IN-DEPTH ANALYSIS

Requested by the Sub-Committee on Security and Defence



The EU's Defence Technological and Industrial Base



DIRECTORATE-GENERAL FOR EXTERNAL POLICIES POLICY DEPARTMENT



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ABSTRACT

The EU's Defence Technological and Industrial Base (EDTIB) has been a key focus of EU policy efforts in recent years, not just for security reasons, but also for economic ones. There have been a host of funds to strengthen and reinforce the EDTIB, and to ensure deeper cooperation, avoid duplication and underscore the interoperability of equipment. These funding streams have not been fully evaluated, but they are important symbols of the energy and commitment with which the EU has attempted to create an integrated pan-EU defence industry. There have, however, been challenges. The EU Member States remain predisposed to procuring weapons nationally or internationally, rather than regionally. There is a question as to whether these funds are great enough to be genuinely transformative, or whether in practice they are insufficient in relation to investment in the domestic defence industries. Finally, efforts to integrate the EDTIB also risk the EU being seen as protectionist, which may lead other major weapons suppliers such as the US to respond in kind.

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1 Political and economic background

1.1 Strengthening the EDTIB could provide significant security and economic gains

The European Union Global Strategy (EUGS) begins by saying: 'We live in times of existential crisis, within and beyond the European Union. Our Union is under threat. Our European project, which has brought unprecedented peace, prosperity and democracy, is being questioned'¹. As the world has seemingly become more volatile, uncertain and fractured, a strong defence industrial base that can provide strategic autonomy and technological advantage has increasingly become a priority for the EU.

However, the ambition to build a thriving and innovative EDTIB was not driven by security concerns alone. It has also been driven by economic worries: the slow, but unremitting, decline in defence expenditure across many Member States, as well as the rising unit costs of capabilities. For many experts, these rising intergenerational costs hint at futures in which even the best-funded militaries in Europe will struggle to achieve full spectrum coverage with their existing defence budgets².

This is further compounded by the huge duplication of effort when it comes to the development of new weapons systems. An EU factsheet published in 2018 (tables and graphs reproduced below) captured the problem neatly. In comparison to the US, the EU collectively has six times the number of weapons systems in use, for half the expenditure. At the heart of this problem is that Member States, by their nature, lean towards protectionism when it comes to defence; as President Bill Clinton is reputed to have put it 'national when possible, multinational when necessary'³.

Protectionism may seem to be illogical, but in practice, states seek sovereignty because they fundamentally want to retain freedom of action and choice in military affairs, and that requires security of supply and technological advantages⁴. In practical terms, this commitment to protectionism is actually enshrined in EU mechanisms. Article 346 of the Treaty on the Functioning of the EU (TFEU Lisbon), which has remained essentially the same since the 1957 Treaty of Rome, states:

Any Member State may take such measures as it considers necessary for the protection of the essential interests of its security which are connected with the production or trade in arms, munitions and war material; such measures shall not adversely affect the conditions of competition in the common market regarding products which are not intended for specifically military purposes⁵.

In effect, EU Member States – particularly those with large domestic defence industries – are able to 'set their own rules' for the tendering of defence-related contracts⁶.

But the costs of Article 346 are significant: a European Parliament study mapping the 'costs of non-Europe' argues that 'the existence of 28 compartmentalised national markets, each with its own administrative

¹ European External Action Service, Shared Vision, Common Action: A Stronger Europe, A Global Strategy for the European Union's Foreign and Security Policy, 2016, p.7.

² Augustine, N. R., *Augustine's Laws*, 6th ed., American Institute of Aeronautics & Astronautics, Reston, Virginia, US, 1997.

³ Briani, V., 'Armanents duplication in Europe: a quantitative assessment', CEPS Policy Brief, No. 297, 2013.

⁴ As argued elsewhere: see Uttley, M. R. H. and Wilkinson, B., 'A spin of the wheel? Defence procurement and defence industries in the Brexit debates', *International Affairs*, Vol. 92, No. 3, 2016 (a), pp. 569–586; Uttley, M. R. H. and Wilkinson, B., 'Contingent choices: the future of United Kingdom defence procurement and defence industries in the post-Brexit era', *Global Affairs*, Vol. 2, No. 5, 2016 (b), pp. 491–502; Dorman, A. M., Uttley, M. R. H. and Wilkinson, B., *A Benefit, Not a Burden*, The Policy Institute at King's, London, 2015.

⁵ Article 346. Treaty on the Functioning of the European Union.

⁶ Bungay, F., *Defence Policy and Procurement*, London: Trade Policy Research Centre, 2012, p.11.

burden and regulated separately, hinders competition and results in a missed opportunity for economies of scale for industry and production⁷. It goes on to estimate the financial cost as somewhere between EUR 26 billion and EUR 100 billion per year⁸.

This is precisely why a thriving EDTIB is such a priority. It has the potential to undercut the need for and use of Article 346, and in so doing, to provide not just security gains, but significant economic gains by reducing the duplication of effort by Member States, and supporting the development of capabilities that could be used collaboratively and cooperatively by Member States.

	EU	United States
Defence Expenditure	€227bn	€545bn
%age of GDP	1.3%	3.3%
Investment per soldier	€27,639	€108,302
Duplication of Systems		
Number of weapons systems	178	30
Main Battle Tanks	17	1
Destroyers/Frigates	29	4
Fighter Planes	20	6

Table 1: Comparison of US and EU systems9

1.2 The EDTIB did not receive the attention and political commitment it needed until 2013

Early efforts to strengthen the base were not entirely successful. By 2007, protectionism and duplication – coupled with rising unit costs and declining defence budgets – still dominated.¹⁰ The European Defence Agency's 2007 *Strategy for the European Defence Technological and Industrial Base* put the case in forthright terms: 'a fully adequate DTIB is no longer sustainable on a national basis'¹¹. The arrival of the global financial crisis in 2007–2008 and the years that followed only made matters worse. As Figure 1 shows, defence budgets across the EU were increasingly squeezed as national governments, despite some ringfencing of defence, typically reduced military expenditure. Meanwhile, unit costs continued to rise and a series of major defence acquisition programmes were delayed or cancelled¹².

Against this backdrop, the EDTIB fell down the EU's list of priorities between 2008 and 2013. It received few focused discussions in European Council meetings where other issues, largely emanating from the financial crisis, took precedence. This was despite French and Polish efforts during their respective presidencies of the Council of the EU (2008 and 2011) to reignite interest and impetus in the EDTIB.

⁷ European Parliamentary Research Unit, *Mapping the Cost of Non-Europe, 2014–19*, Brussels, 2014, p. 77.

⁸ Ibid., p. 21.

⁹ European Commission, *EU Budget for the Future: The European Defence Fund*, factsheet, 2018, available at: https://ec.europa.eu/commission/sites/beta-political/files/budget-may2018-eu-defence-fund_en_0.pdf ¹⁰ Uttley, M. R. H. and Wilkinson, B., 2016 (a).

¹¹ European Defence Agency, A Strategy for the European Defence Technological and Industrial Base, 2007. Quoted in Hartley, K., 'Creating a European Defence Industrial Base', Security Challenges, Vol. 7, No. 3, 2011, pp. 95–111.

^{12 &#}x27;Watchdog warns of defence delays', BBC News, 10 January 2013, available at: https://www.bbc.co.uk/news/uk-20960050

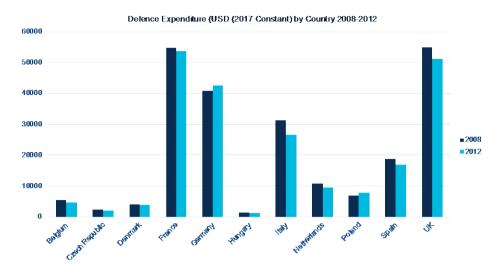


Figure 1: Military expenditure by country 2008–2012 (USD 2017 Constant)¹³

It was not until 2013 that the EDTIB received renewed and much-needed attention. The key moment was a report by EU High Representative/Vice-President Catherine Ashton, which identified the EDTIB as the essential foundation for a successful Common Security and Defence Policy (CSDP). In her report, she noted that 'the European defence market remains fragmented in terms of demand and supply' and questioned whether this was 'sustainable' in view of economic and security realities¹⁴. The Council of the EU agreed in December 2013, stating that 'interdependence is becoming increasingly paramount' and underscoring the need to address 'challenges together, making the best use of scarce national and Union resources through increased and more systematic cooperation and coordination among Member States'¹⁵.

High Representative Ashton's report injected new commitment and energy into initiatives, which translated into significant efforts to strengthen the EDTIB. It led, for instance, to the publication in 2014 of a roadmap for the European defence industry: A New Deal for European Defence. This, for the first time, articulated a series of actions (rather than principles) for a more competitive and efficient defence and security sector. These included:

- 1. an internal market for defence where European companies can operate freely and without discrimination in all Member States;
- 2. an EU-wide 'security of supply' regime where armed forces are sufficiently supplied in all circumstances, no matter in which Member State their suppliers are established;
- 3. a preparatory action on CSDP-related research to explore the potential of a European research programme which, in the future, may cover both security and defence (this is in addition to exploiting all possible synergies between existing civil and defence research);
- 4. an industrial policy that fosters the competitiveness of European defence industries and helps to deliver all the capabilities Europe needs to guarantee its security at affordable prices¹⁶.

¹³ Data taken from Stockholm Institute of Peace Research Institute, *SIPRI Military Expenditure Database 1948–2017*, available at: https://www.sipri.org/databases/milex

¹⁴ Ibid.

¹⁵ Council of the European Union, *Council Conclusions on Common Security and Defence Policy*, Brussels, 2013, available at: https://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/EN/foraff/139719.pdf

¹⁶ European Commission, A New Deal for European Defence: Implementation Roadmap for Communication COM (2013) 542; Towards a more competitive and efficient defence and security sector, COM (2014) 387 final, Brussels, 2014, available at: https://eurlex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014DC0387&from=EN

EU High Representative/Vice-President (HR/VP) Federica Mogherini's appointment not only built on these initiatives, but added further momentum. A 2015 progress report on initiatives outlined in the New Deal for European Defence document also indicated levels of political commitment despite the fact that the preparatory action concept had run into numerous regulatory difficulties in terms of its 'scope, contents, budget and implementation'¹⁷. Despite the challenges, the update promised further meetings of the 'Group of Personalities' convened by European Commissioner for Internal Market and Services Elżbieta Bieńkowska, and a more detailed proposal for the approval of the European Parliament and Council in 2016.

1.3 Despite renewed commitment, there were still significant barriers to a stronger EDTIB

By November 2016, the expended political capital had begun to yield results and what were once policy proposals were now moving into the delivery phase. Papers such as the Implementation Plan on Security and Defence (IPSD) and the Defence Action Plan (EDAP) were released in late 2016 (both of which are covered in detail in another CSDP briefing, entitled *CSDP defence capabilities development*, which outlines key policies for the EDTIB). Specifically, the IPSD paved the way for the development of the Coordinated Annual Review on Defence (CARD) – an annual exercise to review capability and equipment development plans across Member States (this is discussed in more detail in *EU's Institutional Framework regarding Defence Matters*)¹⁸.

Despite the hugely impressive levels of commitment and the development of policy, practical progress in strengthening the EDTIB was still slow. This was not so much due to problems with funding oversight, the basic premise or the levels of funding (though these factors certainly did not help). Rather, it was because many of the Member States with significant defence industries continued to resort to Article 346 and pursued national procurement where possible. The perception among these Member States was that sovereignty had to be maintained over the largest or more complex programmes. Indeed, Uttley estimated that, putting expenditure on international collaborative weapons systems to one side, 80 % of defence expenditure in the EU happened at national rather than European level. With Member States continuing to prefer 'the national' over 'the European' when it came to defence expenditure, the progress towards a truly integrated EDTIB was painfully slow¹⁹.

Other actors were also moving more swiftly, causing the EDAP to repeat familiar warnings and concerns about EU defence and security thinking over the previous decade and beyond (namely that defence budgets in Europe were in decline, where other global actors were increasing theirs at pace).

These concerns were not without foundation. As Figure 2 shows, China's military expenditure nearly doubled between 2008 and 2016. By contrast, in a paper published in 2016, the EDAP noted that 'over the last decades [from 2016] EU Member States have decreased defence spending by nearly 12 % in real terms [...] This decrease in national spending in defence has not been compensated by more European

¹⁷ European Commission, Report on the Implementation of the European Commission's Communication on Defence, 2015, available at:

http://eeas.europa.eu/archives/docs/csdp/documents/pdf/report-implementation-communication-defence.pdf

¹⁸ Council of the European Union, *Implementation Plan on Security and Defence*, 3498th Council Meeting, 14 November, Brussels, 2016, available at: https://eeas.europa.eu/sites/eeas/files/eugs_implementation_plan_st14392.en16_0.pdf.

See also Council of the European Union, Council Conclusions on Implementing the Global Strategy in the Area of Security and Defence, 3498th Council Meeting, 14 November, Brussels, 2016, available at:

www.consilium.europa.eu/media/22459/eugs-conclusions-st14149en16.pdf.

¹⁹ Uttley M., 'Defence Procurement', in Routledge Handbook of Defence Studies (Routledge, 2018), 72–86.

cooperation. Europe suffers from inefficiency in spending due to duplications, a lack of interoperability, technological gaps and insufficient economies of scale for industry and production²⁰.

The paper went on to estimate the annual costs of the lack of cooperation as 'between EUR 25 billion and EUR 100 billion'²¹. The EDAP concluded with a stark assessment: 'Without a sustained investment in defence, the European industry risks lacking the technological ability to build the next generation of critical defence capabilities. Ultimately, this will affect the strategic autonomy of the Union and its ability to act as a security provider'²².

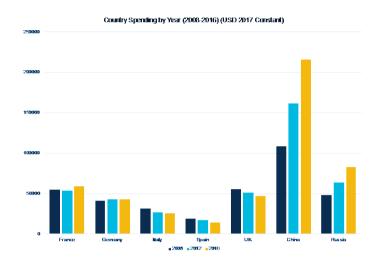


Figure 2: Military expenditure by country 2008–2016 (USD 2017 constant)²³

2 The state of play at the end of HR/VP Mogherini's mandate

Since 2016, deeper political commitment and energy has led to the development of important initiatives and policies, especially the commencement of new funding streams. This section will look at four of these key funding streams: the pilot project, which subsequently became the Preparatory Action on Defence Research (PADR); the European Defence Industrial Development Programme (EDIDP); and the European Defence Fund (EDF), which will encompass PADR and EDIDP in 2021.

These funding streams are summarised in Table 2 on page 11 for ease of reference. As shown in the third section of this paper, despite renewed efforts and initiatives to create a integrated EDTIB, structural challenges and barriers remain. These barriers have slowed down progress to strengthen the EDTIB and build a more integrated defence industry across Europe. They will need to be addressed if progress is to be made.

2.1 Pilot project and Preparatory Action on Defence Research (PADR)

Efforts to build EU defence integration and a stronger EDTIB by allocating new funding streams began in 2015, with the allocation of EUR 1.4 million from both the 2015 and 2016 EU budgets to the EDA through a delegation agreement from the European Commission (the pilot project). Although the scheme was

²⁰ European Commission, European Defence Action Plan: Towards a European Defence Fund, Brussels, 2016.

²¹ Ibid.

²² Ibid

²³ Data taken from Stockholm Institute of Peace Research Institute, *SIPRI Military Expenditure Database 1948–2017*, available at: https://www.sipri.org/databases/milex

financially small, it was symbolically important and heralded a clear intent to foster closer integration in defence, as well as a commitment to build the EDTIB.

The EDA, now with sole responsibility for managing the funding, released a Call for Proposals in March 2016. Work on the chosen projects began in November that year with a focus on sensor platforms, unmanned aerial vehicles and inside-building awareness.

The pilot project was largely seen as a success. As Dirk Tielbuerger, the Head of EU Defence Funding, reported to the European Parliament Subcommittee on Security and Defence, it provided an opportunity to test the 'first template for [funding] activities, be it in terms of modalities or in terms of topic finding, project selection or monitoring of the work of the winning consortia'²⁴.

The pilot project was quickly replaced with a more substantial funding stream, the PADR, which has received EUR 90 million in funding to date (EUR 25 million in 2017, EUR 40 million in 2018 and EUR 25 million in 2019). The tactical aim of PADR was to test funding and oversight mechanisms, and establish which challenge areas the funding should be directed towards to ensure positive capability outcomes²⁵. At a more strategic level, PADR was about demonstrating the potential added-value of defence research to Member States in terms of new strategic capabilities, while also showing industry that the funding process was streamlined.

This shaped a funding model where projects could only receive financing if participating Member States agreed to buy the final product. Equally, the emphasis was (and is) on projects that could not be conducted by a single Member State alone. Funding requirements insist on at least three partners from different Member States and a focus on the priorities identified in the Capability Development Plan, which is integrated with the CARD exercise).

Five projects have been funded so far²⁶. PYTHIA, which aims to identify key trends in the rapidly evolving world of defence technology, received EUR 1 million in funding for partners from Bulgaria, France, Italy, Poland, Romania and the UK. The largest award went to Ocean 2020, a project focused on enhancing situational awareness in maritime environments by using manned and unmanned systems. The project received EUR 35 million for a consortium led by Leonardo. Three further projects received in the region of EUR 2 million each: GOSSRA, which focuses on ensuring that elements worn by soldiers (e.g. sensors or digital goggles) are interoperable; ACAMSII, which is looking to develop adaptive camouflage; and Vestlife, which is a project to create protective clothing for soldiers. Projects receiving funding in the 2019 round have not yet been announced, but with EUR 25 million of funding available, the programme is focused on the development of electromagnetic spectrum dominance and future disruptive defence technologies.

2.2 European Defence Industrial Development Programme (EDIDP)

If the PADR is focused on basic research, then the EDIDP is far more applied and focused on capability development. It is, in effect, an industrial programme that is specifically aimed at supporting the EDTIB by bolstering competitiveness and innovation capacity across the defence technological and industrial base. It is also symbolically important because it represents a comparatively substantial investment of EUR 500 million over two years.

Unlike the previous funding streams, the Commission is responsible for the EDIDP and has oversight of the distinct funding and governance structures around the funding stream. Firstly, the EDIDP is a co-funding

²⁴ Tielbuerger, D., State of play of the Pilot Project and the Preparatory Action on Defence Research, European Parliament Subcommittee on Security and Defence, available at: www.eda.europa.eu/docs/default-source/speeches/2019-02-19_sedecommittee_dirk-tielbuerger.pdf

²⁵ For an extended analysis of the PADR, see the collection of chapters in Karampekios, N., Oikonomou, I. and Carayannis, E. G., eds., *The Emergence of EU Defense Research Policy: From Innovation to Militarization*, 1st ed. 2018 edition, Springer, 2017.

²⁶ For further details, see: European Union External Action, *Defending Europe: European Defence Fund – Factsheet*, 2018, available at: https://eeas.europa.eu/headquarters/headquarters-homepage/35203/defending-europe-european-defence-fund-factsheet_en

model (up to 20% of funds are provided by the EDIDP) that requires undertakings from at least three different Member States. These Member States must be able to demonstrate that their respective governments are fully committed to financing further development and to procuring the final product, including joint procurement. These conditions are in place to ensure benefits to the wider EDTIB, namely through the reasonable expectation that this will result in cooperation over the development and procurement of capabilities.

Secondly, there are strict controls on whether organisations are based in the EU and/or controlled by a third country. While there appear to be mechanisms for deviating from this requirement, they are not clearly defined and, at this stage, look sufficiently strict to act as a disincentive²⁷.

Thirdly, in order to support wider CSDP efforts, a bonus of 10 % can be allocated to projects identified through Permanent Structured Cooperation (PESCO)²⁸, while further bonuses are also available for small and medium-sized enterprises (SMEs). All technology and assets developed with EDIDP funding remains under the ownership of the relevant Member States.

The EDA has already specified two 'flagship' projects that it will fund. The first is Eurodrone, which will receive EUR 100 million to support the development of the Medium Altitude Long Endurance Remotely Piloted Aircraft System (MALE RPAS), which received seed funding under the pilot project. The second flagship project is ESSOR: European Secure Software defined Radio, which will receive EUR 37 million. In addition, the Commission has outlined four future funding areas²⁹:

- **Enabling operations, protection and mobility of military forces** with a focus on unmanned systems (EUR 80 million);
- Intelligence, secured communication and cyber (EUR 80 million);
- **Ability to conduct high-end operations** with a focus on the next generation of ground-based precision strike capabilities, of ground combat and air combat capabilities (aircraft and drones), and of future naval platforms (EUR 70 million);
- **Innovative defence technologies supported by artificial intelligence** with a specific stream for SMEs to work on innovative defence solutions (EUR 27 million).

2.3 European Defence Fund (EDF)

In 2018, on the basis of the three previous funding streams – in effect, pilot programmes with increasingly large budgets – the Commission agreed to launch a fully-fledged EDF to run from 2021 to 2027. The main purpose of the EDF is not just to streamline and simplify the current structure by integrating the PADR and the EDIDP into a single fund. With a proposed total budget of EUR 13 billion under the next EU multiannual financial framework for 2021–2027, the EDF is also a signal of serious financial and political commitment to integrated European defence, and to shoring up and developing the EDTIB.

Although the fund replaces the PADR and EDIDP, it retains the basic versus applied distinction between them, with EUR 4.1 billion allocated to research and EUR 8.9 billion to capability development. The proposed level

²⁷ Fiott, D., 'The EU, NATO and the European defence market: do institutional responses to defence globalisation matter?', *European Security*, Vol. 26, No. 3, 2017, pp. 398–414.

²⁸ European Council of the EU, *Permanent Structured Cooperation (PESCO) updated list of PESCO projects – Overview – 19 November 2018*, 2018, available at: https://www.consilium.europa.eu/media/37028/table-pesco-projects.pdf

²⁹ European Commission, *EDIDP and PADR – factsheet*, 2019, available at:

Table 2: Summary of EU Defence-Related Funding Streams since 2015

Fund name	Value (in €)	Summary	Programmes funded	
Pilot project 2015–2016	€1.4m	The pilot project was introduced in the EU budgets of 2015 and 2016 with the aim to test funding concepts	 Inside Building Awareness and Navigation for Urban Warfare (SPIDER): €433.225; Standardisation of Remotely Piloted Aircraft System (RPAS) Detect and Avoid (TRAWA): €433.292; Unmanned Heterogeneous Swarm of Sensor Platforms (EuroSWARM): €434.000. 	
PADR 2017–2019	€90m 2017: €25m 2018: €40m 2019: €25m (awards to be announced)	PADR was a genuine test-bed for proving the relevance of European defence research and for laying the foundations for the EDF	 Strategic Technology Foresight (PYTHIA): €1m; Ocean 2020: €35m to enhance situational awareness in a maritime environment, using manned and unmanned systems; Gossra: €1.5m to improve the compatibility of complex system elements (i.e. sensors or digital goggles); ACAMSII: €2.6m for adaptive camouflage; Vestlife: €2.4 million for ultralight protective clothing for soldiers. 	
EDIDP 2019–2020	€500m 2019 awards to be announced	A 'capability' strand to build on the research and development phase, and create financial incentives for Member States to cooperate on joint development and the acquisition of defence equipment and technology, in order to reduce their costs.	 Multipurpose unmanned ground systems; Permanent air or space capabilities for ISR and tactical remotely piloted air systems (RPAS); Cyber situational awareness and defence capabilities; Positioning, navigation and timing, and satellite communication; European command and control (C2) system; Upgrade of next-generation ground-based precision strike capabilities; Air combat capabilities (call EDIDP-ACC-2019); Future naval platforms and related technologies; Innovative and future-oriented defence solutions. 	
EDF 2021–2027	€13bn Research:	Streamlining of the PADR and EDIDP. The EDF will provide support all along the industrial development lifecycle, from research to prototype development up to certification. Projects developed through the PESCO framework may receive additional cofinancing of 10 %, ('the PESCO bonus').	Projects will be defined in line with defence priorities agreed by Member States within the context of the ECDP.	

of funding can be up to 100 % for the research phase, and from 20–80 % co-financing (with Member States' budgets) for the development phase. For the final acquisition phase, 100 % of costs will be covered by Member States.

Many of the features of both previous schemes also continue. The eligibility criteria look set to stay broadly similar, with organisations being required to be based in the EU without significant control from any other country. Article 5 of the agreement allows for some third party involvement, but only to those non-EU Members of the European Economic Area (EEA). Although other parties can work on projects, it looks likely that they will be unable to receive EU funding to do so (e.g. they will need match-funding from another source) and, more problematically, they will have no ownership or control of intellectual property created through the projects.

3 Current gaps and future challenges

Since the publication of the EUGS, mentioned at the beginning of this policy brief, a great deal of activity in respect of the EDTIB has taken place – partly in response to that existential fear, and partly in response to economic and capability concerns. The rate, extent and commitment encapsulated in the activities and investments should not be underestimated. There has been a change in the EU's approach to its own defence industrial base and to the efforts to strengthen, build and grow that base for wider economic and security gains.

The progress has been such that HR/VP Mogherini's declaration in a 2017 speech that 'we have moved more in 10 months than in the last 10 years' does not look like overstatement or exaggeration³⁰. However, challenges and issues remain for the EDTIB going forward although, in identifying these, it is important not to take away from the significant and tangible progress that has been made. These barriers to progress are very real and unless that is acknowledged, progress will be slow, if not impossible. Some will require specific actions to be overcome, but many demand diplomacy and persuasion. At a time when the EU is evolving, and when wider public attitudes towards the EU are also shifting, the diplomatic task may be the more urgent – and challenging.

3.1 Challenge 1: The financial commitment is significant but not transformative

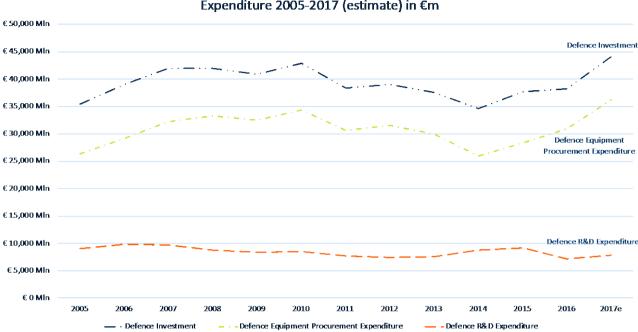
The proposed allocation of EUR 13 billion is a clear symbol of the EU's commitment to strengthening the EDTIB. When taken along with the co-funding from the Member States, it looks to be a significant sum (depending on the levels of co-financing actually provided by Member States).

However, the question is whether this investment is actually enough to be transformative for the EDTIB. In the context of defence research and capability development, EUR 13 billion (even with co-funding from Member States) is not a significant investment, particularly when taken in comparison to national investment in domestic defence industrial bases. For instance, it is far smaller than the investment of those Member States with the largest defence budgets, and even smaller so when compared to defence investment taken collectively across the EDA 27.

The question will be whether this level of investment is sufficient to incentivise the defence industry – both the primes and the SMEs – and governments to favour more collaborative approaches to defence research and development. Only time – and robust evaluation – will tell whether the EDF and its precursors have had any impact on incentivising more integrated, joined-up defence research and capability development.

³⁰ HR/VP Mogherini, F., *The EU Global Strategy: Translating vision into action*, speech, European External Action Service, 2017, available at: https://eeas.europa.eu/headquarters/headquarters-homepage/28575/eu-global-strategy-translating-vision-action_en

As yet, it is not possible to evaluate whether the PADR or the EDIDP have had any effect on closing this gap, since figures for 2018 and 2019 are not available. Evaluation of this in the short-term will be essential, as without in-depth economic analysis, it will not be possible to assess the impact of both funds. Nor will there be a baseline to which the EDF's performance can be compared.



Total EDA27 Defence Investment, Defence Equipment Procurement and Defence R&D Expenditure 2005-2017 (estimate) in €m

Figure 4: Total EDA27 defence investment, defence equipment procurement and defence R&D expenditure 2005–2017 (estimate) in €m³¹

3.2 Challenge 2: The EDF has detractors on moral and political grounds

The EDF has attracted attention, but support for it has not been unanimous. Some question, on moral grounds, whether the EU should fund defence in general. Andrew Smith, a spokesperson for Campaign Against the Arms Trade, wrote in *The Guardian* that 'the organisation known for pacifism has fallen prey to arms traders it hired to advise on military strategy'³². An open letter from more than 1,000 academics and scientists to Members of the European Parliament (MEPs) implored them not to sign off on the funding³³.

There are also questions about future political commitment. In 2018, Daniel Fiott, an editor at the EU Institute for Security Studies, raised concerns:

EU investments into EU security and defence are not free from politics and the current wave of populist and extreme political movements in Europe are – in one way or another – relevant to debates about such investments. For example, the forthcoming European Parliament elections in May 2019 could reinstate parliamentarians that are opposed to EU defence investments on the grounds of Euroscepticism and/or pacifism... Although a number of populist parties and governments have called

³¹ European Defence Agency, *Defence Data 2005–2017*, available at: https://data.europa.eu/euodp/en/data/dataset/defence-data-2016-2017

³² Smith, A., 'Why Does the EU Need a €13bn Defence Fund? It Should Be Waging Peace', *The Guardian*, 19 April 2019, available at: https://www.theguardian.com/commentisfree/2019/apr/19/eu-13bn-defence-fund-arms-companies

³³ '1000 Researchers and Scientists Oppose the European Defence Fund,' Scientists for Global Responsibility, 2019.

for enhanced EU security and defence efforts, there is no guarantee that the next legislature will not try to block or reframe initiatives such as the EDF³⁴.

While the final agreement from the Council and the Parliament is likely to be approved, and according to Eurostat there is strong public support for more EU defence funding, future funding is not guaranteed³⁵. As things stand, there is a risk that if opposition to the EDF and wider defence integration gains momentum and popular support, it may well pull the hard won political commitment from all the efforts that have gone in so far.

3.3 Challenge 3: A protectionist EU?

A further issue is the spectre of EU protectionism. The EDF paves the way for what might be called a protectionist EU in terms of defence affairs (or put more positively, an autonomously-capable EU). Although it allows third country entities to participate in cooperative projects, this participation can only be effected through EU-based subsidiaries and is subject to numerous constraints. Additionally, the third party rule in its current form only allows non-EU Members of the EEA to receive funding.

In other words, the US – and potentially the UK depending on the Brexit journey – would be unable to participate directly in EDF-funded defence projects, preventing access to two very significant domestic defence industries. As Sophia Besch pointed out, the EDF aims to strengthen Europe's 'technological and industrial defence base as well as fill capability gaps, which may reduce the number of weapons Europe buys from the United States [...] to be transparent – a stronger Europe in the field of defence will be a worse client for the U.S. defence industry'³⁶.

For that reason, the US has been lobbying heavily over participation criteria in EU defence projects, although these efforts have been largely unsuccessful so far. The Commission has argued that it is merely setting conditions for accessing funding that are similar to the ones that EU companies face in third country markets. HR/VP Mogherini even said that the rules are actually less restrictive than for EU companies in the US³⁷. However, there remains sufficient concern in the US for officials to send a letter to Mogherini warning that the initiatives would 'represent a dramatic reversal of the last three decades of increased integration of the transatlantic defence sector'³⁸.

A report by the American Chamber of Commerce to the European Union warned that a 'Buy European Act' in the defence sector is likely to be met by the US closing off portions of its own defence markets to European companies³⁹. As a number of Member States have close security and defence industrial ties with the US (e.g. Sweden, Finland, Poland and the Netherlands), it is possible that they will be under pressure to have the third party rules amended. Equally, political tensions over NATO are likely to make some Member States (e.g. France) unwilling to submit.

3.4 Challenge 4: The power of sovereignty

At the heart of the EDF is the attempt to avoid duplication and capability gaps caused by the preference that most Member States have for developing and procuring defence equipment at a national level. The

³⁴ Fiott, D., 'The Multiannual Financial Framework and European Defence', Intereconomics, Vol. 53, No. 6, 2018 (a), pp. 311–315.

³⁵ Besch, S., Developing a Home-Grown European Defence Equipment Market, Centre for European Reform, 2019. See also Fiott, D., 2018 (a); and Fiott, D., 'European Defence Markets and Industries: New Initiatives, New Challenges', Nação e Defesa, 2018 (b).

³⁶ 'The Importance of Being Protectionist', 2019.

³⁷ HR/VP Mogherini, F., *Remarks by HR/VP Federica Mogherini at the Press Conference Following the Foreign Affairs Council (Defence)*, speech, European External Action Service, 2019 available at: https://eeas.europa.eu/headquarters/headquarters-homepage/62387/remarks-high-representativevice-president-federica-mogherini-press-conference-following_en

³⁸ 'US warns against European joint military project', *The Financial Times*.

³⁹ See American Chamber of Commerce to the EU, The European Defence Action Plan: Challenges and perspectives for a genuine transatlantic defence and industrial relationship, Brussels, 2018, available at:

logic of that choice is clear: sovereignty gives a state control and, through that, technological advantage over its rivals, as well as surety and security of supply. But in practice, it is also far more expensive and, in a world of static or declining defence budgets, this is no longer tenable.

But the challenge for the EDF – and for wider defence integration – will be persuading the Member States of the relative advantages of cooperation. There are concerns over a number of issues:

- whether joint defence development and procurement will be cheaper in practice;
- that the major prime contractors in Western Europe will win all the high-tech work, leaving the other defence industries at risk.
- how to select the capability areas that will receive funding: will the CARD process work and will Member States trust it enough to make it a valuable process?
- future exports and to whom jointly developed items could, or could not, be exported (the different opinions among Member States on Saudi Arabia is an example of this).

Ultimately, the question will be whether Member States really see enough incentive to stop using Article 346, or at least to radically limit instances in which they resort to it. In order to achieve this, the real focus will need to be on persuasion and building trust – and this might be the most challenging aspect of all.

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