

# The European Defence Fund: Key Issues and Controversies

The recently-launched European Defence Fund (EDF) is a ground-breaking investment in the areas of security and defence and holds the potential to fundamentally challenge the nature of the European Union (EU) as a peace project. Proponents of the EDF frame the initiative as crucial to European security in an age of increasing political instability and rapid technological change. As such, the EDF is framed as a much-needed catalyst for scaling up the EU's defence by conferring strategic autonomy to Europe, and overhauling a lagging European Defence Technological and Industrial Base. To achieve these goals, the EDF stresses the need to optimise strategic value for money by funding cutting-edge research and innovation and by fostering the development of interoperable defence capabilities. However, the EDF also raises important questions about EU's political priorities, output legitimacy, and security and defence governance.

## Brief Points

- For the first time in its history, the EU is directly investing vast public funds in military technologies. Within a decade the EU will move from spending *no* direct funds on defence to becoming the fourth largest defence spender in Europe, after the UK, France and Germany.
- Between 4% and 8% of the EDF has been earmarked for “disruptive, high-risk innovation that will boost Europe’s long-term technological leadership and defence autonomy”.
- The EDF is part of a broader set of measures that have advanced the course of EU defence cooperation in recent years and illustrates the growing role of private defence industries within EU political processes.

Raluca Csernatoniu IES – VU Brussels and Carnegie Europe

Bruno Oliveira Martins Peace Research Institute Oslo (PRIO)

## Introduction

The ground for the European Defence Fund (EDF) began to be prepared in May 2017, when the EU launched the Preparatory Action on Defence Research (PADR) for defence-related research and technology development. The action was notable because the funding came directly from the EU and not via a joint initiative from the EU Member States. Proponents of the PADR described this scheme as a concrete step to demonstrate the added-value of EU-supported defence research and innovation. The PADR was therefore understood and conceived as a pilot project, launched to pave the way for the European Defence Industrial Development Programme (EDIDP) under the EU budget for 2019-2020, with an aim to boost Europe's defence industrial competitiveness.

The EDF emerged from these actions as part of the EU's next Multiannual Financial Framework (2021-2027). In February 2019, the European Commission (EC) presented the principled agreement on the EDF, framing the fund as a timely catalyst for cutting-edge defence research and innovation. The EDF's substantial financial envelope is set to scale up home-grown European joint strategic defence projects, especially with regard to disruptive technologies and streamlining defence spending. The document was then approved by the European Parliament in April 2019 and is expected to be formally approved by the Council in the next months. Yet, the new European Parliament that will emerge out of the upcoming European elections of May 2019 will be involved in resolving some pending financial issues. Crucially, the EDF makes the EU the fourth largest defence investor in Europe, following the UK, France, and Germany.

These initiatives are linked by a common desire to develop a robust and competitive European Defence Technological and Industrial Base (EDTIB) and to safeguard Europe's technological power in the long-run (Csernatoni 2019). While these developments take place in an ever-changing geopolitical environment, they also raise concerns regarding political legitimacy and transparency. This policy brief outlines the contours of the EDF and highlights its distinctive qualities as a supranational EU collaborative defence research and technology instrument. Then we explore the EDF's role in boosting the EU's technological leadership in emerging and disruptive technologies. We conclude by

investigating the EDF along three axes of analysis: strategy, industry, and legitimacy.

## The EDF: What's in a Name?

In practical terms, the EDF is a vast sum of financial support that will not be used to buy weapons, but rather to foster research and development for military innovation and new defence technologies. While the EDF's exact amount is not fully clear, there will be approximately 590 million euros available for 2019-2020 and 13 billion euro for 2021-2027. The money will come directly from the common EU budget, and will be combined with different national and multinational sums dedicated to military technology.

EU leaders frame the EDF as a key instrument for enabling improved technological innovation and collaboration in the European defence sector. Commissioner Elżbieta Bieńkowska, who is responsible for Internal Market, Industry, Entrepreneurship and SMEs, says the EDF is "yet another important building block to ensure that Europe becomes a stronger security provider for its citizens... so that Europe benefits from cutting-edge, interoperable defence technology and equipment in novel areas like artificial intelligence, encrypted software, drone technology or satellite communication." (European Commission 2019a).

One prerequisite of the EDF calls for a minimum of three Member States to be involved in a project. Many proponents suggest requirements like these will generate economies of scale and create incentives for projects with cross-border participation of many SMEs. The EDF builds upon the PADR, which has already channelled more than 40 million euro for different projects,

including the ambitious OCEAN2020, a consortium of 43 partners from 15 different countries to develop maritime surveillance technologies. OCEAN2020 has a budget of more than 35 million euro and unites diverse entities such as the Ministries of Defence for Italy, Greece, Spain, Portugal and Lithuania, leading European industrial partners (Indra, Safran, Saab, MBDA, PGZ/CTM, Hensoldt, Intracom-IDE, Fincantieri and QinetiQ) and several research institutes, including Fraunhofer, TNO, CMRE (NATO) and the IAI.

## Disruptive Technologies

As mentioned above, the EDF allocates between 4% and 8% to disruptive technologies. This concept was introduced by Clayton M. Christensen as part of what he called the innovator's dilemma. According to Christensen, new technology can either be sustaining or disruptive. Whereas sustaining technology is the gradual development of existing technology, disruptive technology revolutionises its field of action, with all the potential gains and risks associated with it (Christensen 1997).

However, what qualifies as a "disruptive technology" depends on time and context, and there is still some uncertainty about what counts as a disruptive technology in this context. In its press release from February 2019, the EC talks about "disruptive, high-risk innovation that will boost Europe's long-term technological leadership and defence autonomy" (European Commission 2019a). In its April 2019 call for proposals, the EC, rather than providing specific guidelines, invites applications for "[i]nnovative defence products, solutions, materials and technologies, including those that can create a

Artificial intelligence and cognitive computing in defence	Robotics in defence
Defence internet of things	Autonomous defence systems, weapons, and decision-making
Big data analytics for defence	Future advanced materials for defence applications
Blockchain technology in defence	Additive manufacturing in defence
Artificial Intelligence-enabled cyber defence	Next generation sequencing (NGS) for biological threat preparedness

Table I: 10 Key Disruptive Defence Innovations. Source: European Defence Agency (EDA), 2017.

disruptive effect and improve readiness, deployability, reliability, safety and sustainability of Union forces in all spectrum of tasks and missions, for example in terms of operations, equipment, infrastructure, basing, energy solutions, new surveillance systems” (European Commission 2019b: 12). The call then enumerates 34 examples of what falls in that description, including, among others, Mine Counter Measures (MCM) capabilities operating autonomous underwater systems; portable bacteriological and chemical future detection systems; end-to-end solutions for artificial intelligence in defence and security key strategic issues; nanomodified composite materials and related production processes and design procedures for reinforcement of existing armours of defence vehicles; and development of counter-UAS capability based on mini-UAS swarms. Whereas some of the 34 examples are disruptive technologies, others do not seem to be.

Further clues as to what the EU means by disruptive defence technologies may be found in documents from the European Defence Agency (EDA). In a 2017 issue of the EDA’s journal – *European Defence Matters* – the EDA analyses what it considers the current ten most key disruptive defence innovations. Each of these innovations is then briefly addressed by an EDA project officer showing how they matter, how the EDA engages with them, and how these technologies will be used in the future (see Table 1).

The result of the first rounds of funding to disruptive technology projects will show whether or not this list constitutes a guiding matrix of how the EU understands disruptive technologies in the field of defence. In other words, future applicants and well as external analysts will gain insight about EU’s priorities on disruptive defence technologies by virtue of the projects that receive funding.

### Strategic Considerations

Since the formation of the ‘Juncker Commission’ back in 2014, defence matters have played an increasingly central role on the EU’s overall political agenda. The EDF is expected not only to bolster more lucrative joint investment schemes in defence research and innovation, but also to boost and safeguard the EU’s leadership position in this sector. In this regard, the EDF symbolises an unprecedented step taken both to safeguard the EU’s technological and industrial



KOELN and whaler. Photo: European External Action Service / CC BY-NC-ND @ Flickr

base, by developing key technologies in critical areas, and to contribute to the EU’s strategic autonomy by making defence cooperation under the EU budget a reality. While ‘strategic autonomy’ has become a popular term in EU and Member States high-level circles, there is no definitive consensus over the meaning behind this catch-all concept.

This ambiguity has prompted mixed reactions towards the EDF. Some see the fund as a clear indication that political will has finally crystallised across Member States about collective European defence as a community competence. Others take a more modest view, suggesting the EDF only signifies technological and industrial autonomy. Given that the EC will manage the EDF, governance concerns have risen around tensions between national and supranational logics.

Perhaps most important is what the EDF represents for the EC: the rising agenda-setting power of the EC in the area of defence and its exceptional emergence as a political actor in the field of defence overall.

### The Industry Component

Due to budgetary restrictions and intensifying market forces, National Defence Technological and Industrial Bases (DTIBs) across Europe

have increasingly come under pressure to produce competitive defence capabilities. The maintenance of a strong European Defence Technological and Industrial Base (EDTIB) was set out to become a top priority for the EDF by improving defence capabilities, by streamlining the military expenditure of Member States, and by focusing on the development of competitive high-end technologies. However, concerns remain regarding the increased cooperation between the Commission and major defence industries and weapons manufacturers.

Powerful industry-driven lobbying has also played a significant role in shaping priorities in defence R&D and R&T, raising important questions about the corporate capture of EU military initiatives by a nascent European Military Industrial Complex (EMIC) (see Martins & Küsters 2019 and Mawdsley 2018 for a broader analysis). The work of civil society organisations such as Statewatch (Jones 2017) and the European Network Against Arms Trade (2019) has shown that key industry advisors to the EU are among the largest beneficiaries of the defence policies they advocate for, illustrating a troubling conflict of interests.

Member states with strong national defence industries and the means to co-finance costly projects are also expected to be the main beneficiaries of the EDF. For this reason, more thought

should be given to whether a growing EMIC would be a legitimate source for transformative policy practices to change European defence research and innovation culture, potentially engendering a paradigmatic shift in the EU's identity as a peace project. Created in the 1950s with a political vision of making a new war highly unlikely in Europe, the European integration project spread liberal values within the continent and attracted a large number of countries to its sphere of influence, where the threat of offensive military action was off the table. The dramatic increase in, and prioritisation of, defence expenditure in the EU opens up new questions about whether we are witnessing a fundamental change in the political nature of the Union.

### Problems of Transparency, Legitimacy, and Prioritisation

The EC supports funding defence R&D through the EDF for four key reasons: 1) to mitigate the EU's dependence on NATO and US assets; 2) to reduce the duplication of efforts in defence matters throughout the EU; 3) to address the severe lack of interoperability between weapons systems; and 4) to preserve Europe's leadership in cutting-edge technologies beyond the realm of defence.

These arguments, perhaps not surprisingly, have raised significant concerns about transparency and oversight. There have been major points of contention between the European Parliament and the Member States concerning the EDF's objectives, the eligibility criteria for the projects, and the overall management of the fund. While agreements have been reached on most issues, there has been little explanation as to where the money will come from, how it will be spent, what will be cut in order to finance the Fund, and what checks and balances will be put in place to avoid the risk of prioritising the

defence industry's interests over EU transparency rules. As co-legislator of the EDF, the European Parliament can provide scrutiny during the Fund's evaluation processes, but in practice it will not have a say on which projects to fund (see Fiott 2019 for different scenarios of parliamentary scrutiny).

Additional concerns centre around the possibility that EU public funds could be used to develop technology for problematic weapons. Whereas the Fund prohibits the development of lethal autonomous weapons and weapons systems declared illegal by international law (e.g., land mines and nuclear, chemical, and biological weapons), critics fear the frameworks of international law may not be sufficient to cover all the possible scenarios opened up by emerging disruptive technologies. Finally, it is reasonable to wonder if the 13 billion euro reserved for military technologies could be used more fruitfully in other areas, including on policies that address international instability before it escalates to war or conflict. ■

### Further Reading

Christensen, Clayton (1997) *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*. Cambridge, MA: Harvard Business Review Press.

Csernaton, Raluca (2019) 'The EU's Technological Power: Harnessing Future and Emerging Technologies for European Security', in Cornelia-Adriana Baciu and John Doyle (eds.) *Peace, Security and Defence Cooperation in Post-Brexit Europe*. Cham, Switzerland: Springer, 119–140.

European Commission (2019a) 'EU budget for 2021–2027: Commission welcomes provisional agreement on the future European Defence Fund'. Press release, 20 February. Available at: [europa.eu/rapid/press-release\\_IP-19-1269\\_en.htm](https://europa.eu/rapid/press-release_IP-19-1269_en.htm).

European Commission (2019b) 'News: European Defence Fund on track with €525 million for Eurodrone and other joint research and industrial projects'. Available at: [ec.europa.eu/commission/news/european-defence-fund-2019-mar-19\\_en](https://ec.europa.eu/commission/news/european-defence-fund-2019-mar-19_en).

European Defence Agency (2017) 'Ten Upcoming Disruptive Defence Innovations', *European Defence Matters*, 14. Available at: [www.eda.europa.eu/webzine/issue14/cover-story/disruptive-defence-innovations-ahead](https://www.eda.europa.eu/webzine/issue14/cover-story/disruptive-defence-innovations-ahead).

European Network Against Arms Trade (2019) *What is the European Defence Fund?* Available at: [enaat.org/wp-content/uploads/2019/04/ENAAT-DefenceFund-Flyer\\_long-EN.pdf](https://enaat.org/wp-content/uploads/2019/04/ENAAT-DefenceFund-Flyer_long-EN.pdf).

Fiott, Daniel (2019) *The Scrutiny of the European Defence Fund by the European Parliament and national parliaments*. Brussels: DG for External Policies of the Union, European Parliament.

Jones, Chris (2017) *Market forces: the development of the EU security-industrial complex*. London: Statewatch and Transnational Institute.

Martins, Bruno Oliveira and Küsters, Christian (2019) 'Hidden Security: EU Public Research Funds and the Development of European Drones'. *Journal of Common Market Studies*, 57(2): 278–297.

Mawdsley, Jocelyn (2018) 'The Emergence of the European Defence Research Programme', in Nikolaos Karampekios, Iraklis Oikonomou and Elias G. Carayannis (eds.) *The Emergence of EU Defense Research Policy*. Cham, Switzerland: Springer, 205–217.

## THE AUTHORS

Raluca Csernaton is a Guest Professor at the Institute for European Studies (IES) of Vrije Universiteit Brussel (VUB) and a Visiting Researcher at Carnegie Europe. Bruno Oliveira Martins is Senior Researcher at PRIO, where he coordinates the Security Research Group.

## THE PROJECT

The Transnational Academic Network for the Study of Armed Drones (TRANSAD) works towards identifying key technological, theoretical, and policy developments regarding security and defence technologies, in particular armed drones, with a look into how these technologies impact war and conflict.

## PRIO

The Peace Research Institute Oslo (PRIO) is a non-profit peace research institute (established in 1959) whose overarching purpose is to conduct research on the conditions for peaceful relations between states, groups and people. The institute is independent, international and interdisciplinary, and explores issues related to all facets of peace and conflict.