned the future of NATO in Europe and challenged long-established transatlantic

¹ Duchene, F. (1971). A new European defense community. *Foreign Aff.*, 50, 69; Orbie, J. (2006). Civilian power Europe: review of the original and current debates. *Cooperation and conflict*, 41(1), 123, 128

² Linklater, A. (2020). The idea of civilization and the making of the global order. Policy Press.

³ Solana, J. (2004). A Secure Europe in a Better World: European Security Strategy. Civilian perspective or security strategy? European development policy confronting new challenges in foreign and security policy.

policies. In 2016, EU Commission President Jean-Claude Juncker launched the 'EU Global Strategy' on international security and defence,⁴ and established new programmes on research and industrial development of military systems, funded by the EU budget and justified by Article 173 of the Treaty on the Functioning of the European Union on industrial competitiveness and cooperation.

A turning point in Europe was the adoption of the Strategic Compass for Security and Defence in 2022, which paved the way for a process of military transformation: the EU sees the Compass as an ambitious plan to strengthen its security and defence policy by 2030, the aim being complementing NATO as a capable security provider. The document is the result of two years of preparatory discussions: for the first time, a threat analysis was conducted at EU level as a step towards a common strategic culture. Supported by the High Representative, the External Action Service, EU member states remain responsible for the key steps in implementing the priorities set out in the Compass. These include the development of a hybrid toolbox, a cyber defence policy framework, a maritime and space strategy and initiatives to facilitate joint procurement. With the Compass, Member States have committed themselves to spending significantly more on defence, reducing fragmentation and increasing interoperability of their capabilities.

The Strategic Compass and other EU defence initiatives are changing the quantity and quality of the EU's military effort. Responding to Washington's demands to 'spend more on European security', the Compass includes commitments to spend more on defence - well beyond the 2% of GDP target agreed by NATO partners' years ago - an emphasis on advanced weapon systems and capabilities, and a push for more efficient procurement with less duplication between EU countries. The rise of EU-funded military programmes – examined in the next section – is going to be the high-tech weapon add-on to the target of 2% of GDP for the military expenditures of Member States.

At the same time, EU member states have gradually increased their national military spending over the last decade, with a significant increase after the start of the war in Ukraine in 2022 - as documented in the Greenpeace report 'Arming Europe' (Greenpeace, 2023). The increase in spending is leading to the modernisation of armies and military capabilities and is part of a wider global trend.

Further developments which could lead to a new 'defence model' for Europe included in 2023 the expansion of the Atlantic Alliance through the memberships of Sweden and Finland and the new role of the Baltic and Nordic countries, which have been at the forefront of increased military spending, positioning themselves as hardliners on Russia and with a stronger emphasis on NATO. It should be noted that this is the region that in 2003 US President George W. Bush dubbed 'New Europe' for its support of the US invasion of Iraq, while most Western European countries ('Old Europe') were opposed. Lithuania's foreign minister spoke of the emerging new defence model as implying a 'new social contract', mainly in terms of expanding the manpower under the army through enhanced conscription and new taxes to support larger military budget. It is probably no coincidence that the new EU Commissioner for Defence - appointed by Ursula von der Leyen - is the Lithuanian Andrius Kubilius.

⁴ European Commission (2016), Speech by President Jean-Claude Juncker at the Defence and Security Conference Prague: In defence of Europe

⁵ Sus, M. (2024). Exploring the dynamics of policy change in EU security and defence: policy entrepreneurs behind the Strategic Compass. *West European Politics*, 47(4), 942-966.

⁶ The idea was echoed already at the 2023 NATO Vilnius Summit. See: Defense Takeaways for the Baltic states. Baltic Bullettin, 29 Sept. 2023, https://www.fpri.org/article/2023/09/nato-vilnius-summit-defense-takeaways-for-the-baltic-states/

However, the growth in military spending has not taken place in a context of greater integration and more supranational prerogatives for the Union: on the contrary, it has been accompanied by disagreement among Member States on key foreign policy questions, and by different (sometimes conflicting) national defence strategies and arms procurement programmes, not to mention national decisions on the reintroduction of compulsory military service.⁷

A key open issue for Europe remains the relationship with the US, as Donald Trump has repeatedly raised questions about nothing less than the functioning of NATO's collective defence (Art. 5).

With the second presidency of Donald Trump started in January 2025, a new uncertainty on the future of NATO and US-EU/UK relations has emerged. A crucial debate concerns Europe's 'strategic autonomy'. The European Council's Versailles Declaration, adopted in March 2022, envisaged greater strategic autonomy for the EU. But the boundaries of such 'autonomy' have remained blurred: autonomous from whom? for what purposes? The term has sometimes been used interchangeably with concepts such as 'strategic sovereignty', 'capacity to act' and 'resilience'. The idea of strategic autonomy concerns not only the military and security sector, but also the reduction of European dependencies in a wide range of areas, including industrial, energy, climate and trade policy, as well as financial and digital governance.⁸ The key issue is that autonomy presupposes a common vision of security, a redefinition of the EU's powers vis-à-vis its member states, a political will to coordinate EU positions in times of crisis, and access to financial resources and operational tools.

Two major issues stand out as relevant here. The first is the relationship between the EU defence policy, the US global strategy and the scope and role of NATO. The second is the highly sensitive issue of nuclear weapons, given the Pentagon's talk of the world entering a new nuclear age, the presence of US warheads in several EU countries and the status of France as a nuclear power. In June 2025, the UK also decided to substantially expand its nuclear deterrent by buying a squadron of American-made fighter jets capable of delivering US tactical warheads likely to be stored on British soil.

Are nuclear capabilities expected to become part of the EU's security policy? Is there a project to 'Europeanise' French nuclear weapons? What is the relationship with US nuclear deterrence policy, the role of NATO, and what power is the EU expected to share in this regard?

By spring 2025, the new European Commission under Ursula von der Leyen had developed a wide-ranging strategy. Presented in March, the ReArm Europe Plan (later renamed Readiness 2030) proposes to leverage over €800 billion in defence spending through national fiscal flexibility, a new €150 billion loan instrument (SAFE) for joint procurement, potential redirection of cohesion funds, mobilisation of private capital and increased support from the European Investment Bank. The proposal is based on Article 122 of the Treaty on European Union, which allows unanimity to be dispensed with. The Commission did not present an impact assessment and justified the choice of such an exceptional legal basis on the grounds of an emergency situation allowing temporary measures. This decision has been criticised because it seems to have been dictated more by political reasons (e.g. avoiding unanimity in decision-making) than by objective ones. Critics argue that the Commission has

⁷ Besch, S., & Westgaard, K. (2024). Europe's Conscription Challenge: Lessons From Nordic and Baltic States.

⁸ Miró, J. (2023). Responding to the global disorder: the EU's quest for open strategic autonomy. *Global Society*, *37*(3), 315-335.

not only disregarded the inter-institutional agreement on the use of Article 122, but has also set a dangerous precedent. The European Parliament, by a unanimous vote of its Legal Affairs Committee on 23 April 2025, objected to the use of Article 122 on the grounds that it violated its constitutional prerogatives.

While concerns remain about democratic oversight, the fragmentation of the defence market and economic sustainability, many observers welcomed the ambition of the plan and the EU's growing role in defence. Others have drawn attention to the fact that the plan ultimately paves the way for national rearmament at a time when aggressive nationalist parties are proving able to influence government decisions, if not win electoral majorities. Alternative ideas, such as the creation of a new Rearmament Bank or a Defence, Security and Resilience Bank, have been proposed. At the same time, a number of high-level meetings took place in European capitals on the need to support and assist Ukraine's defence, given the growing reluctance of the US ally to provide military aid to Kyiv and the souring of EU-US relations due to mounting tensions over trade tariffs and protectionism. Ukraine's security has increasingly been portrayed as an integral part of European security, with a strong support to Kyiv being provided by the UK, France and Germany. In the European context, France has proposed sharing its national nuclear capacity under a European deterrence umbrella, and Germany has announced massive public investment to revive its defence industry. At NATO-level, all EU countries with the exception of Spain agreed on spending up to 5% of GDP on Defence during the meeting held in The Hague, in the Netherlands, on the 24-25 of July 2025.

Several questions lie at the heart of an EU-wide security policy, and the current debate is far from providing answers. Indeed, the recent security debate has highlighted the pressure for European 'rearmament', but it has also revealed different attitudes and priorities among individual member states, NATO and the United States. What threats should rearmament address, and how? How is rearmament supposed to increase security? These questions become even more pressing when one considers what the EU and its allies and partners envisage a peaceful order. Military strategies, the power to kill and the ways in which force and violence are used are inextricably linked to broader aspirations for the future of the international system.

An overview of defence priorities in Europe

In the complex changes underway in the defence domain, a few major trends and policy decisions can be identified, shaping the context of European security.

The rise in military expenditures of EU Member States. The growth in military spending and arms purchases is now a well-established trend. According to recent SIPRI data, global military spending in 2024 was \$2.718 trillion, more than Italy's GDP. In Europe (including Russia), it increased by 17%, reaching \$693 billion. (SIPRI, 2025). Also according to SIPRI data, military spending in Central and Western Europe rose by 14%, reaching \$472 billion in 2024, an increase of 59% compared to the decade 2015-2024. Germany ranks first, reaching \$88.5 billion in spending in 2024, equal to 1.9% of GDP, an increase of 28% compared to 2023. France's military spending reached \$64.7 billion, equal to 2.1% of GDP, while Italy's budget grew by 1.4%, reaching \$38 billion. In 2024, the year Sweden formally joined NATO, the Scandinavian country's military spending increased by 34%, reaching \$12 billion and 2%

⁹ An example is the new book by French Defence Minister Sébastien Lecornu "Vers la guerre? La France face au réarmement du monde", Plon, 2024.

of GDP. Its military spending more than doubled in the decade 2015-2024 (+113%). Looking at Eastern Europe, Poland's figures stand out. Polish military spending increased by 31% in 2024, reaching \$38 billion, or 4.2% of GDP. With a war being fought along its borders, Poland has forged strong military ties with the United States, redrawing the balance of power within the EU and vis-à-vis Washington. In addition, some EU countries are moving towards the return of military conscription, with the aim of increasing the number of soldiers that can be mobilized in the event of conflict. The end of the Cold War had led to a significant reduction in the number of troops in Europe and the adoption of the professional army model. Current measures suggest a drastic change of pace, with the search for larger military forces in Europe as well.

The rise of EU military programmes. Section 2 of this Report will document in detail the rise of EU military programmes. Since 2017, the European Commission has used Article 173 of the Treaty on the Functioning of the European Union on industrial competitiveness and cooperation, in order to intervene in defence-related areas, overcoming the limits imposed by EU Treaties. The European Commission has supported military research and development programmes, defence technologies and industrial projects with the goal of strengthening EU arms producers and – in some cases – providing an alternative to non-EU-made military equipment.

We will see that the new weapon systems being developed for EU arsenals mainly include drones, space systems, missiles launchers, anti-missiles systems, and hypersonic weapons. They have major implications for conventional war-fighting strategies, but also for the nuclear balance.

The question of nuclear weapons. In Europe there is very little discussion on the nuclear weapons of the US, France and Britain present on the continent, on their role in European military strategies and the overall effect on security. The dominant approach is that of keeping NATO "a nuclear alliance" thanks to both the UK and France's nuclear capabilities and nuclear sharing agreements with non-nuclear European countries (Belgium, Germany, Italy, the Netherlands, and, outside the EU, Turkey). A related effect on procurement strategies is that of pushing EU countries to purchase US F-35A and F-35B aircrafts. The former is certified for the transportation of US nuclear weapons (B-61 series bombs).

In recent years, the returning arms race has also seen greater investment in the nuclear domain. The US has expanded the production and deployment of nuclear weapons; in particular, the US and Germany agreed in 2024 to the deployment of medium range missiles – including SM 6, Dark Eagle, Tomahawk – in Germany, with a dangerous escalation of attack capabilities in the core of Europe.

The arms control regime has been severely weakened by such initiatives of the US and Europe, and by the parallel actions by Russia, including its nuclear sharing agreement with Belarus. In 2023, Russia withdrew its ratification of the Comprehensive Test Ban Treaty (CTBT) and suspended its participation in the most important arms control agreement in force, the 2010 New START, meant to cap the number of warheads deployed by the US and Russia. Negotiations for the New START renewal, due by 2026, were already stalling, given the unwillingness of both parties to engage in productive talks. This, together with the withdrawal from the Intermediate-Range Nuclear Forces Treaty by the Trump administration in 2018, signals the worsening state of the diplomatic relationship between the US and Russia, which implies a lack of sustained positive interactions and mutually agreed codes of conduct.

The crumbling of the global deterrence and arms control architectures should raise the question of what a European rearmament means. What are the strategic scenarios – in both

the nuclear and conventional domains – for the new weapons systems the EU is developing? How is the logic of deterrence evolving? Since the Ukraine war, the baseline of EU actions in the defence area suggests a strategy of deterring Russia from threatening the EU by increasing European defence capabilities. But the lack of a clearly defined security vision, and the steps taken by Europe in technologies and weapon systems that may lead to new arms races, both conventional and nuclear, show how dangerous EU actions could be. Europe, in fact, may have joined the race toward annihilation.

2. The policies, programmes and expenditures of the EU for defence

The European Defence Agency

For many years, the main actor in the defence area at EU level has been the European Defence Agency (EDA), established in 2004 to support Member States and the Council in the area of defence capabilities, procurement and coordination. The EDA's board is composed by the defence ministers of Member States and a representative of the European Commission. It is led by the EU High Representative for Foreign Affairs and Security Policy, and the European Commission's Vice President (HR/VP)¹⁰. The EDA is still in charge of three initiatives used to steer the general EU defence strategy in general (see Table 1):

- the Capability Development Plan (CDP)
- the Coordinated Annual Review on Defence (CARD)
- the Permanent Structured Cooperation (PESCO).

Table 1: The initiatives of the European Defence Agency

COMMON PRIORITY
SETTING

DEFENCE REVIEW & OPPORTUNITIES FOR COOPERATION

CARD
Capability Development Plan
) Identifies ELicapability and training overlapment priorities
) Output-driven orientation

CARD
Capability information
) Capability information
) Capability plantfalls
) Lessons learned
) National Plant is Programmens
) Identifies cooperation in Europe
) Identifies Cooperation opportunities

CARD
Coordinated Annual Review on Defence
on planning, parametrial plant is Programmens
) Common planning, parametrial requirements, coordinated use of capabilities, collaborative approach to capability development and RBIT priorities
) Assesses state of defence cooperation in Europe
) Identifies cooperation in Europe
) Identifies cooperation opportunities

NATIO
COCAR projects

PEDF
European Defence Fund
Research Agentas
(IOSRA)

POSTITUTE To implementation of groces in capability operational domains

COCAR projects

PEDF
European Defence Fund
Research and Capability windows
) Continuite to strengtherming the competitiveness and innovative competitiveness and innovative opportunity of prototypes and capability on insuring supporting investigation of options expension insuring supporting investigation of options equipment and technology.

Source: European Defence Agency factsheet (2019), Ensuring coherence among EU defence tools, p.3

The Capability Development Plan (CDP) identifies the defence capability priorities on which Member States need to focus. It has been produced by the European Defence Agency since 2008. CARD has been produced by the EDA since 2018. Every two years, it provides an overview of the military capabilities of the 27 Member States, of ongoing acquisition, research, and development activities, and an estimation of the European industrial base. The last CARD was published in 2022¹¹.

PESCO¹² was established by a decision of the European Council in 2017 to provide a legal framework to plan and manage joint projects for the development of military capabilities and improve the operational readiness of forces. It sets legally binding commitments for Member States on defence investments by 2025, such as the increase to 20% of the share of the

¹⁰ https://eda.europa.eu/

¹¹ https://eda.europa.eu/docs/default-source/eda-publications/2022-card-report.pdf

¹² https://www.pesco.europa.eu/

defence budget dedicated to investment, and for research and technology (R&T). Within the PESCO framework, Member States jointly acquired certain assets and created consortia of industries to develop and produce them. One of the twenty commitments of PESCO is to start projects that help overcome the shortcomings identified in the framework of the Capability Development Plan (CDP) and the Coordinated Annual Review on Defence (CARD). As explicitly mentioned in the Protocol establishing PESCO, the programme is Member Statescentered.

Both CDP and CARD have a very low impact on the military planning of Member States as they have no budget. In 2022, only 18% of all investments in defence at the EU level were conducted in cooperation¹³. It is difficult to evaluate the results of PESCO's projects. Although the commitments are binding, the deadlines were not respected and some projects were closed due to a lack of results¹⁴. Furthermore, PESCO does not have its own budget, and the projects identified under its framework are developed using funds managed by the Commission or with Member States' funds. Theoretically, the CDP should have worked as a basis for setting common priorities, and the CARD as a starting point for identifying opportunities for cooperation, with PESCO as a linear step for planning and implementing joint projects.

The programmes of the EU Commission

The EU Commission has developed initiatives on defence based on a different perspective. Their approach is not from a security and military domain, because of the legal and political constraints imposed by the Treaties of the Union, but from a research and industrial policy rationale.

In 2016, the EU Commission entered the field of defence-related initiatives with the 'EU Global Strategy'¹⁵ and a set of programmes focusing on research, technology and industrial development launched in the framework of 'industrial competitiveness and cooperation' under Article 173 of the Treaty on the Functioning of the European Union.

This initiative was prepared by the work of the 'Group of Personalities on Defence Research' (GoP), a group established in 2015 by the EC. Of the 16 GoP members, six represented arms companies, namely Airbus, BAE Systems, Indra, Leonardo, MBDA, and Saab, two represented arms research institutes, Fraunhofer and TNO, and one represented the arms industry lobby organisation, the AeroSpace and Defence Industries Association of Europe (ASD). In February 2016, the GoP published a report that persuaded both the Commission and the Parliament to increase R&D funds in the military sector, to the benefit of the major EU arms industries which obtain EU funds (Report of the Group of Personalities on the preparatory action for CSDP-related research, 2016).

Since 2017, the EC has been able to launch several programmes focusing on the EU military industrial base, funded by the EU budget. In doing so, it has inserted itself into an area that was outside of its power and has moved the focus on defence from the field of intergovernmental cooperation and initiatives (led by the European Defence Agency) to one of programmes funded by the EU and directed to major military industries. The programmes are

¹³ EU Defence Review Calls for Greater European Cooperation to Match Defence Spending Increases, EDA 2022

¹⁴ Barigazzi, J., EU military projects face delays, leaked document shows, Politico.eu, July 21, 2021 https://www.politico.eu/article/leaked-document-shows-delays-in-eu-military-pact/

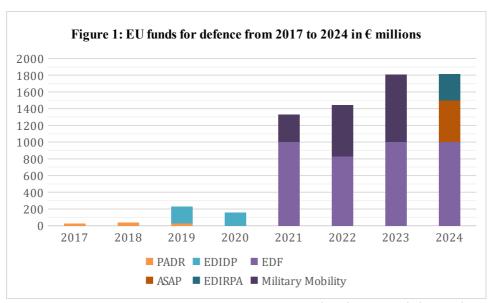
¹⁵ A Global Strategy for the European Union's Foreign and Security Policy, EEAS, December 15, 2019 https://www.eeas.europa.eu/eeas/global-strategy-european-unions-foreign-and-security-policy_en

usually based on public calls for projects presented by EU firms. The six programmes that have been developed by the EU Commission include:

- Preparatory Action on Defence Research (PADR)
- European Defence Industrial Development Programme (EDIDP)
- European Defence Fund (EFD)
- Military Mobility (MM)
- European Defence Industry Reinforcement Through Common Procurement Act (EDIRPA)
- Act in Support of Ammunition Production (ASAP).

Such programmes have been funded by the Multiannual Financial Frameworks 2014-2020 and 2021-2027 of the EU for a total amount of €6.836 billion, with the following allocations from 2017 to 2024:

- €25 million in 2017 from PADR
- €40 million in 2018 from PADR
- €225 million in 2019 between PADR and EDIPD
- €158.3 million in 2020 from EDIPD
- €1000 million in 2021 from the first EDF call and €327 million from MM
- €832 million in 2022 from EDF and €612 million from MM
- €1000 million in 2023 from EDF and €807 million from MM
- €1000 million in 2024 from EDF
- €310 million in 2024/2025 from EDIRPA
- €500 million in 2024/2025 from ASAP.



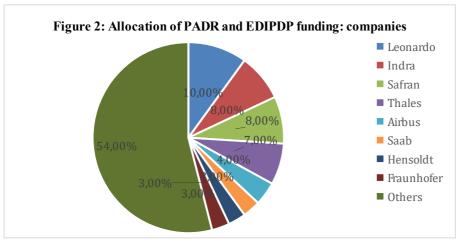
Source: PADR, EDIDP, EDF, ASAP, EDIRPA and Military Mobility webpages *Data for 2024 includes ASAP and EDIRPA funds allocated in 2024 for a two-years period 2024-2025

The first measure taken by the Commission was the establishment of two EU-funded pilot programmes between 2017 and 2019, the Preparatory Action on Defence Research (PADR) and the European Defence Industrial Development Programme (EDIDP). Both were meant to

finance defence research and development, boost innovation, put EU-made products on the market, and provide an alternative to non-EU-made products. PADR allocated €90 million between 2017-18 to fund research projects and technologies¹⁶, while EDIPD had an allocation of €500 million for 2019-2020 to fund the joint development of defence products and technologies¹⁷.

The Commission delegated the management and implementation of the PADR to the European Defence Agency (EDA), while calls for EDIDP were determined by the European Commission in the annual working programmes, which set priorities for military cooperation and capability development.

The $\[mathcal{\in}576.5$ million allocated for PADR and EDIDP went to 428 companies, research institutes, and public institutions. The Italian company Leonardo received the largest volume of PADR and EDIDP funding, with more than $\[mathcal{\in}23\]$ million. It was followed by the Spanish company Indra ($\[mathcal{\in}22.78m$), the two French companies Safran and Thales ($\[mathcal{\in}22.33m$) and $\[mathcal{\in}8.76m$ respectively), and the Swedish Saab ($\[mathcal{\in}8.16m$). Out of 62 projects, 42 were coordinated by companies from France, Italy, Spain and Sweden. France alone receives 26.4% of the funding allocated $\[mathcal{18}$.

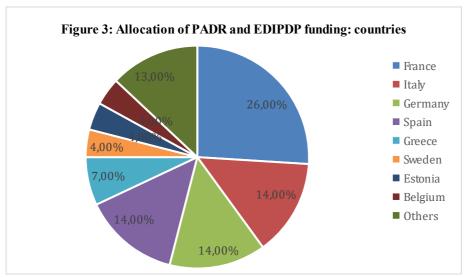


Source: ENAAT&TNI (2022), Fanning the flames, p.25

¹⁶ See the official page https://defence-industry-space.ec.europa.eu/eu-defence-industry/preparatory-action-defence-research-padr_en

¹⁷ See the official page https://defence-industry-space.ec.europa.eu/eu-defence-industry/european-defence-industrial-development-programme-edidp_en

¹⁸ Transnational Institute, *Fanning the Flames*, 17 March 2022 https://www.tni.org/en/publication/fanning-the-flames



Source: ENAAT&TNI (2022), Fanning the flames, p.25

PADR and EDIDP have been used by the Commission to start expanding its role in defence industrial policies and the largest arms companies in the EU have benefited from both funds. Both programmes were also preparatory for the launch in 2021 of the European Defence Fund, now at its fourth call for projects. In order to finance this new fund, the 2021–2027 Multiannual Financial Framework¹9 included for the first time a heading (Heading 5) dedicated to Security and Defence, which accounts for 1.2% of the overall budget. In particular, the Defence programmes cover 65% of the amount dedicated to this heading, with €7.3 billion euros going to the EDF. This was later raised to €8 billion, about €1 billion per year between 2021 and 2027. Collaborative defence research was funded with €2.7 billion, while €5.3 billion was allocated for collaborative capability development projects for 2021-2027.

Table 2: Structure of the EU MFF budget, Heading 5 for Security and defence for 2021-2027 (€ million)

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¹⁹ European Commission, 2021-2027 Long-term EU budget & NextGenerationEU, 2021 https://commission.europa.eu/strategy-and-policy/eu-budget/long-term-eu-budget/2021-2027 en



Source: BRIEFING 2021-2027 MFF, p. 2 (published in 2021)

The European Defence Fund co-finances Member States' defence capability development costs (one-third of its budget) and provides funding for cooperative defence research initiatives at all levels of research and development (two-thirds). The EDF covers the research costs, while development-related activities are co-financed with the Member States at a rate of 20 to 80% of the investment required. Projects connected to PESCO have 10% more funding, but there is no obligation to present R&D projects related to it²⁰.

The EDF is implemented directly by the Commission, which is also responsible for appointing independent experts who analyse the projects submitted and select the awards. Experts should be representatives of the Commission's power and a guarantee of competence for Member States. However, the selection process lacks transparency and the EU Ombudsman has repeatedly questioned the independence of the experts from governments and military firms, and the overall procedure for their selection²¹.

Another issue is related to the selection of the projects: this is done internally, and the assessments made by the experts are not public. The power rests in the hands of the Commission, while Member States are only allowed to designate their representatives to the EDF Programme Committee, together with personnel from the EDA and the European External Action Service (EEAS). These representatives assist the Commission in the annual work programmes, but are excluded from the evaluation and selection processes.

The first annual work programme of the European Defence Fund in 2021 had €1,200 million for 60 projects²²; the second in 2022 €832 million for 41 projects²³; €1,100 million in 2023

²⁰ See official page https://defence-industry-space.ec.europa.eu/eu-defence-industry/european-defence-fund-edf-official-webpage-european-commission_en

²¹ Pugnet, A. EU Ombudsman launches inquiry into Commission's defence fund selection process, Euractiv.eu, November 15, 2023 https://www.euractiv.com/section/defence-and-security/news/eu-ombudsman-launches-inquiry-into-commissions-defence-fund-selection-process/

²² European Defence Fund 2021 Calls for Proposals - Results

https://defence-industry-space.ec.europa.eu/funding-and-grants/calls-proposals/european-defence-fund-2021-calls-proposals-results_en

²³ Result of the EDF 2022 Calls for Proposals https://defence-industry-space.ec.europa.eu/funding-and-grants/calls-proposals/result-edf-2022-calls-proposals_en#individual-project-factsheets-by-category

for 54 collaborative projects; €1,100 million in 2024, including €225 million to support innovation and defence start-ups through dedicated measures under the EU Defence Innovation Scheme (EUDIS) launched the same year. EUDIS is aimed at European entrepreneurs, start-ups and SMEs interested in the defence sector and in transferring civilian technologies to military applications. It also focuses on 'disruptive technologies', a category that received strong interest in the first call but has since seen a decrease in the number of projects being awarded funds.

One of the aims of the European Defence Fund was to encourage the participation of small firms in the EU-funded calls, but in 2021 only 18% of total funding went to SMEs; in 2022 it was 20% and 18% again in 2023. The Foundation pour la Recherche Stratégique (FRS) has analysed the distribution of money between large firms and SMEs in 2021 and 2022: €1,141 million went to the former, and €340 million to the latter. As already proved for PADR and EDIDP, the large majority of the funds goes to the largest companies.

Table 3. European Defence Fund expenditures by type of organisation Period: 2021-2022, € millions

Recipients	Total
Large firms	1141.45
SMEs	340.87

Source: Masson, H. (2024) European Defence Fund Beneficiary Profile After Two Calls for Proposals 2021-2022, Fondation pour la Recherche Stratégique, p.28

In 2021 and 2022, the top ten recipients were all based in France, Italy, Spain, Sweden, and Germany (see Table 4). The same companies are included in the list of the top 100 world military firms in 2021-2022, published by the Stockholm International Peace Research Institute (SIPRI, 2023)²⁴.

This concentration of funds in the largest military firms is also typical of PADR and EDIDP projects, as highlighted in the study commissioned by the EU Parliament Subcommittee on Security and Defence (SEDE). This stated that the very short deadlines of the calls for projects make it difficult for new entrants to the defence market to participate in consortia, so the funding goes to established companies that already dominate the market, and which have spent years lobbying for more EU funds in the defence sector.

Table 4: The Top 25 military firms receiving European Defence Fund projects

Collaborative Research and Development Projects,

Period: 2022 and 2021, € millions

Companies	European funding € millions	Number of participations	
Thales	125	80	9
Leonardo	125	49	2

²⁴ SIPRI (2023), The SIPRI Top 100 arms-producing and military services companies in the world

Airbus	97	36	6
Indra	63	32	3
Saab	58	20	1
Diehl	47	9	0
Rheinmetall	36	23	1
Navantia	33	8	2
Sener Aerospacial	31	8	1
Hensoldt	30	21	0
John Cockerill	30	6	0
Naval Group	29	15	1
Safran	27	18	1
Kongsberg	26	14	1
OHB System	23	10	1
Fincantieri	18	6	0
Baltic Workboats [Sme]	18	1	1
Dassault Aviation	17	2	1
Nammo Raufoss	16	2	0
Patria	16	5	1
KNDS	16	6	1
MBDA	16	16	2
GMV	16	13	1
Elt Group	15	14	0
Isd Integrated System	15	9	0
Development [Sme]	13	J	U

Source: Masson, H. (2024) European Defence Fund Beneficiary Profile After Two Calls for Proposals 2021-2022, Fondation pour la Recherche Stratégique, p.29

The future weapons of the EU

The main aim of the European Defence Fund is to expand the research, technological and production capabilities of European firms in advanced military systems, including the so-called 'disruptive technologies'.

EDF projects address pressing needs of the military, but also look at the future, exploring novel weapon systems and military technologies. Between 2021 and 2023, €904 million went to research projects and €2,125 million went to development activities.

The most relevant projects already funded include:

- the European Corvettes (€154 million)
- a study for a hypersonic weapon defence (€80 million)
- a European space-based missile early warning system (€90 million)
- the next generation of armoured vehicles, (€25 million)
- the creation of intelligent and increasingly accurate weapons (€30 million)
- R&D for four potential solutions for navigating drones in "non-permissive" environments (€20 million)
- a new ground drone equipped with "lethal functions" (€50 million)

- MARTE project, for the next-generation tank (€20 million)
- Europe's first laser weapon (€25 million)
- a prototype for a missile launcher (€4 million)
- an artificial intelligence agent for cyber aggression (€26 million)
- a new missile system with a range of 150 kilometres (€27 million)
- a military cargo ship (€40 million)
- new offensive technologies equipped with underwater drones (€44 million).

Looking more closely, in Table 5, at all the projects funded from 2021 to 2023, the largest funds have gone to naval programmes (€502 million), including the development of a European Patrol Corvette. Space, air combat and ground combat follow in terms of the total funding provided.

Some of the EDF-funded projects are linked to PESCO. These include:

- the European Medium Altitude Long Endurance Remotely Piloted Aircraft Systems (MALE RPAS, also known as Eurodrone), adopted by PESCO in 2018 with the involvement of France, Germany, Italy, the Czech Republic, and Spain. It received €100 million under the EDIDP with €100 million from the 2024 EDF call also being reserved for the same project
- the European Patrol Corvette (EPC), launched by PESCO in 2019 to design and develop the prototype for a new class of corvettes, and involving France, Greece, Italy, Romania, and Spain. It had €60 million in backing from the 2021 EDF call, with €154.5 million reserved to continue developing the project
- the Timely Warning and Interception with Space-based TheatER surveillance (TWISTER), launched in 2019 by France, Germany, Italy, the Netherlands, and Spain. This received an initial €7.5 million through EDF in 2021 and an additional €90 million in 2023.

Table 5: The European Defence Fund calls, by project domain

Period: 2021-2024, € millions

Call Category	Total funding € millions	No. of projects
Naval	547	10
Space	330	8
Air Combat	401	8
Ground Combat	398	12
Information Superiority	114	12
Air and Missile Defence	257	4
Open SME Calls	259	63
Digital Transformation	176	15
Cyber	197	10

Sensors	180	8
Disruptive Technologies	190	26
Energy And Environment	167	6
Force Protection and Mobility	154	6
Materials and Components	145	8
Medical Response and Cbrn	145	9
Simulation And Training	54	3
National Focal Point	1	1

Source: Masson, H. (2024) European Defence Fund Beneficiary Profile After Two Calls for Proposals 2021-2022, Fondation pour la Recherche Stratégique, p.29; European Commission (2024d) Results of the EDF 2023 Calls for Proposal; EU Commission (2025) Results of the EDF 2024 Calls for Proposals.

By late 2024, none of these projects has reached its final stage. On April 2025, result of the 2024 call for proposals have been published²⁵. Listed projects include:

- a concept study on advanced air-to-air missiles (€35 million)
- intelligent weaponry for more precise ammunitions and missiles (€30 million)
- secured and adaptive underwater communications (€24 million)
- a 5G network for defence communication (€25 million)
- a medium altitude long endurance RPAS (€100 million)
- the next generation rotorcraft (€100 million).

In summary, the main trends in EU and national programmes for the development of radically new weapon systems include R&D and production of drones, space systems, missile launchers, anti-missiles systems, and hypersonic weapons. All have relevant implications for military strategies and for the risk of conventional and nuclear arms races.

Drones had already been used in the wars in Libya, Syria, and Nagorno-Karabakh, but have played a key role in the Russian-Ukrainian conflict. With little consideration for ethical concerns, research on drone technologies aims to make warfare both cheaper and deadlier. Even though drones alone may not be decisive in a major war, they are altering the nature of modern warfare, sparking the development of countermeasures, mainly within the electromagnetic domain.

Space systems are crucial for the functioning of nuclear arsenals; satellites play a crucial role in early warning systems, detecting and tracking enemy's ballistic missiles, and supporting numerous command and control functions. Disrupting or "blinding" these satellites could paralyse a country's nuclear assets and destabilise the already fragile balance of nuclear deterrence.

Hypersonic glide vehicles (HGV) are another rapidly developing technology – funded by EU programmes – that might affect strategic stability among nuclear powers. HGVs are nuclear-capable delivery systems launched from a rocket into a suborbital trajectory before reentering the atmosphere and gliding for long distances while being able to manoeuvre

²⁵ EDF Work Programme 2024 https://defence-industry-space.ec.europa.eu/edf-work-programme-2024 en

erratically at hypersonic speeds; this not only makes their interception extremely complex for ground-based systems, but might also delay their tracking, thus critically compressing the time for decision-making on the defence side. Traditional deterrence thinking maintains that, in times of crisis, these capabilities might push two nuclear actors to "strike first", either to annihilate the other's deterrence capability with HGVs or to prevent the more advanced party from using allegedly super-effective hypersonic assets. Research and development of such weapons systems is a dangerous sign of worsening international relations.

The contrasts between EU and national programmes in major new weapon systems

What is the relationship between this range of EU initiatives in the military field and major national procurement programmes for new weapon systems?

In the major EU countries, the most important acquisition processes concern the next-generation fighter aircraft and the European Sky Shield Initiative (ESSI). They originate from national initiatives and collaboration agreements and are not funded by European programmes.

For the next-generation fighter jet, two different projects are being developed in Europe. On the one hand, France, Germany, and Spain are working on the Future Air Combat System (FCAS), with a total R&D budget that may reach €40 billion euros, according to media sources²⁶. At the same time, the UK, Italy, and Japan are developing the GCAP 'Tempest'. Italy planned an initial expenditure of €6 billion for the evaluation, analysis, preliminary design and development phases; the UK has allocated 2 billion pounds, while Japan has not yet disclosed its funding plans²⁷.

The case of the new fighter aircraft highlights the weakness and the contradictions of EU policies. This is a major, ongoing failure of the efforts at greater joint military procurement in Europe, showing how strong is the resistance of Member States to EU calls to coordinate and integrate their arms programmes. With two parallel aircraft being developed in Europe, and with the continuing pressure to acquire US-made aircraft, the costs of the new programmes are likely to exceed expected revenues. If both jets are developed to the production stage, the European Commission will be at pains to encourage member countries to purchase them. The likely outcome will be the introduction of both aircraft and a new pressure by producers to export them, as the only way in which investment costs could be recovered.

In the area of air and missile defence, the ESSI project was initiated by Germany in 2022 with the involvement of over 15 European governments. The aim is to build an integrated air and missile defence system based on three levels: high altitude and long-range (with the US Patriot system), medium altitude and range (with the German IRIS-T system), and short-range (with the Israeli Arrow 3 system). The total cost of the project is unknown; estimates could be based on the cost of similar systems: the US Patriot system costs \$1.1 billion and each guided missile costs between \$3 and 6 million; the German IRIS-T SLM system has a cost of \in 140 million, with \in 0.4 million for a single guided missile; the Israeli Arrow 3 system costs \in 3 billion²⁸.

²⁶ Wolf Fabrice, FCAS program: European cooperation will cost France very, very dearly, meta-defense.fr, August 5 2024, https://meta-defense.fr/en/2024/08/05/scaf-program-cost-cooperation-europe/

²⁷ Alioti, G. et al., "La lotta al Global Combat Air Programme (GCAP) va lanciata adesso prima che sia troppo tardi", Open letter to *Il Manifesto.it*, May 31, 2024 https://ilmanifesto.it/lettere/no-al-gcap-si-alla-transizione-ecologica

²⁸ Anna Desmarais, How Sky Shield, Europe's proposed Iron Dome, would work and why it's becoming controversial, EuroNews, July 28 2024 https://www.euronews.com/next/2024/07/28/how-sky-shield-europes-proposed-iron-dome-would-work-and-why-its-becoming-controversial

With the ESSI initiative, Germany is attempting to address the lack of a common air and missile defence. However, it contradicts the EU goals of developing Europe's defence industrial base as the systems that would be part of ESSI are made almost entirely outside Europe; the project was launched despite the existence of the PESCO's project TWISTER in the same area, financed by the European Defence Fund.

Evaluating the European Defence Fund

In April 2023, the European Court of Audits (ECA) published an auditing report on the European Defence Fund, starting from the analysis of the PADR. The ECA argued that the EU lacks a longer-term strategy for the European Defence Fund, and that the Commission has not yet sufficiently addressed strategic issues on the intended impact of EDF projects. The Court noted a continuation of four PADR projects through projects selected in the EDF 2021 and 2022 calls and stressed that, because of the nature of research projects, not all will lead to results and a certain number of unsuccessful projects are expected.

Moreover, the ECA emphasised that defence research projects generally require a long-term perspective – up to 20 years or more for developing major capabilities. The EDF projects are financed under the current Multiannual Financial Framework 2021-2027, but it's not clear how their possible development and implementation could be funded after that date. Projects currently developed under the EDF are a long way from being used by the military.

Last but not least, the ECA pointed out that for the EDF to have its intended impact, the Commission should work together with the European Defence Agency, the European External Action Service and Member States. This contrasts with the growing role that the Commission alone is having in defence matters, sidelining the European Defence Agency.

The Ukraine war and the growing role of the European Commission

After the Russian invasion of Ukraine, EU Member States started sending weapons and ammunition to Kyiv, but they were soon faced with depleted ammunition and equipment stocks, with companies falling behind in the production of military materials.

In this context, the Commission saw an opportunity to expand its defence industrial policy. In its early response to the war, the EC focused on facilitating common procurement and refilling European stocks by launching the European Defence Industry Reinforcement Through Common Procurement Act (EDIRPA) and the Act in Support of Ammunition Production (ASAP). Both are based on Article 173(3) of the Treaty on the Functioning of the EU (TFEU) and are managed by the EC.

EDIRPA is implemented through the multiannual work programme 2024-2025 and has a budget of €310 million over two years (2024-2025). Adopted in July 2022 by the Commission and in November 2023 by the Council, it supports common procurement among Member States to facilitate the purchase of armaments. In this way, Member States can also continue to support Ukraine by avoiding increased shortages in national reserves in the short term, while consolidating joint procurement and strengthening the EU industrial base in the long term. The three areas of joint procurements are:

- ammunition
- air and missile defence
- platforms and replacement of systems.

The first call for proposals is still ongoing, as the submission deadline was set for 25 July 2024. The Commission services will evaluate the proposals.

In November 2024, an allocation of €300 million for five EDIRPA projects was announced. These include the 'Mistral' very short-range air defence system; the 'Joint Air Missile Defence Initiative in Europe (JAMIE) for the IRIS-T SLM medium-range air defence systems; the Common Armoured Vehicle System (CAVS); the 'CPoA 155mm' for acquiring 155mm artillery ammunition; the project 'HE 155mm' again for artillery ammunition. All projects are organised as consortia of a large number of Member States which are committed to developing and acquiring such weapon systems; the total expenditure for their procurement is expected to exceed €11 billion. ²⁹

ASAP has €500 million of EU funding over two years (2024-2025) to support Ukraine, rebuild national stocks, and increase ammunition production in Europe in the long run. ASAP will stimulate the production of ammunition in five different areas:

- Explosives, with a budget of approx. €124 million
- Powder, with an allocation of €248 million
- Shells, with a project portfolio budget of approx. €90 million
- Missiles, with a budget of €50 million
- Testing and reconditioning certification, with an allocation of €2 million.

The call for proposals was published in April 2024. Germany and France have the highest number of companies involved (5 and 4 respectively), with Germany's Rheinmetall and its European branches being the most frequently involved. In Italy and Spain, the companies awarded funding are Italy's Simmel and Baschieri&Pellagri, and the Spanish branch of Rheinmetall³⁰.

The programme will fund up to 35% of production capacities and up to 40% of the components and raw materials used in the production of ammunition or missiles. If small and medium enterprises (SMEs) benefit from the fund and participate in the production ramp-up, the funding available can increase by 10%.

ASAP's funding comes from two European funds: €260 million from the EDF and €240 million from EDIRPA. Three months after the launch of ASAP, the Internal Market Commissioner Thierry Breton said the European industry could produce 1.7 million rounds of ammunition annually at the end of 2024, thanks to this plan. However, according to an investigation of Radio Free Europe/Radio Liberty (RFE/RL), the current capacity is about one-third of this figure³¹.

The first aim of ASAP is to support Ukraine by giving its army the ammunition needed to face the Russian invasion, but helping Ukraine is not the only reason why this programme was established³². Due to ASAP, national industries can access EU funds to expand their

²⁹ https://defence-industry-space.ec.europa.eu/eu-boosts-defence-readiness-first-ever-financial-support-common-defence-procurement-2024-11-14_en

³⁰ ASAP results. Boosting ammunition production https://defence-industry-space.ec.europa.eu/document/download/b694b109-fa2c-493e-bf1e-87768ae6469e_en? filename=ASAP%20factsheet.pdf

³¹ Myroniuk Anna and Yehoshyna Valeria, EU Shell-Production Capacity, Supplies to Ukraine Fall Far Short of Promises, Radio Free Europe, July 08, 2024 https://www.rferl.org/a/ukraine-weapons-shells-european-union-eu-war-russia-investigation/33025300.html

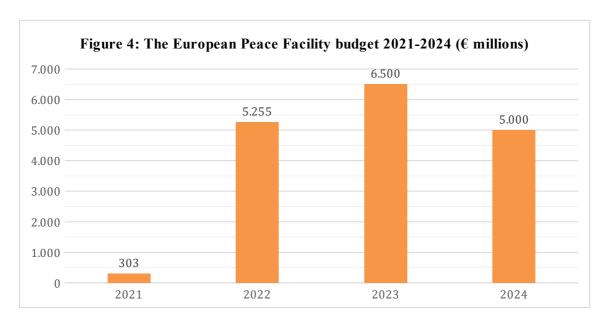
 $^{32 \}quad \text{Act in Support of Ammunition Production Factsheet https://defence-industry-space.ec.europa.eu/document/download/25e87515-4ef4-476d-9171-395f8bf6ec02_en?}$

production, but this means that once the war in Ukraine ends, European industries will need Member States – or governments outside the EU – to buy their products. The short-term pressure to expand output may be in contrast with the long-term capabilities in ammunition production that could be appropriate for the EU.

The European Peace Facility: a 'peace' fund for arms supply

The European Peace Facility (EPF) is the largest EU programme in the military field, as shown in Figure 4. The EPF was created in 2021 to replace Athena, a mechanism established by the Council of the European Union in 2004 to manage the funding of the common costs of EU operations having military or defence implications. EPF is an off-budget programme, financed by direct contributions from Member States based on their economic size, and is meant to finance EU actions that have military implications. The European Commission acts as and administrator through its Service for Foreign Policy Instruments and as an accounting officer and internal auditor for assistance measures through the Directorate-General for Budget and the Internal Audit Service respectively.

Since its creation, the European Peace Facility has provided military assistance and equipment to a variety of non-EU countries and was lately used to support Ukraine in its response to the Russian invasion (see Tables 6 and 7). When it was established, the financial ceiling of the EPF was €5.7 billion for the years 2021–2027; by the end of 2022, however, two-thirds of the budget was allocated to Ukraine, so the budget was increased to €8 billion in March 2023 and then to €12 billion in June 2023. In March 2024, €5 billion were added to assist Ukraine as the Council – at the invitation of the High Representative Josep Borrell – established the Ukraine Assistance Fund (UAF) within the European Peace Facility (EPF) for the years 2024-2027. The total allocated from 2021 to 2024 is €17 billion, part of which has already been spent to refund EU states.



Source: EPF website

Data for 2024 are incomplete

The EPF consists of two pillars: the operations pillar and the assistance measures pillar. The first of these funds the shared costs of military Common Security and Defence Policy (CSDP) missions and operations, and military-related aspects of Peace Support Operations. The second pillar offers the EU the possibility to bilaterally provide weapons, military training, equipment, and infrastructure in partner countries worldwide.

With the war in Ukraine, the EPF was used for the first time to supply lethal military equipment, as EU Member States sent large shipments of weapons to Ukraine, sometimes bilaterally and sometimes under the Council decision. Thanks to the UAF and EPF, Member States obtained a partial reimbursement (with a rate between 25% and 45%) from the EPF funds for their military deliveries to Ukraine. Before the establishment of the UAF, the EPF had already been used to allocate some €6.1 billion to military aid for Ukraine³³. Such large supplies have benefited military industries, as Member States have bought new military equipment for delivery to Ukraine, or for replenishing national stocks.

The EPF suffers from a lack of transparency³⁴. It is difficult to establish whether arms have been exported by individual Member States based on bilateral agreements or provided under the EPF. It is difficult to identify the quantity of weapons and military equipment provided to Ukraine. However, Member States are not obliged to supply items for the delivery of lethal force. According to Article 5 of the Council decision establishing the EPF, any Member State that has abstained from an assistance measure designed to deliver lethal force does not have to contribute to the costs of that assistance measure, but shall then contribute an additional amount to assistance measures that do not involve the supply of military equipment or lethal force.

Table 6: The European Peace Facility assistance measures by country that has implemented deliveries

Total amount of funds from July 2021 to April 2025, € millions Supplies to Ukraine since 2022 are not included

Country	No. of assistance measures	Total funds
		€ millions
France	23	176
Estonia	7	196
Portugal	1	85
Italy	3	73
Lithuania	4	33
Spain	1	21
Belgium	1	20
Slovenia	2	15

Source: European Peace Facility webpage

Table 7. The European Peace Facility measures for Ukraine

Period: February 2022 to July 2024, € millions

33 European Peace Facility https://www.consilium.europa.eu/en/policies/european-peace-facility/
34 Two years European Peace Facility, PAX, July 2023 https://paxforpeace.nl/wp-

content/uploads/sites/2/2023/07/PAX EPF-Paper-2023.pdf

No. of assistance measure	Total funds € millions
5	5,561

Source: European Peace Facility webpage

The plans for military mobility

A further EU programme is the Action Plan on Military Mobility. This was first adopted by the European Commission and the High Representative in 2018 to improve the mobility of troops and equipment within the EU. In February 2022, the EC and HR adopted a revised Action Plan 2.0³⁵ to extend support measures for Military Mobility, accelerate administrative processes for transporting war materials across borders, improve infrastructure – including bridges and tunnels – used to move armoured vehicles, and expand transport capacity such as rail cars.

The plan aims to upgrade connections between the Eastern territories of the EU – Estonia, Latvia, and Lithuania – as well as Moldova and Ukraine, and the wider European railway network. This will simplify and accelerate movements of troops and equipment to the Eastern flank of NATO. Poland, Germany, Slovakia, Latvia, Lithuania, Estonia, Belgium, and the Netherlands are the main recipients of the first three calls.

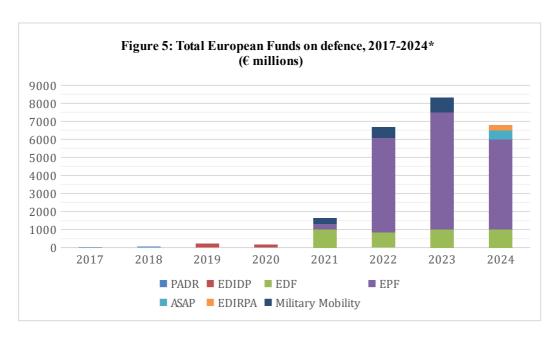
After a budget revision in January 2024, the Multiannual Financial Framework for the years 2021 to 2027 allocated a total of €1.74 billion for military mobility through the Connecting Europe Facility (CEF), with €327 million allocated for the 2021 call, €612 million in 2022, and €807 million in 2023. The EU financial contribution co-finances 50% of the total eligible costs of the project. The proposals are evaluated by the European Climate, Infrastructure and Environment Executive Agency (CINEA), an agency established in 2015 by the Commission.

The dramatic growth of Europe's military programmes

The ongoing transformation of Europe from a peace project to a military player is evident from the dramatic growth in EU expenditures on various aspects of its defence initiatives. Figure 5 shows that in 2019 the European Commission funded the PADR and EDIDP programmes with €200 million; from 2021, €1 billion has been provided annually for the European Defence Fund, in addition to the launch of the Action Plan on Military Mobility and, more importantly, of the European Peace Facility. In 2022 and 2023, funding for European military programmes increased by seven to eight times, reaching a total of €8.2 billion in 2023. Data for 2024 are incomplete, due to further allocations in the final months of the year, but as the new programmes ASAP – on munitions – and EDIRPA – on procurement – have been introduced; the total expenditure for 2024 will set new records in Europe's military initiatives.

³⁵ Joint Communication to the European Parliament and the Council. Action Plan on Military Mobility 2.0, European Commission, November 10 2022

https://defence-industry-space.ec.europa.eu/system/files/2022-11/Action%20plan%20on%20military%20mobility%202.0.pdf



*Data for 2024 includes ASAP and EDIRPA funds allocated in 2024 for a two-years period 2024-2025; data for 2024 are incomplete

The European Commission is the main player in Europe's rearmament; it funds some programmes out of its budget and manages the funds provided by Member States for the European Peace Facility. Considering all the defence-related funds allocated between 2017 and 2025 from the EU budget, the Commission has spent €6.83 billion; if we also include the European Peace Facility, the total EU funding for defence-related projects reaches €23.83 billion. Most of these funds go to the major military firms in Europe in the forms of financing research and technology projects, developing new weapon systems, procurement of arms and ammunition, acquisition of military materials and infrastructures.

The European Defence Industrial Strategy and the new EU Defence Commissioner

During 2024, with the elections for the European Parliament and the appointment of the new European Commission, again led by Ursula von der Leyen, additional military initiatives were launched.

In March 2024, Ursula von der Leyen unveiled³⁶ the EU's first-ever European Defence Industrial Strategy (EDIS)³⁷, aiming to strengthen military industries, their production readiness and their long-term capabilities. This amounts to a defence industrial policy consolidating Europe's 'military-industrial complex'. The Strategy includes the establishment of an Advisory board composed of Member States, the High Representative, and the Commission, but it is the Commission that will manage EDIS and its funds.

Again, EDIS aims to increase European defence industrial readiness through collaborative EU-based investment, research, development, production, and procurement. The goal is to expand EU capabilities and to coordinate more effectively the €270 billion devoted to military expenditures in 2023 by Member States.

^{36 2023} State of the Union Address by President von der Leyen, September 12 2023 https://ec.europa.eu/commission/presscorner/detail/en/speech 23 4426

³⁷ See EDIS | Our common defence industrial strategy https://defence-industry-space.ec.europa.eu/eu-defence-industry/edis-our-common-defence-industrial-strategy en

A first step will be to persuade Member States to purchase weapons together and to buy them in Europe. Between 2021 and 2022, only 18% of the total equipment investment in Europe was collaborative. From the start of the Ukraine war to June 2023, EU Member States have bought more than three-quarters of their defence equipment from outside the EU, with the United States alone representing 63%. This is a trend the European Commission would like to change, but national interests have always been an obstacle in integrating defence procurement in Europe.

The European Commission now wants Member States to allocate at least 50% of their procurement budget to EU-based suppliers by 2030 and 60% by 2035; at least 40% of defence equipment should be procured through international collaborations within the EU. Such collaborative projects are expected to expand capabilities and the export of EU-made weapons. In this regard, the Commission has also proposed a new European military export mechanism, inspired by the U.S. foreign military sales model, where Washington signs contracts directly with foreign governments.

The Commission is also addressing the build-up of reserves of critical defence equipment and the creation of a centralised catalogue of EU-made weapons systems and materials in which industries can voluntarily participate. There are plans to map the key suppliers and supply chains of defence production in Europe, with the goal of creating a secure supply chain for arms production.

In preparation for future wars in Europe, EDIS even introduces the possibility of priority-rated orders, which would allow Member States and the European Commission to redirect production to prioritise military deliveries over civilian ones in times of crisis. The Commission also suggests investing in "ever-warm" factories (facilities that are kept running even while demand is low) in order to ensure that EU defence firms are always able to increase production capacity when needed, with the possibility of repurposing civilian production lines³⁸.

Such a strategy would mark a dramatic acceleration of the militarisation of Europe. It would also require very substantial funding. EDIS will initially be funded through the European Defence Industry Programme with a budget of €1.5 billion, reassigned from the European Defence Fund. But this will hardly be enough. One possibility that is envisaged is the use of joint EU debt to finance EU military programmes, on the model of Next Generation EU that raised €750 billion for the post-pandemic recovery. Several Member States are not willing to use common EU debt to finance defence programmes, while others question the increasing power of the European Commission on defence issues³⁹.

Such programmes for a military industrial Europe have been openly supported by Mario Draghi's report on EU competitiveness (*The future of European competitiveness*, 2024) published in October 2024. Recommendations of the Draghi Report include:

- the swift implementation of the European Defence Industrial Strategy
- greater integration of military procurement among groups of Member States
- the pursuit of further standardisation and harmonisation of defence equipment, in order to limit procurement outside the EU
- facilitations in access to finance for the European defence industry

³⁸ Besh Sophia, Understanding the EU's New Defense Industrial Strategy, Carnegie Endowment, March 8 2024 https://carnegieendowment.org/posts/2024/03/understanding-the-eus-new-defense-industrial-strategy?lang=en

³⁹ Schickler Jack, Eurobonds could finance EU air defence shield, leading think tank says, EuroNews, September 17 2024 https://www.euronews.com/my-europe/2024/09/17/eurobonds-could-finance-eu-air-defence-shield-leading-think-tank-says

• pressure for the consolidation of military firms into larger European industries with greater R&D and technological capabilities.

The Report also suggests a new institutional set-up that would give the newly established Defence Commissioner a coordination role in the field of defence industrial policy. In fact, developments in 2024 emphasise the role of the European Commission, with a close link with major EU arms industries, and with a limited role assigned to the national armed forces in defining defence procurement needs.

The political manifestation of such an expansion of Europe's military capabilities has been, in autumn 2024, the appointment for the first time of a Defence and Space Commissioner within the new European Commission as a way to legitimise and provide visibility to EU military policies. In autumn 2024, Ursula Von der Leyen nominated to the position Andrius Kubilius, former prime minister of Lithuania, a strong supporter of NATO and of major increases in EU military expenditures⁴⁰.

In November 2024, the publication of the report "Safer Together. Strengthening Europe's Civilian and Military Preparedness and Readiness" by former Finnish President Sauli Niinistö (Niinistö, 2024) – Special Adviser to the President of the European Commission – represented a problematic new step towards the militarisation of the European Union. The report expects the forthcoming "White Paper on the future of European Defence" to provide a long-term policy view for Europe and hopes for the full implementation of the European Defence Industrial Strategy (p. 25). The key argument of the report is that the EU should expand its "preparedness" to confront military threats with greater weapons development and acquisition, and with a comprehensive effort that should invest the whole economy and society:

"In line with the notion of mainstreaming preparedness, all relevant instruments across sectors should earmark a certain amount for preparedness action in their respective fields—so that, for example, at least 20% of the overall EU budget contributes to the EU's security and crisis preparedness (...). The EU and Member States should consider setting up two dedicated facilities: a Defending Europe Facility (DEF) and a Securing Europe Facility (SEF), combining relevant funding streams and avoiding fragmented, siloed instruments. The Defending Europe Facility should encompass relevant defence industrial and other defence-related or dual-use instruments. The Securing Europe Facility should combine all instruments and programmes linked to civil security (e.g. law enforcement and border management), civil protection, and other emergency response services, and related critical infrastructures" (p.29).

Out of the €1,200 billion of the 2021-2027 budget, the report proposes that €240 billion be allocated to the militarisation of the EU. Such a policy would radically change the nature of the European Union, pushing it on a trajectory of militarisation within its economy and society, with a dramatic expansion of military industry, arms procurement and social control. The resources for such a policy project would be taken away from the other economic, social and environmental priorities of the EU. The Europe of the Welfare State, of the Green Deal, of democratic values is incompatible with a militarisation project of this type.

The involvement of the European Investment Bank

In parallel, the European Investment Bank (EIB) has also been investing in the expansion of military activities. The EIB was originally prevented from investing in defence projects. Now the EIB aims to facilitate access to finance for European businesses and innovators with

⁴⁰ https://elpnariai.lt/en/a-kubilius-on-the-future-of-the-european-defence/.

defence related projects in the fields of reconnaissance and surveillance, spectrum protection and control, cybersecurity solutions, infrastructure, and military mobility.

The EIB invests in dual-use research and development projects through the Strategic European Security Initiative (SESI). Launched in 2022, this security and defence fund was expanded to €8 billion in June 2023.

In January 2024, the EIB launched the Defence Equity Facility (DEF). Under this scheme, the European Investment Fund and the EDF will invest €175 million into small companies and start-ups, taking up the financial risks of innovation. So far, the EIB has funded seven projects related to dual-use activities. Its recipients include⁴¹:

- the German drone start-up Quantum Systems
- the Italian Leonardo
- the French Nové
- the Irish investigative intelligence company Siren
- the Spanish start-up Skydweller
- SES from Luxembourg
- the Polish Bank Gospodarstwa Krajowego.

In May 2024, the EIB changed the rules underpinning its activities, abolishing the previous requirement that at least 50% of expected revenues from dual-use projects in the areas of security and defence must come from civilian applications. Under the last reform, projects and infrastructure used by the military or police that also serve civil needs will be eligible for EIB financing⁴². Before May 2024, the EIB had stricter rules on investment dedicated to the defence sector, but the pressure coming from industry, defence ministers of Member States and the Council has had an impact on the newly elected president Nadia Calviño.

In July 2024, the EIB took another step in its support for defence companies⁴³. The European Investment Fund (EIF) – part of the EIB Group and a provider of funds for Europe's micro, small and medium-sized enterprises – has signed a Memorandum of Understanding with the NATO Innovation Fund, the venture capital fund backed by 24 North Atlantic Treaty Organization nations that has a €1 billion budget. The NATO fund and EIF will cooperate in supporting the long-term growth of the defence and security industry across Europe⁴⁴.

White Paper for European Defence – Readiness 2030

On 19 March 2025, the Commission and the High Representative presented the White Paper for European Defence – Readiness 2030. The document helps shape the political guidelines⁴⁵ of President von der Leyen to strengthen the EU's defence industry by identifying investment needs and promoting smarter, joint spending to build EU defence capabilities. The Paper complements key reports, including the 'Niinistö Report' on strengthening EU's civil and military preparedness and readiness, the Draghi report.

⁴¹ European Investment Bank, Strengthening Europe's security and defence industry https://www.eib.org/en/projects/topics/innovation-digital-and-human-capital/sesi/index

⁴² Pugnet Aurelie, EU Investment Fund launches €175 million risk investment programmes in defence start-ups, SMEs, Euractiv.eu, January 12, 2024 https://www.euractiv.com/section/defence-and-security/news/embargo-9am-eu-investment-fund-launches-e175-risk-investment-programmes-in-defence-start-ups-smes/

⁴³ D'Elia C., EIB: Strategic Roadmap 2024-2027 approved, fasi.eu, June 24 2024 https://fasi.eu/en/articles/news/27248-eib-strategic-roadmap-2024-2027-approved.html

⁴⁴ Pugnet Aurelie, NATO's defence industrial pledge takes shape in yet another bid to boost output, Euractiv.eu, July 5, 2024 https://www.euractiv.com/section/defence-and-security/news/natos-defence-industrial-pledge-takes-shape-in-yet-another-bid-to-boost-output/

⁴⁵ Ursula von der Leyen, Europe's Choice Political Guidelines For The Next European Commission 2024–2029, 18 July 2024

In her political guidelines, von der Leyen stressed the will to spend more in Defence and to do so in a collaborative way. She also anticipated the build-up of the European Defence Fund, investing in high-end defence capabilities in critical areas such as naval, ground, air combat, space-based early warning and cyber, and the reinforcement of the European Defence Industry Programme to incentivise common procurement. The aim is to create a true Single Market for Defence products and services.

The White Paper envision the enhance of the EU's military capabilities by 2030 and outlines a series of measures aimed at increasing investment, strengthening the European defence industry, and reducing reliance on external allies, with the objective of achieving greater strategic autonomy in security and defence.

The main goals of the White Paper are closing the critical capability gaps; supporting the defence industry through increased joint procurement; deepening the EU defence market by simplifying existing regulations to facilitate collaboration between Member States and companies in the sector. The document also stresses the need to adopt disruptive innovations, such as artificial intelligence and quantum technology to enhance European military capabilities. Last but not least, the White Paper suggests optimising military mobility and strategic stockpiling, two issue already addressed by the Commission through the Military Mobility project and ASAP⁴⁶.

The ReArm Europe Plan

The same day, the Commission presented ReArm Europe, later relabelled Readiness 2030, a plan that foresees more than €800 billion in defence investment. The plan, however, doesn't introduce new defence support programs at EU-level, such as the EDF or EDIP. Decisions regarding funding for these programs will be made as part of the negotiations for the next Multiannual Financial Framework (2028–2034).

ReArm Europe focuses on facilitating national military budget increases while ensuring a degree of European coordination.

The Commission has proposed five key measures:

- Activating the Stability and Growth Pact's escape clause—which allows member states to exceed deficit and debt limits during crises. Countries could be allowed to increase their military budgets to up to 1.5% of GDP without this expenditure being counted in their national deficits. This measure could generate an estimated €650 billion over four years for defence spending.
- Raising €150 billion through EU-issued bonds, which would then be lent to member states at low-interest rates and with long repayment terms. This funding would support pan-European military projects, such as air defence systems, by pooling demand and enabling joint procurement.
- Facilitating the use of cohesion funds for defence investments.
- Creating a European savings and investment union to encourage private financial institutions to support the military industry—something they have been reluctant to do.
- Expanding the European Investment Bank's (EIB) role in defence financing, which also means to lift restrictions on military financing still applied to the Bank investments.

On the 27th of May, the Council has adopted the Security Action for Europe (SAFE)⁴⁷. The European Commission plans to raise up to €150 billion in capital markets, leveraging its

46 EU Commission, White Paper for European Defence – Readiness 2030, 19 March 2025, pp. 6-9

unified financing approach, to enable Member States to rapidly scale up their investments in defence capabilities. These funds would be distributed in the form of long-term loans with competitive and attractive conditions, to be repaid by beneficiary countries. The loans would be backed by the EU budget.

SAFE would allow Member States to immediately increase their defence investments through joint procurement from the European defence industry, prioritising strategic capabilities. This measure would help ensure interoperability, predictability, and cost reduction, thereby strengthening the European defence industrial base. Despite the European focus, Ukraine and countries in the European Free Trade Association (EFTA) and the European Economic Area (EEA) would be able to participate in joint procurement, with the possibility of purchasing from their industries. Countries in the EU accession process, candidate states, and EU security and defence partners would be able to join joint procurement initiatives and contribute to common demand. They would also have the option to negotiate specific, mutually beneficial agreements to facilitate the participation of their industries in these processes.

Alarm from the European Central Bank

In May, the European Central Bank published its "Financial and Stability Review" commenting on the effects of the plan Rearm Europe on EU economies.

The Bank stated that planned fiscal expansion could challenge the balance sheets of euro area countries. "Higher defence spending and an increase in the cost of servicing debt could further strain fiscal positions, especially in countries which have high short-term refinancing needs and are already burdened by large debt levels. That said, most of the more highly indebted countries have so far not pledged to greatly increase their defence spending. Moreover, risks to growth resulting from trade tensions and higher defence spending may limit the fiscal space needed to shelter the economy from future adverse shocks, as well as to address structural challenges associated with digitalisation, low productivity, population ageing (Special Feature C) and climate change".

Moreover, according to the ECB, debt-financed increases in defence spending and further rising interest expenditures may complicate the path towards fiscal consolidation in some countries under the new EU fiscal framework and could cause debt levels to start rising again. A combination of weaker growth, defence spending needs and other structural challenges could compound the already strained fiscal positions of some euro area sovereigns. The potential for these vulnerabilities to materialise simultaneously given common triggers, possibly amplifying each other further, increases the risk to financial stability.

The Defence Omnibus Package

On June 17th, the Commission published the Defence Omnibus⁴⁹. It incorporates feedback from public consultations with Member States, defence industrial players and SMEs across the EU, and from the Implementation Dialogue, chaired by Commissioner Kubilius on 19 May 2025, with several stakeholders from the EU's Defence Technological and Industrial Base

⁴⁷ EU Commission, Proposal for a Council Regulation establishing the Security Action for Europe (SAFE) through the reinforcement of European defence industry Instrument, 19 March 2025 48 European Central Bank, Financial Stability Review, May 2025, 13 May 2025

⁴⁹ European Commission, Communication From The Commission To The European Parliament And The Council - Defence Readiness Omnibus, 17 June 2025

It five pillars are the following:

- Fast-track permitting for defence-related authorisations with: single point of contact; priority status; presumption of permit-granting within 60 days. Clarification to Member States that derogations in environmental legislation include defence readiness to complement the new fast-track system.
- Allow Member States to authorize nationwide exemptions for chemical substances used in defence supply chains by broadening existing national exemptions for defence interests in REACH and other chemicals legislations.
- Offer legal certainty to investors, and provide clarification on prohibited weapons that are excluded from the Sustainable Finance Framework. Streamline InvestEU eligibility conditions for defence, while keeping the necessary safeguards. Make the EDF award and financing system more flexible and rapid.
- Simplification for small procurements by doubling the threshold for the application of the Defence Procurement Directive and, enabling faster and more efficient procedures.
- Increase the use of General Transfer Licences, simplify transfers by certified companies, and avoid delays in the implementation of EDF projects through dedicated licences.

On one hand, the With Paper, the ReArm Europe plan and the Defence Omnibus on defence further demonstrate the close relation between the EU Commission and the EU defence industry; on the other, it proves that the Commission's solely focus is on the militarization of the EU, without a proper debate on its own real security needs, or a further discussion on the strategic autonomy and the defence model that should be adopted.

3. The growth of military spending of EU Member States

EU military initiatives have rapidly expanded, but in absolute terms EU military programmes are limited when compared to national military budgets. Most military expenditure in Europe comes from national defence budgets. Member States are also essential for the functioning of EU funds, as they have to contribute to the development phase of the European Defence Fund and provide funds for the European Peace Facility.

A previous Greenpeace Report (Greenpeace, 2023) has already documented the growth of national military expenditure in Europe.⁵⁰ This section examines the trajectories of NATO EU countries as a whole and of the four largest economies − France, Germany, Italy and Spain. In 2024, NATO EU countries (according to NATO definitions and data) are spending €346 billion in their military budgets. National military expenditures of NATO EU countries amount to more than 40 times the total military-related expenditure of the EU in 2024.

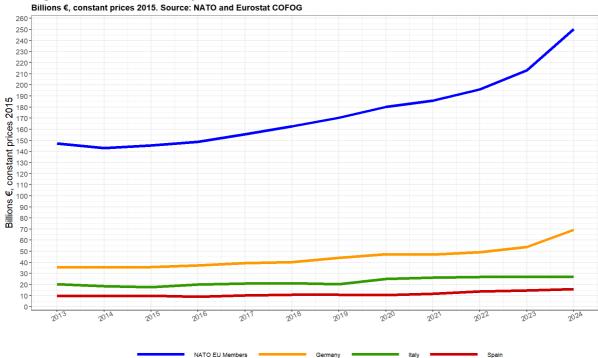


Figure 1: Total Defence Expenditure

Note: Values for 2023 and 2024 are NATO budgetary forecasts.

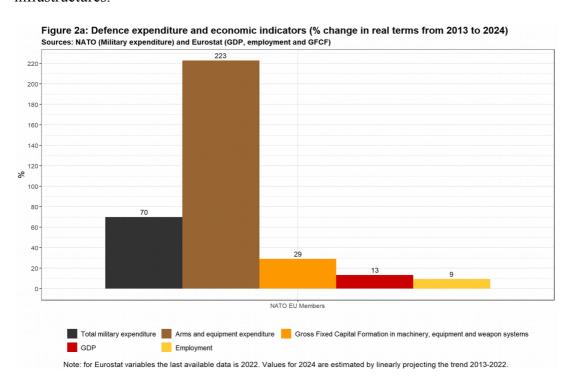
As Figure 1 shows, total expenditures of NATO EU countries amount to €250 billion measured in constant 2015 prices; in the eleven years between 2014 and 2024, military expenditures of NATO EU countries have increased by 66% in real terms. Between 2023 and 2024 alone, the increase was 17% in real terms. European countries are engaged in an unprecedented race to expand military budgets.

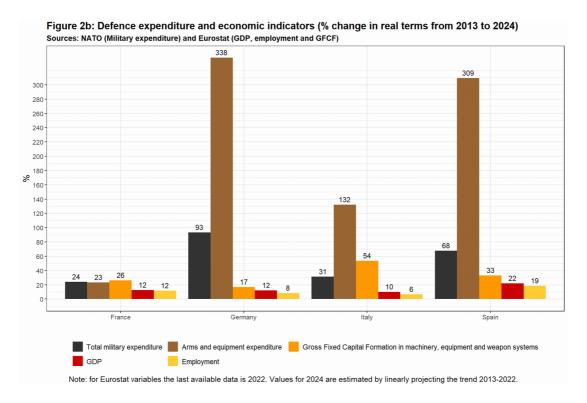
Almost all the increase in spending over the last decade has been directed towards the acquisition of new arms and equipment. About one third of all military expenditure goes to new weapon systems; in 2024, NATO EU countries will spend €77.9 billion in this area (measured in constant 2015 prices), equating to growth of 223% compared to the spending in arms and equipment of 2013.

⁵⁰ See the Greenpeace Report 'Arming Europe' for definitions, methodologies and a detailed analysis of trends and processes (Greenpeace, 2023)

Economic performance and military spending

Figure 2a examines the aggregate of NATO EU countries and compares the rise in military expenditure and arms procurement with the stagnation of EU economic performance. Between 2013 and 2024, real GDP has increased by 13% (just over 1% per year on average), total employment by 9%, and military expenditures by 70%, five times faster than national income. The picture in the area of new investment is even more dramatic: while capital formation has risen by 29%, arms acquisitions have increased by 223% – seven times as fast – throughout NATO EU countries. Arms are absorbing a rapidly increasing proportion of the resources that countries devote to new production capabilities, new technologies, and new infrastructures.





The patterns of the four largest EU economies – Germany, France, Italy and Spain – for the same variables are shown in Figure 2b. Germany and Spain have the largest increases in military spending and in arms acquisition over the 2013-2024 period. Germany has doubled its total defence spending and more than tripled its expenditure on weapons and equipment; Spain follows closely, with similar increases. Italy, characterised by weaker economic performance, has a lower increase that nonetheless dwarfs the rates of growth of GDP and investment. In France, total defence expenditure and arms acquisition have grown at twice the pace of GDP.

Military expenditure vs. environmental and social expenditures

At a time of concerns about public finances in Europe, such a rise in military spending comes at the expense of other types of public expenditures. Figure 3a shows that in the aggregate of NATO EU countries, from 2013 to 2024, total government expenditures increased by 21% in real terms (less than 2% per year on average). However, military expenditure expanded by 70%, as opposed to lower increases in education (+13%), environmental protection (+14%), and health (+31%).

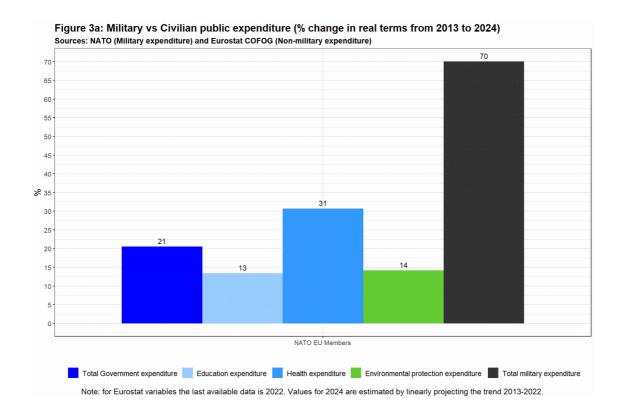


Figure 3b shows the same variables for the four largest EU countries over the 2013 to 2024 period. In Germany, the rise of total military expenditure is three times as fast as total public expenditure, and twice as much as health spending; education and the environment show a much lower expansion in real terms. Spain has the second largest expansion of overall public expenditures (+24%), with significant increases of 29 to 43% in social and environmental spending. In Italy, defence expenditure is also increasing faster than total public spending and funding for social and environmental activities. France is the only country where the growth of military expenditure is parallel to that of total public expenditures, with health receiving more than the defence domain.

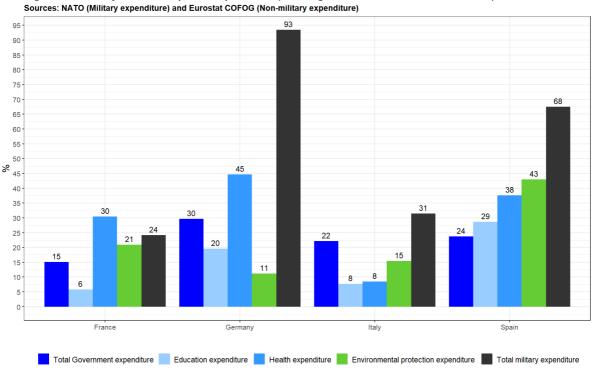


Figure 3b: Military vs Civilian public expenditure (% change in real terms from 2013 to 2024)

Note: for Eurostat variables the last available data is 2022. Values for 2024 are estimated by linearly projecting the trend 2013-2022.

Some studies (Greenpeace, 2023; Stamegna et al, 2024) have investigated in detail – using input-output methodologies – the economic effects of European military expenditure on growth and employment, comparing them to those for education, health and environmental expenditures. The results showed that in Germany, a \in 1,000 million expenditure in arms procurement sets in motion an increase in domestic output of \in 1,230 million. In Italy, the resulting increase is only \in 741 million, as a larger part of the expenditure goes to imports. In Spain, the increase in domestic output totals \in 1,284 million. In terms of employment, this creates 6,000 additional (full time) jobs in Germany, 3,000 in Italy, and 6,500 in Spain.

The findings showed that, however, the economic and employment impact is greater when the $\[mathebox{\ensuremath{\mathfrak{e}}}\]$,000 million is spent on education, health and the environment. The greatest impact is found in the area of environmental protection, with an increased output of $\ensuremath{\mathfrak{e}}\]$ 1,752 million in Germany, $\ensuremath{\mathfrak{e}}\]$ 1,900 million in Italy, and $\ensuremath{\mathfrak{e}}\]$ 1,827 million in Spain. For education and health, the additional output ranges from $\ensuremath{\mathfrak{e}}\]$ 1,900 to $\ensuremath{\mathfrak{e}}\]$ 1,380 million. In Germany, in terms of employment opportunities, $\ensuremath{\mathfrak{e}}\]$ 1,000 million could create 11,000 new jobs in the environmental sector, almost 18,000 jobs in education or 15,000 jobs in health services. In Italy, the equivalent figures range from 10,000 jobs in environmental services to almost 14,000 in education. In Spain, the employment effect would range between 12,000 new jobs in the environmental sector to 16,000 in education. The employment impact is between two and four times the one that is expected from increased arms procurement (Greenpeace, 2023, p.4; see Stamegna et al., 2024 for further analyses).

The economic effect of EU defence expenditure is similar to that of national arms spending as it also leads to R&D and procurement of weapons from EU industries. The impact of EU initiatives in defence in terms of growth and jobs would be an average of the impacts in its various Member States. When compared with the impact of EU expenditures on the environment, education and health, again the economic benefit is likely to be much higher in the latter type of spending; in terms of jobs, civilian programmes may lead to between two

and four times the level of employment creation than that resulting from increased arms procurement.

At the EU level, as at the national one, militarisation is a 'bad deal'. It is likely to lead Europe along a trajectory of lower economic growth, lower job creation, and lower quality of development. The alternatives – more expenditures for the environment, education, and health – would have better effects on growth and jobs, and would bring major benefits in the quality of life and of the environment in Europe.

4. Trade-offs and security alternatives

The trade-offs between EU military and environmental programmes can be assessed by looking at the 2021-27 Multiannual Financial Framework (MFF) of the European Union. In this framework, "Defence" is allocated €8.514 billion (in 2018 prices) to the European

Defence Fund and Military Mobility (other programmes are outside this funding source).

"Environment and climate change' is the MFF's main budget line for green spending. This includes the 'LIFE programme' (€4.812 billion) and the 'Just Transition Fund' (€7.5 billion). In addition, the EU's Next Generation Fund will provide €10 billion for this area, bringing the total amount of 'green' spending to €22.8 billion. This is less than the EU's total military activities – MFF programmes and the European Peace Facility – for 2021-2024 alone, which have reached €23.5 billion.

Other long-established EU programmes – in agriculture, regional development, social cohesion – receive EU funding from the MFF that is orders of magnitude higher.

What is striking, however, is the rapid increase in EU military programmes. Between 2021 and 2024 (including only provisional data for the current year), the EU's total military programmes (including the European Peace Facility) will increase by around 350%. Conversely, between 2021 and 2024, the MFF budget for 'Environment and climate action' will fall by 33%, due to the phasing out of the EU's Next Generation Fund (from $\mathfrak{E}2.7$ billion to $\mathfrak{E}1.8$ billion). Among the larger programmes, funding for agriculture will fall by 12%, while funding for regional development and social cohesion will remain stable.

Moreover, there are signs that Brussels is considering redirecting EU 'cohesion funds' to defence and security. Cohesion funds are aimed at reducing economic inequalities between EU countries and regions; the MFF allocated €392 billion to this end for the period 2021-2027 and only about 5% of such funds have been spent so far. The Commission will now allow the use of these funds for financing defence industries for dual-use projects, such as drones, and for infrastructures for military mobility, such as reinforcing roads and bridges to allow the passage of tanks⁵¹.

Another cause for concern is the strong technological content of EU military programmes in the MFF. If we look at Horizon Europe, the EU's main research and innovation funding programme for 2021-2027, the defence-related programmes documented above are now of such a scale that a significant part of the EU's research capacity in universities and industry is being directed towards the development of weapons systems. Does Europe really want to direct its science and technology efforts towards military aims?

Environmental priorities and climate security

A number of studies have further explored the trade-offs for European resources and the policy alternatives that are emerging in the case of the environment and climate.

The European Environmental Agency (2023) has published the report "Investments in the sustainability transition: leveraging green industrial policy against emerging constraints" where it argues that "The implementation of the European Green Deal (EGD) demands a huge amount of investments, around €520 billion per year from 2021-2030. Additional investments to boost the EU's capacity to manufacture net-zero technologies amount to around €92 billion from 2023 until 2030". Further actions may include the creation of an EU public research agency similar to the US Advanced Research Projects Agency − Energy with the mandate of fostering high-risk, early-stage development projects for new clean

⁵¹Paola Tamma, 'Brussels to free up billions of euros for defence and security from EU budget' Financial Times, 11 November 2024, https://www.ft.com/content/eb0de7f4-5ba1-460a-a83d-1a7302fc1536

technologies. In this way, the EU could steer private investments in clean technology at the scale and speed that is needed (European Environmental Agency, 2023).

The Institute for Climate Economics (2024) in its "European Climate Investment Deficit Report" estimates a gap of €406 billion per year between the investment that would be required in order to achieve the EU 2030 climate targets, and the actual public and private climate investments in the EU economy. Reaching EU climate goals will require a doubling of current public and private investment.

The Institut Rousseau (2024) in its report "Road to net zero" documents that, in order to achieve carbon neutrality by 2050, Europe must allocate the equivalent of 2.3% of its GDP to additional green investments. This equates to half of the European Union's fossil fuel import costs in 2022. Public investment needs to be doubled, reaching €510 billion a year. The report argues that current European budgetary rules make such an effort impossible and therefore such climate-related public investments must be excluded from the constraints of the Growth and Stability Pact.

Gaps in funding also concern social infrastructures. The European Commission paper "Identifying Europe's recovery needs" (2020) showed a gap of \in 192 billion per year in EU-wide investment for social infrastructures. Building on such evidence, the European Trade Union Confederation (2024) report "Navigating Constraints for Progress: Examining the Impact of EU Fiscal Rules on Social and Green Investments" shows that the majority of EU Member States will not be able to meet their targets for investment in schools, hospitals and housing under the new economic governance rules that constrain public expenditures. Investment needs to be raised annually by \in 120 billion in health, \in 57 billion in affordable housing and \in 15 billion in education.

On the priority to be assigned to climate security, there is a wide consensus among European citizens. According to the 2023 Eurobarometer survey – conducted by interviewing 26,358 EU citizens of different ages and social categories in all 27 Member States – 93% of Europeans consider climate change a serious global problem and 58% believe that the transition to a green economy should be accelerated (Eurobarometer, 2023).

In another survey conducted in June-July 2024 that focused on EU priorities, "Europeans most frequently mention the environment and climate change (33%) and irregular migration (also 33%), followed by security and defence (29%) and the war in Ukraine (25%) as areas the EU should address as a priority" (Eurobarometer, 2024).

This degree of concern is highly justified. As documented by the European Environmental Agency (2024b), Europe is the fastest-warming continent in the world. Extreme heat, once relatively rare, is becoming more frequent. Downpours and extreme precipitation are increasing in severity, combined with declines in overall rainfall and more severe droughts. These events have a negative impact on food and water security, energy security and financial stability, as well as on the health of the population. Climate change can affect social cohesion as it is a 'risk multiplier' that can exacerbate existing crises. Climate risks can easily cascade from outside regions to Europe and affect society as a whole, with vulnerable social groups particularly affected.

The European Environmental Agency (EEA)(2024a) has carried out the first European Climate Risk Assessment (EUCRA), examining possible climate threats, and has found that several have already reached critical levels. Most climate risks identified could reach critical or catastrophic levels by the end of this century if not addressed immediately. If no action is taken there is a risk of hundreds of thousands of deaths from heatwaves, while coastal floods alone could lead to economic losses above €1 trillion per year.

According to the EEA, weather and climate-related extremes have already caused major costs for Europe. In the period 1980-2023, the estimated losses of economic assets were around €738 billion, mainly in Germany, Italy and France, with €162 billion lost between 2021 and

2023. Losses are expected to increase and accelerate as the severity of climate events intensifies further. The tragic floods in Spain's Valencia region on 29 October 2024, causing more than 200 deaths, are a dramatic reminder of how serious climate threats are in Europe. Facing such challenges, the Climate Action Network Europe has called for the appointment of an EU Commissioner responsible for the just transition and climate action, as a way to recognize such priorities in EU policies (Climate Action Network Europe, 2024b)

How can such environmental priorities and climate-related threats be addressed if Europe takes the road of militarisation?

It is a paradox that NATO itself has acknowledged that climate change is "one of the defining challenges of our times" and has committed to mitigating climate change (NATO, 2022). However, despite its promises, NATO continues to increase emissions, as military spending and equipment remains highly dependent on fossil fuels.

Reports by the Transnational Institute (2023, 2024) estimated that NATO's overall military spending in 2023 of \$1.34 trillion produced 233 million metric tonnes of CO2 equivalent (tCO2e); in 2023 NATO increased its military-related emissions by around 15%.

The Intergovernmental Panel on Climate Change (IPCC) has set a 43% reduction in emissions as the target that needs to be reached by 2030 in order to keep global average temperature increases to below 1.5 degrees Celsius. In this scenario global military-related emissions need to be reduced by at least 5% per year, and the trend of NATO countries is in stark contrast with climate requirements.

In addition, if every NATO member reached the 2% of GDP military spending target, NATO would spend \$2.57 trillion by 2028, enough to pay for seven years of the United Nations Environment Programme's (UNEP) estimated climate adaptation costs for low- and middle-income countries. At the same time, the extra €1 trillion that European NATO members would need to spend to meet the 2% of GDP military spending target is equivalent to the €1 trillion needed for the EU Green Deal (Transnational Institute, 2023, 2024).

5. Conclusions

Militarisation and environmental protection are not just trade-offs when we consider EU or national government budgets. They are contrasting priorities for the politics and policies of Europe. They embody contrasting visions for the idea of security and for the future of our continent and planet.

Military spending increases greenhouse gas emissions, diverts economic resources from climate action, reduces finance for sustainable investments, and drives arms races that fuel political, social and environmental instability. The global challenge of climate change requires global cooperation, not military rivalries that may divert attention from planetary risks. Arms races create an atmosphere of distrust that can prevent progress in climate action. The path chosen by the European Union and by Member States is the road towards greater militarisation, justified as a reaction to the war in the Ukraine and to international instability — an issue further complicated by the return of Donald Trump to the US presidency. Instead of opening up a debate on how common security and conflict resolution can be achieved in Europe, the priority for the EU and its Member States has been the expansion of military expenditures and arms production, with little consideration of the risk that such actions may further fuel arms races. The very nature of the EU is being changed by such decisions, challenging the Union's aspiration to be a transformative agent in international relations.

In the context of the budgetary and debt-reduction constraints of the new Growth and Stability Pact, the expansion of military spending in most EU countries comes at the price of major cuts in social and environmental programmes. The EU budget is also shifting resources

from social and environmental spending to military-related priorities. Far from moving towards an ecological transition with the EU Green Deal, European countries are moving towards militarisation, contributing to greater international tensions and arms build-up. This is in contrast to the need to achieve real security for Europe, including the ability to prevent and respond to climate-related threats.

European citizens, social movements and civil society organisations working on peace and ecology issues, as well as trade unions and political parties, need to address the dangers of a militarisation of Europe. There is an urgent need to change the agenda of national governments, military authorities and EU institutions, and move instead towards a future of common security for all Europeans. In a context marked by the war in Ukraine, Palestine, Gaza and in the Middle East more broadly, including Iran, the consequences of current EU policies could jeopardise the stability and security of our continent.

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