Food for thought 09-2021



Collaborative Procurement and European Defence Fund in the context of Strategic Autonomy Case Study on Autonomous Weapons



* This Food for Thought paper is a document that gives an initial reflection on the theme. The content is not reflecting the positions of the member states but consists of elements that can initiate and feed the discussions and analyses in the domain of the theme. All our studies are available on www.finabel.org

DIRECTOR'S EDITORIAL

In the last decades, autonomous weapons have grown exponentially in the debate in the defence industry thus recently resulting pivotal in the defence industry itself. Yet at the EU level, the research and development of such weapons remains a highly controversial topic. Moreover, R&D has been excluded from the previous legal framework such as the Procure-ment Directive and it is only to a certain extent introduced in the newly enacted European defence Fund. The problem is that autonomous weapons are excluded from the EU initia-tives, contrary to the International Rush in developing them. Furthermore, defence is the hot potato in general, for example, the first comprehensive legislation on AI systems advanced by the EU excludes the defence. Ultimately, the exclusion of the autonomous weapons and the defence in general from its scope, the EU is contradicting the very aim to become stra-tegically autonomous in defence and has no say neither in the R&D nor in procurement. In this context, this analysis aims to contribute to the academic debate of why the EU is taking such a position by studying the underlying causes thereof. In the light of the foregoing, this analysis aims to bridge between the political debate concerning the Autonomous weapons and the EU ambition in order to be a relevant international actor which is possible through harmonisation and mobilisation. This paper will firstly provide a background on the Common Security and Defence Policy followed by an analysis of the EU's ambitions in becoming stra-tegically autonomous. Following this we will analyze the European Procurement Directive and the European Defence Fund. Lastly, an analysis on the application of the former legal instruments to the case study of autonomous weapons. This topic is therefore relevant for Finabel member states as it concerns the innovation trend in army capabilities that interest all the members and also the extent to which the EU can participate in the development of such capabilities. Nevertheless, this paper comes out from the shared perception at Finabel that innovation is the key for a bright future in European army interoperability field. In ar-my, as well as business organisations, the goal is to design new and modern technologies which allow the army itself to perform critical and strategic tasks more effectively. For these reasons, this paper can surely help gain a broader prospective regarding the newest developments and innovations in the European army which, in turn, might come useful to actually comprehend in which way the future steps are meant to be taken.

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ABBREVIATIONS

AG	Advocate General
AI	Artificial Intelligence
AWS	Autonomous Weapons
CFSP	Common Foreign and Security Policy
ECJ	Court of Justice of the European Union
CSDP	Common Security and Defence Policy
DPD	Defence Procurement Directive
EDA	European Defence Agency
EDAD	European Defence Action Plan
EDEM	European Defence Equipment Market
EDF	European Defence Fund
EDIDP	European Defence Industrial Development Programme
EDTIB	European Defence and Technological Industrial Base
EEAS	European External Action Service
EU	European Union
EUGS	European Union Global Strategy
LAWS	Lethal Autonomous Weapons Systems
MS	Member States
NATO	North Atlantic Treaty Organization
PADR	Preparatory Action on Defence Research
PESCO	Permanent Structured Cooperation
R&D	Research and Development
R&T	Research and Technology
SME	Small and Medium Enterprises
TFEU	Treaty on the Functioning of the European Union

INTRODUCTION

Over the past decades, developing and improving the EU's policy in the field of security and defence has proven to be arduous.¹ Defence and security are traditionally considered as belonging to national sovereignty. Similarly, an EU industrial base is lacking or even non-existent as defence industries remain mostly nation-state focused.²

For more than thirty years, any military role of the European Union had been out of the question. Defence policy, against all odds, found its way into the Maastricht Treaty in 1993 and was later transposed in the Lisbon Treaty of 2009. Defence and security policy, according to the Treaty on the Functioning of the European Union (TFEU), is an integral part of the Common Foreign and Security Policy of the EU.³ However, the TFEU specifically states that the common security and defence policy of the Union does not prejudice the specific character of the security and defence policy of certain member states. Therefore, according to the TFEU, the EU does not have an exclusive or shared compe-

Bruno Angelet and Ioannis Vrailas, European Defence in the Wake of the Lisbon Treaty (Ghent: Academia Press, 2008), 5-7; Thierry Tardy, "Does European Defence Really Matter? Fortunes and Misfortunes of the Common Security and Defence Policy", European Security, no. 2 (March 2018): 119, [online] Available: <u>https://doi.org/10.1080/09662839.2018.1454434</u>, 2. Sophia Besch, EU's Institutional Framework Regarding Defence Matters (Luxembourg: Publications Office, 2020), 4.
 S. Consolidated version of the Treaty on the Functioning of the European Union (13 December 2007), 2008/C 115/01 [hereafter TFEU].



European Union Flags, Olga Shulman Lednichenko, 27 November 2011

tence in defence, but it is rather characterised by intergovernmental cooperation.

Nevertheless, the Commission implied all the available legal, economic, and political tools to persuade the member states (MS) to increase cooperation at EU level, especially regarding capability development. Its strenuous effort is to be acknowledged. The European Defence Procurement Directive 2009/81/EC (DPD) is an example as such, aiming to establish a competitive European single market for defence-related goods and services. However, its impact is limited because of the lack of coverage for R&D and due to the ease to bypass it under Article 13 and Article 346 TFEU.

To reconcile the need for R&D at the EU level with the traditionally nationally oriented nature of defence and security policy as prescribed by the Treaty,⁴ the European Defence Fund (EDF) was launched. It aims to fill the gaps of the DPD, tackle past deficiencies and increase European collaborative capability development. This way, the EDF has the potential to remedy some of the downfalls of the DPD.

The DPD and the EDF clearly indicate the Commission's ambition to advance to a common security and defence policy to respond to internal and external crises as a common voice. This ambition, as stated in the 2016 European Union Global Strategy (EUGS)⁵, is to reach "an appropriate level of strategic autonomy" to "ensure Europe's ability to safeguard security within and beyond its borders". However, it takes more than ambition

and political will to get there. The EDF especially follows the European Defence Action Plan rationale, which states that for Europe to deliver on these capability priorities, it must create the conditions for more defence cooperation to maximise the output and the efficiency of defence spending. This should go hand-in-hand with a strong, competitive, and innovative defence industrial base.⁶

This paper aims to see how legislative tools such as the DPD and EDF respond to the need to foster defence cooperation and development to attain strategic autonomy from the initial phase of the capability development cycle until its end. Chapter One will introduce the strategic autonomy concept, its history, and its relevance. This is to be followed by discussing the general aspects of the legislative initiatives, the DPD, and the EDF in Chapter Two. The third chapter will continue analysing the same legal instruments, but with a particular focus on Autonomous Weapons (AWS) as the case study. This allows for assessing the extent to which the EU initiatives in security and defence are sufficient for attaining strategic autonomy.

The analysis will ultimately conclude that, regardless of the improvement brought about by both initiatives, AWS are excluded from both the DPD and the EDF. Therefore their development and procurement does not lie within the scope of EU law but is rather dealt with at the national level. This leads to the conclusion that the Common Security and Defence Policy is a fastidious ream of EU law.

^{4.} Anna Bakker, Sven Biscop, Margriet Drent and Lennart Landman, Spearheading European Defence, (The Hague: The Clingendael Institute, 2016), 3.

^{5.} High Representative of the Union for Foreign Affairs and Security Policy, Vice-President of the European Commission, and Head of the European Defence Agency, "EU Global Strategy", European External Action Service, June 2016 (hereafter EUGS 2016).

^{6.} European Commission, "Communication from the Commission to the European Parliament, the European Council, the European Economic and Social Committee and the Committee of the Regions: European Defence Action Plan", 30 November 2016, COM(2016), 950 final.

The European Union's foreign policy affairs and security and defence matters have always been the areas in which progressing and advancing has proved to be a challenging task. Despite the integration achievements accomplished in other EU fields, such as the Single Market, the European Monetary Union, or the Common Agriculture Policy; the cultural, identity, historical, and geographical differences between the MS have prevented the consolidation of a common strategic culture. In this context, as the main international events of the last years have proved, the EU is still unable to carry out military operations outside its borders, not even when the stability of the European project itself is being called into question and challenged.7

A change in this trend arrived with the 2016 European Union Global Strategy (EUGS), where it was acknowledged that there was a need for the EU to promote and defend its interests, to gain more global in-

fluence, and to act more strategically to be less dependent on other global powers. From that moment on, strategic autonomy has become the main conceptual framework towards which those European institutions involved in the Common Foreign and Security Policy (CFSP) and the Common Security and Defence Policy (CSDP) head their debates and efforts. The aforementioned Strategy puts security and defence cooperation in the spotlight due to its fundamental and indispensable role in the evolution and survival of the EU. To this end, different initiatives were launched, and mechanisms installed to consolidate the EU as a defensive actor with a single defence market backed by a strong military industry, such as the Permanent Structured Cooperation (PESCO), the EDF, and the DPD. To understand the scope and dimension of this relatively new concept, this chapter will analyse its geopolitical and historical background to later focus on its precise meaning and how it is being implemented by the European institutions.

The Revival of the Common Security and Defence Policy

Over the past two decades, the CSDP witnessed significant developments, both politi-



A general view of participants during the Meeting of Experts on Lethal Autonomous Weapons, UN Photo / Jean-Marc Ferré, 14 April 2015.

7. European External Action Service, (2016), 'A Global Strategy for the European's Union Foreign and Security Policy', 3. [online] Available at: https://eeas.europa.eu/archives/docs/top_stories/pdl/eugs_review_web.pdf_ cally and institutionally. The Treaty of Lisbon introduced several changes regarding security and defence that enabled the strengthening of defence cooperation within the EU with the necessary flexibility and particular attention to collaborative defence research and capability development.8 The CSDP thus received a new status and a more solid and prominent position within the EU institutional framework. The most relevant modifications introduced by the Lisbon Treaty were the merger of the CFSP and the CSDP, the creation of the function High Representative of the Union for Foreign Affairs and Security Policy, the establishment of the European External Action Service (EEAS), and the adoption of a legal basis to create PESCO for military capability development.9 Particularly noteworthy in the new CDSP is the commitment enshrined in the TEU to support the progressive development of defence capabilities and research as well as to strengthen the industrial and technological base in the defence sector with the recently established European Defence Agency (EDA) as the key institution.¹⁰ In response to the traditional reluctance towards true EU defence integration, MS can join PESCO and the EDA voluntarily, both under the Council's authority. In the same vein, the unanimity requirement for CDSP decision-making by the Council is upheld except for several operational decisions regarding the EDA and PESCO.11 However, with the new tools and institutional design, the Treaty of Lisbon laid

the foundations for the EU to design and implement its security and defence.

In the first years after the Lisbon Treaty, not much progress was made in the EU's CDSP. However, over the years, several international events have taken place inside and outside EU borders with endless implications for European security and stability. The challenges these international events pose for the EU and its MS have led to a renewed willingness to develop and improve CDSP. In this context, the EU was able to use the possibilities the Lisbon Treaty provides, leading to more progress in European security and defence policy in the last five years than over the past decade.¹²

Especially the 2011 Arab Spring uprisings and the 2014 Crimea crisis proved the Union's lack of reaction capacity and how it is not ready to face conflicts of such magnitude. The inability to act in these cases basically stems from the aforementioned divergent interests that the MS hold in the regions in question, making it almost impossible to reach common positions or to implement meaningful decisions regarding security and defence affairs. ¹³

Other external and internal developments have also challenged and undermined the EU's position in the world, such as the 2016 UK's withdrawal from the EU and the Donald Trump administration. Even though Brexit means losing one of the continent's greatest military powers, it will also allow the EU to advance and progress in the security and defence field, as the UK has always blocked

^{8.} Bruno Angelet and Jannis Vrailas, European Defence in the Wake of the Lisbon Treaty, 20; see Art. 42(4), 45(2) and 46 (2)(6), Consolidated version of the Treaty on the European Union (26 October 2012), 2012/C326/13 (hereafter TEU).

Art. 42 TEU (CDSP); art. 17 TEU (HR FSP); art. 27(3) TEU (EEAS); art. 42(6) and 46 TEU (PESCO); Bruno Angelet and Ioannis Vrailas, European Defence in the Wake of the Lisbon Treaty. 18; Sophia Besch, EU's Institutional Framework Regarding Defence Matters, 5.

^{10.} Art. 42(3) and 45 TEU.

^{11.} Art. 42(4), art. 45(2) TEU; Bruno Angelet and Ioannis Vrailas, European Defence in the Wake of the Lisbon Treaty, 20.

^{12.} Bruno Oliveira Martins and Joedyn Mawdsley, "Sociotechnical Imaginaties of EU Defence: The Past and the Future in the European Defence Fund," Journal of Common Market Studies (2021): 1, [Indine]. Available at: http://dx.doi.org/10.1111/jcms.13197; Thierry Tardy, "Does European defence really matter? Fortunes and misfortunes of the Common Security and Defence Policy", 119-137; Sophia Besch, EUS Institutional Framework Regarding Defence Matters, 5.

^{13.} Fatma Zeynep Özurt, "Understanding the Continuity and Change in the European Union's Policies on the Mediterranean and the MENA Region after the Arab "Spring" Uprisings", Security Strategies Journal, Vol. 5, no. 29, (December 2019): 67.

any European initiative in this field given its alignment with the US and NATO. On the other side, the Donald Trump administration also challenged the stability of the EU, as he described NATO as obsolete and expressed the need to suppress it while contradictorily insisting on an increase in defence spending by the European allies. In addition to that, since the Obama administration, the US' foreign policy has shifted its focus from Europe to the Asia-Pacific area, given the rise of China as a global power, hence decreasing its commitment to European security and implicitly promoting European autonomy.¹⁴

These geopolitical developments and the CSDP momentum were materialised in the 2016 EUGS. This transcendent document sets out the challenges that the Union faces while analysing the European geopolitical landscape to determine which strategic lines of action the EU should adopt, always in accordance with the objectives and guiding principles established in the Treaties. In this sense, the EUGS detects a change in the international and European security environment and sets forth a strategy to cope with them. It remarks the need for the EU to become strategically autonomous and enhance its security and defence policy to grant the continuity of the European project. Indeed, suppose the EU wants to protect its interests while defending and conveying its fundamental values. In that case, strategic autonomy is necessary, as it implies the ability to respond to external threats

without relying on other actors.

The Concept of Strategic Autonomy

Strategic autonomy is not defined in the 2016 EUGS, but it is alluded to on different occasions. This means that there are multiple approaches to understanding strategic autonomy as a concept. For example, it could be understood as the EU's ability to face different threats without the current dependence on NATO. Still, it could also be understood as counting on the consolidation of a genuine defence industry. However, there are a series of common elements in all conceptions.¹⁵ Firstly, there is always a political component related to the more strategic aspects, especially in decision-making.¹⁶ Secondly, there is an operational factor constituted by the civil or military capabilities available to the Union.¹⁷ Lastly, there is an industrial component related to the production of the necessary equipment and materials.18

Therefore, strategic autonomy can be understood as the ability of the Union to confront those threats that endanger any aspect of its integrity by its means and capabilities, while also counting on an appropriate organisational structure and being supported by a true European defence industry.¹⁹ In this way, strategic autonomy is configured as the coexistence of the capacity for action, the capacity for organisation, and productive capacity, hereby constituting a Union able of maintaining se-

17. Ibid. 18. Ibid.

^{14.} Eric Wilms, Lotte De Jong, Katarina Kertysova, Frank Bekkers, and Karlijn Jans, European Defence Fund: Challenges and Opportunities for Dutch Participation (The Hague: Hague Centre for Strategic Studies, 2018), 3.

^{15.} Ronja Kempin and Barbara Kunz, (2017) 'France, Germany, and the Quest for European Strategic Autonomy', Notes du Cerfa 141, Ifri, 10. [online] Available at: https://www.ifri.org/ sites/default/files/atoms/files/ndc_141_kempin_kunz_france_germany_european_strategic_autonomy_dec_2017.pdf.

^{16.} Ibid. 17. Ibid.

^{19.} Dick Zandee, Bob Deen, Kimberley Kruijver, Adaja Stoetman, European Strategic Autonomy in Security and Defence, (The Hague: Clingendael Report, 2020), 8. [online] Available at: https://www.clingendael.org/sites/default/files/2020-12/Report_European_Strategic_Autonomy_December_2020.pdf.

curity within and outside its borders by itself, consolidating itself as a global actor providing global security. Nevertheless, the concept of strategic autonomy should have a more tangible and delimited meaning. The current abstraction of this notion allows the member states an extensive interpretation of it, which could lead to its application based on national interests.

The Materialisation of Strategic Autonomy

Strategic autonomy is a long-term goal, meaning that it is expected to be achieved in the next decades. As stated above, one of its main pillars is the consolidation of an effective European defence industry able to provide member states with their defence and military needs. At the same time, this would also reinforce another of the backbones of



Killer robots, Alyse & Remi, April 11, 2014

strategic autonomy, the military capabilities available for the Union. In any case, if the EU wants to become strategically autonomous, both member states and the institutions will have to make great investments in security and defence capabilities and implement deep political and institutional changes.

In this context, according to the latest Data Report from the EDA, the military spending of the member states of the EDA (all EU member states but Denmark) has been increasing since 2014. Before that, the main trend was a progressive decrease in the total defence expenditure of the 26 member states after the 2008 economic crisis. Here, national budgets were forced to implement restrictive economic measures, hence leaving defence and security in the background. According to the report, the total defence expenditure before the economic crisis was around \notin 180 billion, reaching its lowest point in 2014

with $\notin 156$ billion.²⁰ However, since then, MS' defence spending has been increasing, reaching $\notin 186$ billion in 2019.²¹

This tendency has also been reflected in the investments into defence equipment procurement and research and development (R&D). The report remarks how the procurement of new equipment has increased more exponentially than the defence expenditure in R&D, as, in 2019, 83.1% of defence invest-

^{20.} European Defence Agency, (2019), 'Defence Data 2018-2019: Key Findings and Analysis', 4. [online] Available at: https://cda.europa.cu/docs/default-source/brochures/2019-cda-defence-data-teport.pdf 21. lbid.

ments were spent by member states to procure new equipment, while funding for defence R&D stayed at 16.9%.²² Unfortunately, the procurement of defence equipment is being mostly handled by MS unilaterally, as shown in the 2019 report, which states that they spent only \in 7 billion on the acquisition of new equipment in collaboration with other member states, representing 20% of the total defence equipment procurement.²³ A similar inclination takes place in the field of defence R&D, where in 2019, MS only spent \in 141 million in cooperative R&D projects, the lowest level of collaborative spending ever recorded.²⁴

Considering this information, it is possible to see how security and defence are again becoming a priority for member states, as is reflected in their national defence expenditures. This has not translated into an increased collaboration and cooperation between them in joint defence equipment procurement and defence R&D projects which is problematic considering the EU's long-term goal to become strategically autonomous. However, the Union has indeed launched different frameworks and initiatives in which these deficiencies can be addressed.

At the political level, few advances have been achieved. Unanimity is still required for decisions concerning the CFSP and CSDP, meaning that all member states must agree to make a statement, a joint declaration, or take position in an international conflict. This usually leads to long negotiations, delays, and blockings. However, increasing calls for the implementation of qualified majority mechanisms would allow the EU to decrease its reaction time, increase its reaction capacity, and act more strategically.

Regarding the aforementioned consolidation of the European defence industry and defence market, the most prominent initiative in this field is the EDF, which, together with the DPD that will be introduced later, constitutes a new framework to foster the collaborative procurement of defence capabilities by MS. Therefore, this is related to the industrial component of the concept of strategic autonomy stated above. Nowadays, the European defence industry generates about €100,000 million annually and approximately 1.4 million jobs.²⁵ However, this sector is fragmented and uncoordinated, with duplications in both production and research processes, making it a highly inefficient industry. It is estimated that the lack of cooperation between MS in the field of security and defence costs between € 10 and € 25 billion yearly.²⁶ To minimise this trend, the EDF was launched in 2017 to coordinate, complement, and expand national investments in defence research, the development of prototypes, and the acquisition of military technology and equipment.

Interim Conclusion

Considering all of the above, the debate on strategic autonomy reflects the evolution of the CSDP itself and how the Union's needs increasingly require joint and shared action by the MS. Therefore, strategic autonomy

26. European Commission, (2019), 'The European Defence Fund: Stepping up the EU's Role as a Security and Defence Provider'. [online] Available at: https://ec.europa.eu/docsroom/ documents/34509/attachments/1/translations/en/renditions/pdf

^{22.} Ibid.

^{23.} Ibid., 12

^{24.} Ibid., 14.

^{25.} Arturo Alfonso Meiriño, 'La Financiación de la Defensa en la UE', Revista Española de Defensa, (February 2017): 52. [online] Available at: https://www.defensa.gob.es/Galerias/gabinete/red/2017/red-336-financiacion-ue.pdf

implies a change in the paradigms of the CSDP and the Union itself: it is the goal to be achieved and the element around which the CSDP revolves.

As seen throughout this chapter, the European institutions are focusing their efforts on consolidating the EU as a truly global security actor. Here, strategic autonomy emerges as the path towards achieving this ambitious goal. One of the main pillars is establishing a competent defence industry able to provide MS with adequate defence and military capabilities.

The EDF stands out as the most ambitious initiative in this field. It is the first time that

the Union will have a dedicated programme to support defence industrial cooperation.²⁷ At the same time, this new cooperative framework aims to reinforce one of the main weaknesses in the defence industry sector, namely, the lack of collaborative defence procurement between MS. In this context, it must also be highlighted that the DPD constitutes the legal tool that complements the institutional efforts in increasing the cooperative defence procurement between MS. The EU is setting up a legal and institutional network in security and defence to progressively achieve the so-pursued strategic autonomy and become a credible global actor in the next decades.

CHAPTER 2. EU INITIATIVES CONTRIBUTING TO THE EU'S STRATEGIC AUTONOMY

DPD 2009/81

The overwhelming success of the internal market has induced prices to lower and has significantly increased trade between MS. Therefore, it is no surprise that the European Commission wants to do the same within the EU defence industry. So far, defence and security issues have predominantly been governed nationally, including the research, development, and procurement of defence material and arms. In particular, EU MS tend to exempt procurement of military equipment from EU procurement rules.²⁸ However, they have recurrently acknowledged that they will need to outsource materials and arms and defence services. This is where the DPD comes into effect. The most recent version of this Directive came about in 2009, amending the existing one from 2004. The Directive provides a legal framework on the rules for procuring war material, arms, and munitions for defence purposes. Within the scope of the Directive, there is also the procurement of sensitive equipment and services rendered for security purposes. In other words, the Directive regulates defence procurement contracts. The Directive was established using the procedure outlined in Article 251 of the Treaty establishing the European Community, com-

^{27.} European Commission, (2020), 'Commission welcomes the political agreement on the European Defence Fund', Press Release. [online] Available at: https://ec.europa.eu/commission/presscomer/detail/en/IP_20_2319

^{28.} European Commission, "Report from the Commission to the European Parliament and the Council on the Implementation of Directive 2009/81/EC on Public Procurement in the Fields of Defence and Security, to Comply with Article 73(2) of that Directive", 30 November 2011, COM(2016), 762 final, 2.

bined with Article 47(2), 55, and 95. These legal bases fall under the internal market policy area.²⁹ However, they are also complementary to the CSDP and CFSP policies. Indeed, the defence industry has been mentioned in multiple CSDP and CFSP annual reports due to the crucial role in 'strengthening the EU's strategic autonomy'.³⁰ These reports also illustrate the importance that the Directive can have in improving efficiency by advocating for a fully integrated defence market.³¹

The framework proposed by the Directive is an attempt of the EU to establish an EU Defence Equipment Market (EDEM) and strengthen the European Defence and Technological Industrial Base (EDTIB).³² In response to the Council Common Position 2008/944/CFSP,

the European Parliament has also stressed the importance of strengthening the ED-TIB, as it will aid MS in further improving their security capabilities.33 Therefore, the main objective of the Directive is to ensure that defence procurement is governed by EU legislation that promotes the involvement of Small and Medium Sized Enterprises (SME) and is based on transparency, competition, and equal treatment.³⁴ In other words, the EU is trying to create an environment similar to that of the internal market rules, so that defence companies from all MS have easy access to each other's defence markets. This way, the EU would be creating the optimal conditions for greater competition within the European defence market while simultaneously ensuring that MS' national security interests and concerns are protected when needed. A second objective of the DPD is to complement the objectives under the CDSP, notably, to strengthen MS defence capabilities and assist the EU in becoming strategically autonomous.

The EU has developed many defence novelties in the past years, including the most



Secretary General speaks on transatlantic relations and European defence in Brussels, NATO, November 18, 2016

European Parliament and Council, Directive 2009/81/EC of 13 July 2009 on the Coordination of Procedures for the Award of Certain Works Contracts, Supply Contracts and Service Contracts by Contracting Authorities or Entities in the Fields of Defence and Security, and Amending Directives 2004/17/EC and 2004/18/EC", OJEU L216/76.
 European Parliament, Committee on Internal Market and Consumer Protection, "EU Defence Package: Defence Procurement and Intra-Community Transfers Directives: European Implementation Assessment", October 2020, EPRS, PE 654.171 (hereafter EU Defence Package 2020).

^{31.} Ibid., 32.

^{32.} European Parliament, "Report on the Implementation of Directive 2009/81/EC, Concerning Procurement in the Fields of Defence and Security, and of Directive 2009/43/EC, Concerning the Transfer of Defence-Related Products", 8 March 2021, A9-0025/2021.

^{33.} EU Defence Package, 2020.

^{34.} European Commission, "Report on the Implementation of Directive 2009/81/EC on Public Procurement in the Fields of Defence and Security (...)", 30 November 2011, 2.

recent EDF. As stated above, the purpose of these legislative tools is to increase the EU's strategic autonomy and security capabilities. Notably, these defence tools exclude AWS from their scope despite being rapidly developed in foreign states. It follows that if the EU refrains from regulating and promoting AWS, it somewhat contradicts its aim of becoming strategically autonomous and strengthening its global role.

Directive Innovations

Since the Directive deals with sensitive contracts, thus including sensitive information, several safeguards have been put into place to tender for this. These include the security of classified information, for which the authorities may require such information to include specific commitments or sufficient information on certain elements of the contract.³⁵ Furthermore, the security of supply is also closely regulated by the Directive, particularly, the timing of the delivery of goods and services together with conformity with any other contractual specificity.³⁶ The Directive has also created a further layer of regulation regarding subcontracting, as it defines specific rules for the former. Indeed, it aims to promote competition along the supply chain, thus including smaller companies as well.

A further innovation of the DPD is the regulation of offsets. This will allow MS to focus on the price and quality of the products and services, while disregarding any advantage



EuroMALE RPAS mockup ILA-2018, Boevaya mashina, April 25, 2018

Art. 22, European Parliament and Council Directive 2009/81/EC.
 Ibid., art. 23.

that enterprises could have based on offset packages.³⁷ Offsets typically are additions included in the defence contracts, more important than the delivery of the equipment and therefore irrelevant towards the price and quality of the product.³⁸ Indeed, the European Commission believes that offsets should be eliminated as they hinder competition. Consequently, the Commission declared that it would make a case-by-case assessment of the use of offsets justified by Article 346 TFEU.³⁹

Adverse Responses: Circumventing the Directive and Lacking Implementation

According to the European Defence Agency's data from 2014 until 2019, the Defence Equipment Procurement Expenditure has been significantly rising.⁴⁰ On the other hand, in 2013, the lowest level of European Collaborative Equipment Procurement was recorded.⁴¹ A few years later, in 2017, there was a record high expenditure in European Collaborative Equipment Procurement. The most recent data have shown that this level has again dropped by 6%.42 Hence, there has been a general increase in MS Defence Equipment Procurement. However, Cooperative Equipment Procurement rates remain low. If MS were more cooperative with each other, prices would be lower for the procurement of weapons and the research would be more efficient. These figures have also shown that due to the sensitivity of military equipment procurement, MS have a preference to do so

without cooperation from other MS.

The DPD could be extremely beneficial for the defence industry. Indeed, if MS were to fully comply with the Directive, it would be a catalyst for massive advances in research and development as well as greatly stimulate the industry and cross border trade. However, the Directive has faced adverse responses as a number of MS remain strong advocates of national defence-industrial protectionism.43 This concept entails that MS wishes to keep sovereign control on defence issues and procure and produce within their national boundaries. The idea of national protectionism is facilitated by Article 346 TFEU which acts as a safeguard for national interests as it allows sensitive information concerning national security issues to remain confidential. Furthermore, the Directive itself contains exemptions that make it possible for MS to keep their defence industries outside of EU law. Besides, the possibilities to circumvent the Directive as well as its implementation by MS has been lacking. These three issues regarding the directive prompted by protectionism will be briefly discussed below.

Circumventing the Directive through Article 346 TFEU

With Article 346 TFEU, MS are allowed to circumvent and undermine the Directive.

^{37.} Jay Edwards, (2011), 'The EU Defence and Security Procurement Directive: A Step Towards Affordability?', International Security Programme Paper, Chatham House. [online] Available at: https://www.chathamhouse.org/sites/default/files/0811pp edwards.pdf

^{38.} Ibid., 10. 39. Ibid.

^{40.} European Defence Agency, "Defence data 2018 - 2019", (Belgium, EDA, 2021) ISBN No. 978-92-95075-53-5, [online] Available at: https://eda.europa.eu/docs/default-source/brochures/2019-eda-defence-data-report.pdf.

^{41.} Ibid., 12.

^{42.} Ibid.

^{43.} Jay Edwards, (2011), 'The EU Defence and Security Procurement Directive: A Step Towards Affordability?' .

Indeed, this Article grants MS the power to concur Defence Agreements without being subject to the procurement rules, on the grounds that these contracts concern national security, or in other words, the "protection of the essential interests of its security which are connected to the production of trade or arms, munitions, and war material."44 However, in an attempt to reduce the application of the exception under Article 346 TFEU, the European Commission has emphasised MS duty to individually assess whether circumventing the procurement rules are justified in that particular defence contract.45 This way, the Directive can tackle protectionism and simultaneously create a market for the defence industry at the EU level, promoting industrial competition, lowering prices, and ensuring compliance with the internal market rules.

Exemptions Provided by the Directive Itself

Furthermore, MS may also avoid applying the 2009/81/EC Directive by seeking defence and supply contracts that remain under the numerical thresholds established in Article 8 of the Directive. These thresholds entail that supply and service contracts under the value of \in 412.000 do not qualify under the Procurement Directive. Work contracts that fall under the value of \in 5.150.000 also are not obligated to comply with the Procurement Directive. Thus, contracts under these amounts are not required to follow the rules and procedures under the DPD, providing MS another avenue to circumvent the Directive. Lastly, Article 13(c) of the Directive includes a list of specific exceptions to the Directive. Notably, one of these exceptions is the fact that cooperative programmes that have an R&D element and are conducted by at least two MS are excluded from the applicability of the Directive.⁴⁶

Issues with the Implementation and Progress of the Directive

The transposition of the Directive 2009/81/ EC was on the 21st of August 2011. However, such transposition faced adversity by MS due to the sentiment of National Defence Protectionism. Indeed, this was one of the biggest issues concerning the correct implementation and progress of the Directive. MS tend to protect national interests concerning either security or production of defence equipment. However, such implementation is also limited by the Directives self-imposing thresholds that allow the MS to circumvent the former. These thresholds include, for example, defence contracts under the established values in Article 8 of the Directive. Furthermore, MS may consistently attempt to qualify a defence contract as 'sensitive information' concerning national security and therefore invoke the exemption in Article 346 TFEU. Thus, a large portion of high-profile and high-value defence contracts are handled outside the Directive.

Evidently, the correct implementation of the Directive by all MS is paramount for the EU to ensure that its defence market is distinct. In fact, the Commission intended for the Di-

^{44.} Art. 346 TFEU.

^{45.} Commission of the European Communities, "Interpretative communication on the application of Article 296 of the Treaty in the field of defence procurement", 7 December 2006, COM(2006), 779 final.

^{46.} Orsolya Tokaji-Nagy and Sead Kadic, Directive 2009/81/EC on EU Defence and Security Procurement: A major step towards creating a truly EU Defence Equipment Market To what extent has Directive 2009/81/EC been transposed into Hungarian and German national laws? A comparative Analysis'. (Maastricht: University of Maastricht, 2012), [online] Available at: <u>file//Users/file.tobs/Townloads/fookii.pdf</u>.

rective to instil mutual trust, promote cooperation, and illustrate shared security and defence interests between MS. However, if MS continue to have polarised views on the Directive, the EU can potentially be left behind other emerging global actors and no longer be considered a leading power.⁴⁷

Partial Success of the Directive

According to the European Commission's 2016 evaluation of the objectives and principles of the DPD, they have only been partially achieved, with certain factors hindering the Directive from reaching its full potential. In fact, despite the large rise in defence contracts that have been signed under the supervision and application of the DPD, this number is still disproportionately represented regarding the MS who apply it. Therefore, there is still some inequality in regards to MS who have complied fully with the directive and others who have regularly circumvented the former and undermined the values promoted by the Directive, which include competition, transparency, and equal treatment within the Defence Market.⁴⁸ Furthermore, this partial success of the 2019/81/EC Directive, to a certain extent, owes itself to the lack of specificity in regards to the application of the Directive in government vis-à-vis government defence deals, together with the procurement of defence equipment and services by a government agency or subcontracts performed by the former. Additionally, the Directive failed to bring together the necessary level of SME participation.⁴⁹ A study conducted by Chatham House concluded that the success or failure of the Directive would depend largely on its ability to add value by making defence-industrial manufacturing more efficient and affordable.

Absence of Autonomous Weapons Mentioned in the Procurement Directive

As is evident from the analysis above, MS have shown extremely diverging opinions on regulating the defence market. They also show the same tone and opinion towards AWS and therefore struggle to reach a consensus to regulate these. For example, Austria has even called for a ban on AWS.⁵⁰ However, technological advancements in AWS are rapidly outpacing existent international law and regulation. This is a major reason why research and development of AWS are excluded from the Procurement Directive. Although, one can argue that the EU remedied this by including the former within the EDF, which will be analysed in the section below.

Indeed, both the DPD and the EDF were part of the Commission's plan to renovate the industrial aspects of defence and, therefore, crucial for the 216 European Defence Action Plan.⁵¹ The EDF was actually developed to stimulate MS to procure defence equipment and therefore make significant advances in the European Defence Industry as well as promote industrial innovation. In the following section, we will analyse the EDF and its novelty regarding the R&D of AWS.

^{47.} Ibid.

^{48.} EU Defence Package, 2020.

^{49.} European Commission, Report on the Implementation of Directive 2009/81/EC on Public Procurement in the Fields of Defence and Security (...), 8 March 2021.

^{50.} Justin Haner and Denise Garcia, (2019), 'The Artificial Intelligence Arms Race: Trends and World Leaders in Autonomous Weapons Development', Online Journal. [online] Available at: https://onlinelibrary.wiley.com/doi/full/10.1111/1758-5899.12713#epol12713-bib-0006

^{51.} Francisco Veiga, (2020), 'Industry Day: 2020: Military Attachés Portugal: European Defence Fund'. [online] Available at: <u>https://www.iddportugal.pt/wp-content/uploads/2020/01/</u> COR-Francisco-Veiga-European-Defence-Fund-Industry-Day-2020.pdf

EDF

The European Union does not carry much weight as a military power, mainly because its defence sector is too fragmented. Indeed, 80% of procurement and 90% of research and technology (hereafter R&T) is spent at the national level, and there are six times as many different weapons systems in the EU as in the United States, with drastic economic consequences.52 The lack of coordination has also led to shortcomings in the transportation and support of strategically deployed forces, the refuelling of airborne combat aircraft, and tactical intelligence and surveillance of ground operations. The institutional changes regarding security and defence implemented with the Lisbon Treaty laid the foundation for new EU initiatives that would tackle the fragmented nature of the EU's defence R&D, defence market, and industrial basis.53 The EDF and PESCO are two of those initiatives aimed at strengthening EU defence cooperation and the EU's military capabilities through collaborative defence research and capability development.⁵⁴ Joint investments, as well as R&D of products and technologies, would promote and increase interoperability of the MS militaries and could lead to high

economic growth and a significant potential dual-use.55 This way, the EDF and PESCO are two initiatives that complement previous initiatives, such as the Procurement Directive, which had only partial success in achieving a single defence market backed by an industrial base. The following chapter will elaborate on the establishment of the EDF and its main characteristics.

The Establishment of the FDF in Context In the first years after the Lisbon Treaty, not much progress was made in the EU's CDSP. However, since 2016, the EU has increased its commitment to CSDP.56 Noteworthy developments are the EU Global Strategy, its follow-up roadmap, and the Implementation Plan on Security and Defence, all published by the High Representative of Foreign Affairs and Security Policy and later endorsed by the Council.⁵⁷ These policy documents acknowledge the need and aim to increase joint capability development, collaborative procurement, and joint R&T.58 This way, they foreshadow, implicitly or explicitly, the creation of the EDF as a tool for this purpose. In this context, President of the Commission Juncker's state of the union in September 2016 acknowledged the lack of cooperation in defence matters and its financial conse-

[online] Available ar: <u>https://ec.europa.eu/docsroom/documents/23605.</u>
53. Arnout Molenaar, "Unlocking European Defence: In Search of the Long Overdue Paradigm Shift", Instituto Affari Internazionali, 2021, 14-15; Bruno Angelet and Ioannis Vrailas, European Defence in the Wake of the Lisbon Treaty. 20; see art. 42(4), 45(2) and 46 (2)-(6) TEU.
54. Bruno Angelet and Ioannis Vrailas, European Defence in the Wake of the Lisbon Treaty, 20; see art. 42(4), 45(2) and 46 (2)-(6) TEU.
55. European Parliament, "European Parliament Resolution of 20 January 2021 on Artificial Intelligence: Questions of Interpretation and Application of International Law in so Far as the Elis Affected in the Areas of Civil and Military Uses and of State Authority Outside the Scope of Criminal justice", 21 January 2021, (2022013(INI)), P9_TA(2021)0009.
56. Bruno Oliveira Martins and Jocelyn Mawdsley, "Sociotechnical Imaginaries of EU Defence: The Past and the Future in the European Defence Fund," 1; Thierry Tardy, "Does European defence really matter? Fortunes of the Union for Foreign Affairs and Security Policy, Vice-President of the European Commission, and Head of the European Defence Panters, 5.
57. EUGS 2016; High Representative of the Union for Foreign Affairs and Security Policy, Vice-President of the European Commission, and Head of the European Defence Agency, "Roadmap on the follow-up to the EU Global Strategy", European External Action Service, September 2016 (hereafter Roadmap 2016); High Representative of the Union for Foreign Affairs and Security Policy, Vice-President of the Read policy, and Palence Pance Affairs and Security Policy, Vice-President of the European Commission, and Head of the European Defence Agency, "Implementation Plan on Security and Defence", 14 November 2016, 14392/16 (hereafter Implementation Plan 2016); European Council, "Council conclusions on implementing the EU Global Strategy in the area of Security and Defence", 14 November 2016, 2016, 14149/16.

^{52.} Anthony Teasdale (ed.), Europe's Two Trillion Euro Divided. Mapping the Cost of Non-Europe, 2019-24, (Brussels: EPRS Studies, European Parliament, 2019), 220, [online] Available e=EPRS_STU(2019)631745; European Commission, "Communication from the Commission to the European at: https:// Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Launching the European Defence Fund", Communication of 7 June 2017, 3. [online] Available at: https://ec.eu

^{58.} EUGS 2016, 19-20, 11 and 45-46; Roadmap 2016, 11; Implementation Plan 2016, 17, 20-29; European Council, "Council conclusions on implementing the EU Global Strategy in the area of Security and Defence", 9-13.

quences.⁵⁹ He called for a strong European defence with a strong industrial base and announced that the Commission would shortly propose the establishment of the EDF to that end.⁶⁰ Consequently, in November 2016, the EU Commission adopted the European Defence Action Plan (EDAP), which includes the plan to set up the EDF. The EDAP acknowledged that the European Defence Market is fragmented and has insufficient industrial collaboration.⁶¹ Similarly to the DPD, the Commission stresses the need to tackle these deficiencies by improving the efficiency of defence spending and by contributing to

the progressive realisation of a single, strong defence market backed by a competitive and innovative defence industrial base.⁶² The EDAP is thus closely linked to the EUGS and the Implementation Plan on Security and Defence and supports their ambition to improve the entire operation of defence capability development, from R&D to the production of the capability and its procurement.⁶³ In this vein, the Commission refers to previous efforts aimed at the progressive creation of a European defence market, such as the Procurement Directive, but also points towards the negative trend in collaborative R&T, ca-



Ten years of the Lisbon Treaty and the Charter of Fundamental Rights, European Parliament, December 18, 2019

61. European Commission, "Communication from the Commission to the European Parliament, the European Council, the European Economic and Social Committee and the Committee of the Regions European Defence Action Plan", 30 November 2016, COM/2016/0, 950 final, 2-3. 62. Ibid, 2-3.

63. Ibid., 3.

^{59.} President of the European Commission, State of the Union 2016, European Commission, September 2016, 19, [online] Available at: https://op.europa.eu/nl/publication-detail/-/publication/0ff4ff6-9a81-11e6-9bca-01aa75ed71a1_

^{60.} Ibid.

pability development, and procurement.64 In response to this trend, the EDAP and its three pillars structure was adopted, whereby every pillar targets the different aspects of the Capability Development Cycle: launching the EDF, fostering investments in defence supply chains, and reinforcing the single market for defence.⁶⁵ All three pillars share and contribute to the purpose of the DPD to create a competitive, transparent, and just single defence market and, in particular, to increase European collaborative procurement.⁶⁶ The next section will elaborate on the Commission's proposal to establish the EDF as part of the EDAP, focusing on collaborative procurement.

The EDF in the EDAP and the EDF Pilot Projects

The EDAP mentions that the EDF will have two complementary financing structures, or windows, namely a research window and a capability window, which will be launched in a phased manner.⁶⁷ These windows complement each other, but have a distinct legal nature and separate sources of financing.68

The Research Window

The research window focuses on funding collaborative research in defence technologies and products.⁶⁹ Because national expenditure for defence R&T had been in decline the years before the EDAP, the Commission wants to see an increase of investments in defence research both at the national and the EU level.⁷⁰ The research window of the EDF aims to mobilise EU funds for this purpose. This way, the research window does not directly contribute to collaborative procurement. However, by financially supporting the first step in the Joint Capability Development Cycle, the research window incentivises defence cooperation and contributes to the European single defence market and consequently might positively affect collaborative procurement. Still, the funding is considered complementary to national defence research efforts and seeks to catalyse national defence research.71

More concretely, the Commission planned to launch the research window of the EDF in two phases. Firstly, from 2017 until 2019, the Preparatory Action on Defence Research (PADR) took place as a pilot project for the research window, with a budget of € 90 million.72 After PADR, the research window would take the form of a European defence research programme within the multiannual framework after 2020.73 Thus both PADR and its successor will be funded entirely by the EU budget. The actual governance and implementation of the programme, as well as the structure of the dialogue between the stakeholders, Commission, MS and industry, was left open for discussion.74

In 2017, the PADR was launched by publishing the first call for research related to unmanned systems, technology, and products in

^{64.} Ibid., 4-5. 65. Ibid., 5.

^{66.} Ibid., 5. 67. Ibid., 5.

^{68.} Ibid.

^{69.} Ibid., 5 and 7. 70. Ibid., 7.

^{71.} Ibid.

^{72.} Ibid. 73. Ibid.

^{74.} Ibid 8.

the context of Force Protection and Soldier Systems and Strategic Technology Foresight.⁷⁵ Only consortia consisting of legal entities from at least three different participating countries could take part.⁷⁶ Simultaneously, the Commission entrusted the governance of the PADR to the EDA by means of a delegation agreement.77 In 2018 and 2019, the Commission and EDA launched other calls for defence research under the auspices of the PADR under the same conditions. These topics were distinctively European, such as reconfigurable system-on-a-chip for defence purposes, high power laser effector, strategic technological foresight for 2018,78 and Electromagnetic Spectrum Dominance, Future Disruptive and Defence Technologies and Interoperability standards for military unmanned systems for 2019).79 In total, 18 projects were started whereby over 200 actors in 22 EU MS benefited from the PADR funds.⁸⁰

The Capability Window

The capability window aims at supporting collaborative development of defence capabilities, i.e. military assets such as material equipment and technologies.⁸¹ It aims to counter the lack of coordination in capability

development and the financial and practical inefficiencies that come with it.⁸² Namely, the capability window creates joint financing of the development and procurement of defence capabilities.⁸³ Hence, it directly supports collaborative procurement and the European single defence market. This window is funded by the EU budget and the national contributions of MS willing to participate.⁸⁴ While the specifics are left to be developed in the future, the EDAP proposes a double-layered structure of the capability window.

On the one hand, there is an umbrella structure, open for all MS, in the form of a framework consisting of common legal and financial tools that would support the MS.⁸⁵ On the other hand, there are specific projects in capability development where MS can participate at will. Each project would be governed by the participating MS within the boundaries set by the umbrella structure.⁸⁶

The specifics and practicalities of the capability window were left unattended in the EDAP. In 2018, the European Defence Industrial Development Programme (EDIDP) was introduced by means of a regulation, hence launching the capability window of the EDF.⁸⁷ The EDIDP intended to serve as the pilot project for the capability window of the

^{75.} European Commission, "Appendix 1 to annex 1 to Commission Decision on the financing of the 'Preparatory action on Defence research' and the use of unit costs for the year 2017", 11 April 2017, C(2017), 2262 final; European Commission, "Commission Decision of 11.4.2017 on the financing of the 'Preparatory action on Defence research' and the use of unit costs for the year 2017", 11 April 2017, C(2017), 2262 final.

^{76.} Frédéric Mauro, Edouard Simon, Ana Isabel Xavier, Review of the Preparatory Action on Defence Research (PADR) and European Defence Industrial Development Programme (EDIDP): Lessons For the Implementation of the European Defence Fund (EDF) (European Union: Brussels, 2021), 7.

^{77.} Delegation Agreement Between the European Union Represented by the European Commission and the European Defence Agency on the Implementation of a Preparatory Action on Defence Research, 31 May 2017, [online] Available at: https://cda.europa.eu/what.ewe.do/all.activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/activites/ac

^{78.} European Commission, "Commission Decision of 9.3.2018 on the Adoption of the Work Programme for 2018 and on the Financing of the 'Preparatory action on Defence research', and Authorising the Use of Unit Costs Under the Preparatory Action", 9 March 2018, (2018) 1383 final. "9. European Commission, "Commission Decision of 19.3.2019 on the Financing of the 'Preparatory Action on Defence Research' and the Adoption of the Work Programme for 2019",

¹⁹ March 2019, C(2019), 1873 final.

^{80.} Dick Zandee, European Defence Fund: The Real Test is yet to Come, (The Hague: Clingendael Netherlands Institute of International Relations, 2021), 2; Frédéric Mauro, et al., Review of the Preparatory Action on Defence Research (PADR) and European Defence Industrial Development Programme (EDIDP), 7.

^{81.} Ibid., 6. 82. Ibid., 9.

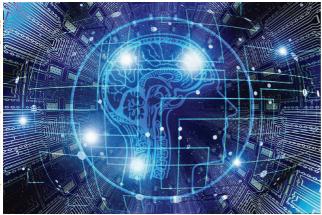
^{82.} Ibid., 83. Ibid.

^{84.} Ibid., 6 and 10.

^{85.} Ibid., 9-10.

^{86.} Ibid., 10.

^{87.} Frédéric Mauro, et al., Review of the Preparatory Action on Defence Research (PADR) and European Defence Industrial Development Programme (EDIDP), 9.



EuroMALE RPAS mockup ILA-2018, Boevaya mashina, April 25, 2018

EDF running from 2019 until 2020 with a budget of \in 500 million.⁸⁸ Under the EDIDP, 21 calls were launched in 2019 and 2020.⁸⁹ As with PADR, consortia who want to apply for funding under EDIDP have to be composed of at least three entities from three different MS.⁹⁰ In total, 16 projects received funding under the EDIDP, involving 166 entities from 24 MS.

The Actual EDF

In June 2018, the Commission proposed the regulation which sets up the EDF within the 2021-2027 multiannual financial framework, building on the experiences gained from

PADR and EDIDP.91 In December 2020, the Council reached a provisional political agreement with the European Parliament on the regulation establishing the EDF within the context of the Multiannual Financial Framework for 2021-2027.92 The Commission originally proposed to allocate € 13 billion to the EDF. of which 4,1 billion would be spent on defence research and 8,9 billion on capability development.93 This budget

was cut during the negotiations in the Council, now only \in 7,9 billion will be dedicated to the EDF, of which 2,6 billion will be allocated for the research window and 5,3 billion for the capability window.⁹⁴

Legal Basis

The EDF proposal explicitly reaffirms the EDF's aim to foster the competitiveness and innovativeness of the Union's defence, technological, and industrial base by supporting collaborative defence-oriented R&D activities.⁹⁵ In this vein, the Commission invokes Article 173 of the TFEU as a legal basis that allows for legislative action to encourage the

^{88.} European Commission, "Commission Implementing Decision of 19.3.2019 on the financing of the European Defence Industrial Development Programme and the adoption of the work programme for the years 2019 and 2020", 19 March 2019, (20219), 2205 fnal; European Parliament and European Council, "Regulation (EU) 2018/1092 of the European Parliament and of the Council of 18 July 2018 Establishing the European Defence Industrial Development Programme Aiming at Supporting the Competitiveness and Innovation Capacity of the Union's Defence Industry", 7 August 2018, OJEU L200/30.

⁸⁹ Frédéric Mauro, et al., Review of the Preparatory Action on Defence Research (PADR) and European Defence Industrial Development Programme (EDIDP), 9-10. 90. Art. 6(2), Regulation 2018/1092.

^{91.} European Commission, "Proposal for a Regulation of the European Parliament and the Council establishing the European Defence Fund", 13 June 2018, COM/2018/476 final - 2018/0254 (COD), (hereafter EDF Proposal).

^{92.} European Council (14 December 2020), Provisional agreement reached on setting-up the European Defence Fund, Press Release, https://www.consilium.europa.eu/en/press/press-re-leases/2020/12/14/provisional-agreement-reached-on-setting-up-the-european-defence-fund/

^{93.} EDF Proposal, 24 (art. 4); Frédéric Mauro, et al., Review of the Preparatory Action on Defence Research (PADR) and European Defence Industrial Development Programme (EDIDP), 14.

^{94.} European Council (14 December 2020), Provisional agreement reached on setting-up the European Defence Fund, Press Release, https://www.consilium.europa.eu/en/press/press-re-leases/2020/12/14/provisional-agreement-reached-on-setting-up-the-european-defence-fund/;

^{95.} EDF Proposal, 2 and 22.

development of and cooperation between undertakings and foster better exploitation of the industrial potential of innovation policies, research, and technological development. Since the EDF also supports joint defence research, the Commission uses Article 182 TFEU as an additional basis for the proposal.

The Ratio Legis of the EDF

The EDF was launched by an initiative of the European Commission to support collaborative R&D defence and promote an innovative and competitive industrial base in the defence sector. It aims to contribute to and strengthen the competitiveness and efficiency of the defence industry at the European level. Thus, for the EDF to intervene in the financing of projects, MS must demonstrate their intention to jointly procure the final product or to obtain the benefits of the technology, as reflected in the EDF Proposal. This can be done in particular through cross-border procurement. Furthermore, to ensure the competitiveness and innovation of the European defence industry, actions must be sustainable both in the medium and the long term.

One of the main factors affecting the competitiveness and innovative capacity of defence programmes is their cost. Indeed, the defence sector is experiencing an increase in equipment expenses, which in turn is resulting in higher R&D costs. The EDF aims to alleviate this cost escalation by shifting the burden of these costs to the EU level with the underlying objective of increasing cooperation between MS in the joint research and development of new defence technologies.

In the defence sector, it is not possible to fol-

low conventional rules regarding more traditional commercial markets. Here, demand comes from MS and associated countries, and they are the ones who control the procurement of defence-related products and technologies. Thus, it is often the MS and associated countries that are paying the full R&D costs. To encourage MS to collaborate on defence, the EDF aims to cover all costs before the prototyping phase.

This phase is crucial, in that it consolidates the investments made by the MS (and associated countries) and begins the process of acquiring future products and technologies. During this phase, MS agree on the necessary commitments, including cost allocation and ownership issues. To ensure the credibility of their commitment, the EDF should not exceed 20% of the eligible costs. EDF provides funding for collaborative R&T and R&D, but this funding is more important when it is a PESCO project. It goes to 20% and increases to 30% in the framework of PESCO projects. Once the prototype phase is over, the EDF should contribute up to 80% of the costs. At this stage, the actions are close to the finalisation of the product and technology and can generate substantial costs.

The objective of scaling up defence R&T investment is to maintain or acquire key technologies and industrial capabilities. This capability-based approach, which is based on priorities set by the MS, requires their close involvement throughout the process. It is indeed vital to solve European military shortfalls by investing in modern capability assets.

Rules on Funding

More practically, the EDF Proposal sets forth the budget allocation and prescribes the rules for obtaining funding under the EDF.96 In particular, the EDF Proposal identifies the conditions under which entities and their projects are eligible for funding.97 Firstly, only entities established in the EU or an associated country, who have their executive management structures in the Union or an associated country and are not controlled by a non-associated third country or by a non-associated third country entity, are eligible for funding.⁹⁸ However, by derogation, an entity who is under the control of a non-associated third country or entity can still be eligible for funding under several conditions.⁹⁹ Similarly, the EDF requires that all infrastructure, facilities, assets, and resources used in actions financed under the EDF shall be located on the territory of the Union or associated countries with the same derogation to this requirement as in the eligibility of the entities.¹⁰⁰ Secondly, the EDF Proposal stipulates the objectives to which the projects requesting funding need to be related.¹⁰¹ It also requires that the projects must involve three legal entities established in at least three different MS to be eligible for funding.¹⁰² Hence, this requirement limits the scope of the EDF to collaborative projects with the involvement of at least three MS. These eligibility rules reflect the EDF's emphasis on supporting collaborative R&D done within the auspices of the EU for the sake of creating more European defence cooperation at all levels of the Capability Development Cycle.

Interim Conclusion

The foregoing overview of the EDF and the DPD reveal that, despite some differences, they share the aim to establish a competitive and innovative single defence market backed by a strong industrial base as part of the longterm objective of strategic autonomy. The DPD, adopted as a single market instrument, establishes a common legal framework that ensures transparency, equal treatment, and competitiveness in defence procurement for this purpose. On the other hand, the EDF contributes to this aim by providing financial support for collaborative defence R&D. They are thus complementary initiatives towards the realisation of a single defence market with a cooperating industrial base.

The European Commission's evaluation report on the DPD 2009/81/EC¹⁰³ has revealed that the directive did not fully achieve its desired effect. Indeed, there was a significant rise of defence procurement within the EU but significantly less participation in collaborative defence procurement. Simultaneously, the implementation of the Directive by MS has been problematic. In fact, the degree of application of the Directive is disproportionately distributed between MS, and a great deal of

^{96.} Ibid., 5 and 22.

^{97.} Ibid., art. 10-11.

^{98.} Ibid.,. art. 10(1). 99. Ibid., art. 10(2).

^{100.} Ibid., art. 10(2). 100. Ibid., art. 10(3) and 10(4).

^{101.} Ibid., art. 11(2) and 11(3).

^{102.} Ibid., art. 11(4).

^{103.} European Commission, "Report from the Commission to the European Parliament and the Council on the implementation of the Directive 2009/81/EC on public procurement in the fields of defence and security, to comply with Article 73(2) of that Directive", November 30th, 2016, COM(2016), 762 final.

high-value defence contracts are continuously being signed outside the Directive. In this context, the European Commission has called for a stricter application of the exception under Article 346 TFEU, demanding a case-bycase assessment each time to avoid that MS continue to unnecessarily circumvent the DPD. The partial success of the Directive is also due to its failure to accommodate the necessary level of SMEs.

Therefore, the EDF project was launched in 2016 to remedy the limited success of the Directive and bring MS together through financial support for collaborative defence R&D. However, quite a significant number of the technologies developed under the EDF have a potential dual-use, including the military one. Technologies employed in the defence sector could raise some questions that could lead to radical change in the way defence business is conducted. These technologies include cryptography, radar, positioning systems, big data, and artificial intelligence. They can be identified as disruptive, and it is therefore imperative to support their development wisely. Indeed, these technologies can provide operational advantages, as, needless to say, these developments will provide considerable industrial and economic benefits.¹⁰⁴ Lethal autonomous weapons systems (hereafter LAWS) are part of the emergence of artificial intelligence (hereafter AI) technologies. It is worth noting that these weapons are not regulated by any European or international convention. The funding for R&D of weapons that operate without significant human control has given rise to debate. However, EU states have been reluctant to tackle the question of autonomous weapons both in the directive and in the EDF.

The present chapter deals with the aforementioned initiatives, describing their general aspects and novelties in the EU's plan to achieve strategic autonomy. The next chapter will address how the DPD and the EDF, despite their common ambition, exclude AWS. It will further explain how MS circumvent the DPD for R&D of AWS and demonstrate that the EDF is going down the same path.

CHAPTER 3. ANALYSIS OF THE EU LEGAL INSTRUMENTS IN SECURITY AND DEFENCE. AUTONOMOUS WEAPONS CASE STUDY

While both the DPD and EDF aim to foster collaborative defence R&D for the sake of the creation of an EU single defence market with a competitive industrial base, both initiatives appear to exclude R&D on one of the most important and most researched technological developments in the defence sector: AWS. In this vein, Chapter Three will analyse the DPD and the EDF to substantiate the argument that neither of them regulates AWS.

^{104.} European Commission, (2021), 'Defence Industry and Shape'. [online] Available at: https://ec.europa.eu/defence-industry-space/eu-defence-industry/european-defence-fund-edf_en

The latter has banned the R&D on AWS for Human Rights considerations, while the Autonomous systems are on the Defence Agenda of the international actors. The first section will analyse Article 346 TFEU and Article 13(c) of the DPD and demonstrate that these provisions allow MS to legally circumvent the Directive. Section Two will analyse the case study through the prism of the newest initiative: the EDF, which brings about a change in the R&D at the EU level yet excludes the AWS from its scope due to the European Parliament Resolution from 2018.

DPD in the Context of Autonomous Weapons

As previously discussed in Chapter Two, the DPD has had only partial success in terms of implementation and application. One of the main criticisms is the lack of provisions on R&D. The present section will continue to discuss the Directive in the context of AWS, particularly that the circumvention thereof can take place under two legal bases: Article 13 thereof and Article 346 TFEU. The present chapter will analyse both ways of exclusion that will ultimately conclude that the AWS are outside the scope of the Directive and try, if possible, to seek some avenues for EU intervention.

Circumvention by Article 13(c) of the DPD

First of all, Article 13(c) states that contracts awarded in the framework of a cooperative programme based on R&D, conducted jointly by at least two MS for the development of a new product and, where applicable, the later phases of all or part of the life cycle of this product, are excluded from the scope of the Directive. Upon the conclusion of such a cooperative programme between MS, they shall indicate to the Commission the share of R&D expenditure relative to the overall cost of the programme, the cost-sharing agreement, as well as the intended share of purchases per MS, if any. Therefore, the only implication of the Commission in the R&D is limited to the notification as such.

Notwithstanding, Recital 34 stipulated that the Directive does not apply to R&D, which is financed by the MS. It emphasises that the R&D contracts where the benefits accrue exclusively to the contracting authority/entity, because it is wholly remunerated by the contracting authority/entity are therefore not covered by this Directive. Therefore, one can argue that EU financing can legally avoid such a legal limitation. With a proper regulation on AWS and certain conditions in place for financing, the Commission could have used, in principle, the present Directive. However, such weapons have been excluded from the outset, cutting off a possible avenue.

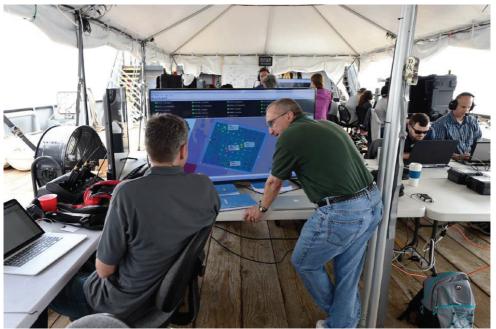
According to Article 1 (27) of the DPD, elaborated further in Recital 13 thereof, the definition of R&D has been limited by the Directive to three areas: fundamental research, applied research, and experimental development. Yet, even though the autonomous weapons would check any of the types mentioned, it remains that the creation of AWS has no scrutiny at this point as it is excluded from the EDF, as will be explained in the second section of this chapter. It seems plausible that the procurement thereof can be ruled out by invoking sensitivity for national security and defence sovereignty.

Article 346 TFEU as a Derogation

Secondly, even though the 2009 DPD has amended the Public Procurement Directive from 2014, the former remains to be subject to derogative provisions of Article 346 TFEU according to Article 2 of the DPD. The Directive – as an instrument of secondary EU law – does not change the Treaty and must abide by the Treaty, which is primary EU law.¹⁰⁵ Therefore, its application is subject to the exceptions provided for by the TFEU, particularly Article 346 TFEU.

In the context of defence, Article 346 TFEU is the most relevant Treaty-based derogation. This derogation implies that contracts may be awarded without applying the Directive in cases where this is necessary to protect the essential security interests of a MS. This points towards the fact that states might invoke the present derogation to legally circumvent Article 10, which states that the DPD shall apply to public contracts awarded in the fields of defence and security.

Article 346 TFEU establishes that MS may exclude the application of the TFEU in two situations: firstly, in the case that the application of the rules of the Treaty would involve the disclosure of information which would be contrary to the essential security interests of a MS or secondly, when a MS considers that it is necessary to exclude the application of the Treaty for the protection of the essential interests of its security in relation to the production of or trade in arms, munitions, and



105. Art. 346 TFEU.

war material.

The definition of their essential security interests is the sole responsibility of MS, as clearly stated by the Court in Fiocchi Munizioni SpA.¹⁰⁶ Notwithstanding, in a series of recent judgements,107 Article 346 TFEU does not allow MS to depart from the provisions of the Treaty by nothing more than simply referring to such interests. The Court of Justice of the European Union (hereafter ECJ) has also stated that the derogation under Article 346 TFEU is limited to exceptional and clearly defined cases, and that the measures taken must not go beyond the limits of such cases.¹⁰⁸ Like any other derogation from fundamental freedoms, it has to be interpreted strictly.¹⁰⁹ Suppose a MS intends to rely on Article 346 TFEU to award a contract covered by the Directive (or by Directives 2004/17/EC or 2004/18/EC) without observing the procedural requirements laid down by those Directives. In that case, it must ensure that the measure chosen, e.g. the direct award of the contract to a specific producer, is necessary to protect its essential security interest. The decision to use Article 346 TFEU must therefore be based on a case-by-case assessment which identifies the essential security interests at stake and evaluates the necessity of the specific measure, i.e. the non-application of the Directive, taking into account the principle of proportionality and the need for a strict interpretation of Article 346 TFEU.

It is acknowledged that there may still be contracts which, for example, necessitate such extremely demanding requirements in terms of security of supply, or which are so confidential or important for national sovereignty, that even the specific provisions of DPD would not be sufficient to safeguard a MS essential security interests.¹¹⁰ In these cases, the MS concerned must ensure and, if necessary, be able to demonstrate that the concrete measure taken is objectively suitable for the protection of the essential security interest identified and that, in qualitative and quantitative terms, it does not go beyond what is strictly necessary for that purpose.

Previous ECJ Case-Law on Article 346 TFFU

In the Insinööritoimisto InsTiimi Oy case, the Advocate General (hereafter AG) of the ECJ clearly stated the conditions under which the MS may derogate from EU legislation in connection with their defence and their armed forces. The question, in this case, was whether the award of a public contract in the field of defence might disregard the rules laid down in Directive 2004/18, where the intended purpose of the object of procurement is specifically military. Still, there also exist largely similar civilian applications. It stated that the procurement has to fulfil the condition that such equipment must be intended specifically for military purposes. It is not possible to infer whether a product is intended solely for military purposes because an MS armed forces act as the purchaser or another public authority purchases the product for the armed

^{106.} ECJ, Fiocchi Munizioni SpA v Commission, Case T-26/01, (30 September 2003), EU:T:2003:248, §58. 107. ECJ, Commission v Finland, Case C-284/05, (5 December 2009), §47; ECJ, Commission v Sweden, C-294/05, (15 December 2009), ECLI:EU:C:2009:779, §45; ECJ, Commission v Germany, C-372/05, (15 December 2009), ECLI:EU:C:2009:780, \$70; ECJ, Commission v Italy, C-387/05, (15 December 2009), ECLI:EU:C:2009:781, \$47; ECJ, Commission v

Greece, C-409/05, (15 December 2009), ECLI:EU:C:2009:782, §52. 108. ECJ, Commission v Spain, Case C-414/97, (16 September 1999), ECR I-05585, §22.

^{109.} ECJ, European Commission v Italian Republic, Case C-239/06, (15 December 2009),

ECLI:EU:C:2009:784, §69.

^{110.} Recital 16, European Parliament and Council, Directive 2009/81/EC.

forces. Otherwise, any pencil could become a military product merely because it is purchased for the military. This would run counter to the requirement of a strict interpretation of Article 346(1)(b) TFEU and impair the principle of the internal market excessively.¹¹¹ The AG reiterated the findings of the Commission v Italy¹¹² case law that it isn't sufficient that a product is merely suited for military use and thus will possibly be used for military purposes. In the aforementioned case law, the Court ruled that the helicopters which had been purchased by the Italian State, without any competitive tendering procedure, did not come under Article 346 TFEU because they were certainly for civilian use and only possibly for military use. Therefore, this is a possible avenue for the Commission to intervene under the condition that it has a dual purpose. If the MS intend the AWS for exclusively military purposes, such legal circumvention is possible.

Indeed, in the case of products such as vehicles, aircraft, etc., the specific military purpose must be positively demonstrated, because civilian use is also conceivable.¹¹³ Therefore, in the ECJ's case law, Article 346 TFEU has been narrowly interpreted, yet broadly for exclusive defence purposes. If, for instance, certain weapons have both a military and civilian purpose, then Article 346 TFEU cannot really stand¹¹⁴, and it has to be demonstrated with evidence of the intended military purpose.¹¹⁵ Indeed, the ECJ has shifted its approach related to Article 346 TFEU for a stricter assessment because MS have long avoided applying EU law to defence by extensively relying, implicitly or explicitly, on Article 346. The underlying assumption was that, based on this provision, activities related to the production of (and trade in) arms and war material were automatically excluded from EU law. In other words, this was considered a provision delimiting the competencies of the EU – and setting out the boundaries between the EU's and its MS's domains.¹¹⁶

In the 2009 Community Customs Code cases,¹¹⁷ Sweden argued that the purpose of Article 346 is to ensure that MS have freedom of action in areas affecting national defence and security. Germany, Greece, Finland, and Denmark also contended that the very wording of that provision - in that it refers to 'measures as it considers necessary' - shows that the Treaty intended to confer on MS significant discretion. These arguments, however, failed to convince the Court of Justice. It responded that, despite that reference, Article 346 could not be read in such a way as to allow MS to depart from EU law based on no more than a desire to protect - what they deem to be essential security interests. The Court added that it is up to the MS seeking to rely on Article 346 to prove how this is indeed the case, as mentioned above.

Furthermore, MS enjoy a wide margin of appreciation in identifying the essential security interests to be protected. Several MS involved

^{111.} AG, Insinööritoimisto InsTiimi Oy, Case C-615/10, (19 January 2012), ECLI:EU:C:2012:26,

^{\$46.}

^{112.} ECJ, Commission v Italy ('Agusta') Case C-337/05 (8 April 2008), ECLI:EU:C:2008:203, §§27/48-49.

^{113.} Ibid., §50.

^{114.} ECJ, Commission v Spain, §22.

^{115.} ECJ, Commission v Italy ('Agusta'), §68.

^{116.} Vincenzo Randazzo, "Article 346 and the qualified application of EU law to defence" EU Institute for Security Studies no. 22 (July 2014): 1-4, [online]. Available at :https://www.iss. europa.eu/sites/default/files/EUISSFiles/Brief_22_Article_346.pdf

¹¹⁷ ECJ, Veli Elshani v Hauptzollamt Linz, C-459/07, (2 April 2009), ECLI:EU:C:2009:224.

in defence-related cooperation or in pooling and sharing could similarly identify among themselves the pursuit of those activities as essential security interests to be protected. The key challenge is – and will remain – to prove the necessity and proportionality of the specific measure derogating from EU law (e.g. non-application of the Directive) to protect such interests. Pondering on rather elusive issues – such as defining in abstract terms the notion of 'essential security interests' does not seem useful for the purpose of correctly applying this Treaty provision.

Notwithstanding the high benchmark for successful use of Article 346, the issue remains that R&D is excluded from the scope of the Directive and that autonomous weapons are not regulated at all at the EU level, because defence is the mantra of the Article 346 TFEU. Once a state demonstrates its essential interest, correlated with defence usage, the Commission has no say. The interest of MS in developing them will inevitably bring about a high degree of sensitivity in development, especially from a competition perspective.

As a last remark, MS should use a sort of precautionary principle to limit risks linked to litigation, meaning that Article 346 should only be used in those truly exceptional cases where national authorities are entirely confident that they can prove that all the required conditions are fulfilled. If in doubt, EU law should be applied even in the context of unregulated AWS, because the ECJ or the Commission might find the AWS for both military but also civilian purposes.

Hereinafter, Section Two of the present chapter will discuss how AWS are also excluded from one of the most recent initiatives, the EDF. It will ultimately lead to the conclusion that the AWS are excluded from the R&D to the procurement stage, and the EU has no



EU flags at the European Commission Berlaymont building, Guillaume Périgois, July 15, 2020

power to intervene because of express legislative derogations and the exclusion thereof.

EDF and AWS

A lot of debates arose among MS regarding the creation of the EDF. To guarantee its success, different entities got involved in the launch of the EDF. It is up to the MS to identify the different capability needs and priorities to be funded by the EDF.¹¹⁸ It is therefore not up to the Commission to make this choice, but rather it provides an incentive for states to spend collaboratively on defence.¹¹⁹ The Commission created the EDAP in 2016, and the plan included the creation of the EDF. Later, the Commission entrusted the governance of the PADR to the EDA. The EDA is an institution of the Council, which means that it is controlled by the MS, and this institution has extensive knowledge of defence capabilities. The Commission does not have this kind of expertise, but it has the expertise in the single internal market and its financial management. The EDA plays an interesting role here because it can act as a pivot between the MS and the Commission.120

There is currently a debate taking place within the EU related to the types of military technologies and their use in conflicts in which MS may become involved.¹²¹ Indeed, on numerous occasions, the question of LAWS was raised, but no common European position was ever adopted. Nonetheless, similar to the DPD, MS still managed to agree on excluding R&D on products and technologies that fall under the scope of LAWS.¹²²

One of the factors that limited the success of the Directive was the lack of involvement of SMEs. The EDF wants to create an environment in which SMEs from all MS will have easy access to each other's defence markets within the Union. Finally, the section will mention existing clusters of cooperation and mention projects that could benefit from the funding of the EDF.

The Ban on Lethal Autonomous Weapon Systems

In the context of the debate whether innovative but controversial defence technologies should be embraced or repelled, the European Parliament called for a ban on LAWS, as it has previously on numerous occasions. The Parliament expressed this recommendation, among others, in its recommendations to the 73rd session of the United Nations General Assembly in 2018, in the regulation it adopted jointly with the Council to establish the EDIDP in 2018 and again in its Resolution of 12 September 2018 on AWS.¹²³ 124 125 With the creation of the EDF, the Parliament issued a new Resolution in January 2021 regarding the questions of interpretation and application of international law in regard to AI.

^{118.} Margriet Drent, Dick Zandee, More European Defence Cooperation: the Road to a European Defence Industry, (The Hague: Clingendael Institute 2018), 4, [online] Available at: http://www.jstor.com/stable/resrep21310

^{119.} European Commission, (2017) 'The European Defence Fund: Questions and Answers Factsheer'. [online] Available at: https://ec.europa.eu/commission/presscorner/detail/pl/ memo 17_1476.

^{120.} Wilms, et al., European Defence Fund: Challenges and Opportunities for Dutch Participation, 7.

^{121.} Nikolaos Karampekios, Iraklis Oikonomou and Elias G. Carayannis, The Emergence of EU Defence Research Policy: from Innovation to Militarization, (Washington, Springer, 2018), 298.

^{122.} Ibid., 332

¹²³ Jacek Bylica, EU Statement by at the General Debate of the 73rd Session of the UN General Assembly First Committee, 8 October 2018, New-York, [online] Available at: https://www.un.org/disarmament/wp-content/uploads/2018/10/statement-by-cupean-union.pdf,

^{124.} Regulation (EU) 2018/1092 of the European Parliament and of the Council of 18 July 2018 establishing the European Defence Industrial Development Programme aiming at supporting the competitiveness and innovation capacity of the Union's defence industry,7 August 2018, OJEU, L200/30.

^{125.} European Parliament, "European Parliament Resolution of 12 September 2018 on Autonomous Weapon Systems", (2018/2752(RSP)), 23 December 2019, 2019/C433/10, C433/86.

In this Resolution, the term "autonomous" is defined as "an artificial intelligence (AI) system that operates by interpreting certain input, and by using a set of predetermined instructions, without being limited to such instructions, despite the system's behaviour being constrained by and targeted at fulfilling the goal it was given and other relevant design choices made by its developer".¹²⁶ AI can only be used in military and civil contexts if subjected to meaningful human control, which explicitly excludes the use of LAWS. There is a fundamental requirement for MS to respect human rights and humanitarian law. And that applies to all weapons systems as well as their operators.127

The Regulation establishing the EDF requires compliance with the international obligations of the Union and its MS. Indeed, MS and their entities undertake to respect the Charter of Fundamental Rights of the European Union, the European Convention for the Protection of Human Rights and Fundamental Freedoms, ethical principles, and principles relating to human welfare. Indeed, human rights and human dignity must be respected in all EU-defence related activities. AI-enabled systems or weapons must allow for human control at all times.¹²⁸ It stems from this that the use, development, or production of products or technologies prohibited by international law cannot be funded by the EDF. However, it is possible to fund the development of systems of countermeasures for defensive purposes. It is also important to stress

that automated systems, or systems remotely operated or teleoperated, are not considered AWS.¹²⁹

In its resolution from 2018, the European Parliament defends its position based on various legislative reasons and positions previously taken. It is imperative to emphasise that the aim of this analysis is not to endorse autonomous weapons but to point to the idea that their development can still be executed at the national level, without the EU intervention.

First and foremost, the resolution references Article 21 (2)(c)¹³⁰ of the Treaty on European Union (hereafter TEU). It states that the Union shall define and pursue common policies and actions and shall work for a high degree of cooperation in all fields of international relations, to: (c) preserve peace, prevent conflicts, and strengthen international security, in accordance with the purposes and principles of the United Nations Charter, with the principles of the Helsinki Final Act and with the aims of the Charter of Paris, including those relating to external borders. The European Parliament relies on these legal bases to justify such a ban. The Parliament can hardly rely on human rights to support its decision as these must be applied in all actions and decisions taken by the MS. But from the perspective of AWS, these can pose a real threat to human rights if they are not regulated. The ban has no legislative powers, as according to the EU Treaty, defence is still an exclusive competence of the MS. Therefore, they can continue to fund and create such weapons un-

^{126.} European Parliament Resolution of 20 January 2021 on Artificial Intelligence.

^{127.} Ibid.

^{128.} European Parliament, "Guidelines for Military and Non-Military Use of Artificial Intelligence", Press release 20 January 2021, [online] Available at: https://www.europarl.europa.eu/ news/en/press-room/20210114JPR95627/guidelines/for-military-and-non-military-use-of-artificial-intelligence.

^{129.} Regulation (EU) 2021/697 of the European Parliament and of the Council of 29 April 2021 establishing the European Defence Fund and repealing Regulation (EU) 2018/1092, 12 May 2021, L. 170/151.

^{130.} Art. 21, (2)(c), TUE



EuroMALE RPAS mockup ILA-2018, Boevaya mashina, April 25, 2018

der their Defence Policy.

Moreover, the Greens/EFA political party in the European Parliament has played a major role in advocating to "stop killer robots", taking a strong position when it comes to AWS. Bodil Valero MEP, the security policy spokesperson of the party, stated that "Autonomous weapons systems must be banned internationally, the power to decide over life and death should never be taken out of human hands and given to machines." "Large arms manufacturers will always try to earn profits from the development of future weaponry, but autonomous weapons are a step too far. That's why the European Parliament will call for all EU countries to declare their support for a ban on autonomous weapons before the next round of negotiations at the UN level in November."131

The second legal argument put forward is the 'Martens Clause' included in the 1st Proto-

col Additional to the Geneva Conventions. It states that "until a more complete code of the laws of war is issued, the High Contracting Parties think it right to declare that in cases not included in the Regulations adopted by them, populations and belligerents remain under the protection and empire of the principles of international law, as they result from the usages established between civilised nations, from the laws of humanity, and the

requirements of the public conscience."¹³² It can be inferred from this clause that in the absence of EU intervention in the AWS, the clause is universal.

However, the problem faced by humanitarian lawyers is that there is no accepted interpretation of the Martens Clause. It is therefore subject to a variety of interpretations, both narrow and expansive. At its most restricted, the Clause serves as a reminder that customary international law continues to apply after the adoption of a treaty norm.¹³³ A wider interpretation is that, as few international treaties relating to the laws of armed conflict are ever complete, the Clause provides that something which is not explicitly prohibited by a treaty is not *ipso facto* permitted.¹³⁴ For the manufacturing of AWS, however, there is no clear consensus at the international level. One

^{131.} The Greens/EFA, "European Parliament to Call for a Ban on Killer Robots", Press Release 11 September 2018. [online] Available at: https://www.greens-efa.eu/en/article/press/european-parliament-to-call-for-a-ban-on-killer-robots.

^{132.} Rupert Ticehurst, "The Martens Clause and the Laws of Armed Conflict", International Review of the Red Cross no. 317, (April 1997). [online] Available at: https://www.icrc.org/enl.doc/resources/documents/article/other/57jnhy.htm.

^{133.} Christopher Greenwood "Historical Development and Legal Basis", in The Handbook of Humanitarian Law in Armed Conflicts, ed. Dieter Fleck, (Oxford/New-York: Oxford Press University, 1995), 28.

^{134.} Yves Sandoz, Christophe Swinarski, Bruno Zimmermann (eds)., Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949, (Geneva: ICRC/Martinus Nijhoff, 1987), 39; Nagendra Sing and Edward McWhinney, Nuclear Weapons and Contemporary International Law, (2nd ed.), (Dordrecht: Martinus Nijhoff, 1989), 46-47.

cannot step over the sovereignty of the state to influence its defence policy. In the absence of EU intervention and with a cumbersome scrutiny at international level, the oversight of the R&D is a hard endeavour as the MS can be bound if party to the Treaty.

The main ethical question raised regarding the use of LAWS is the question of human control in regard to the decision-making, the selecting and targeting, and the lack of cognitive skill.¹³⁵ Indeed, there is a need for the legal principles of distinction, proportionality, and precaution to be respected when a weapon system is operating. If such principles cannot be controlled by significant human control, the weapon falls under the description of lethal autonomous weapon systems and won't be eligible under the EDF's funding. Indeed, there cannot be any substitute for human involvement in the sentencing or the decision-making. The concept of human control and judgment is imperative to ensure the respect of human rights, humanitarian law, and human welfare.136

Those arguments must also be applied when a proposal is made to upgrade existing products or technologies, not just during their development phase. Whenever a proposal is submitted, the Commission will have to analyse whether ethical issues arise and if so, the proposal will be subject to an assessment.137

All these arguments were highlighted during the creation of the EDF. During the preparatory phases of the EDF, there was already an explicit ban on the development and production of technologies prohibited by international law. Indeed, the Regulation establishing the EDIDP excluded LAWS from the capability window.¹³⁸ With the launch of the EDF, the Council and the Parliament commonly agreed on excluding lethal AWS from the actions funded under the EDF. Any R&D or any production of a technology that could operate without meaningful human control would not be eligible for funding.139 As there are no international conventions on the use of LAWs, the position of the Council and the Parliament to exclude these systems from the eligibility of the EDF is a considerable first step towards the consolidation of a common European position on LAWS.

In the military domain, including the defence sector, the AWS are a special category of AI. With the emergence of new technologies, the EU must focus on developing and digitalising AI in the defence sector. The MS have to harmonise their approach to military AI. It resulted in a wide European strategy going against lethal autonomous weapon systems, and it banned the use of "killer robots". It remains crucial to support R&T and R&D and the use of the intelligence in the defence sector. Indeed, through the EDF, the objective is to promote investment, R&D, and production of technologies in the domain of defence.140

The Limitation of Article 346, TFEU

The EDF was born out of the Commission's desire to create cross-border industrial R&D

^{135.} European Parliament Resolution of 20 January 2021 on Artificial Intelligence. 136. Ibid.

^{137.} Regulation 2021/697 of the European Parliament and of the Council, L. 170/156.

^{138.} Regulation (EU) 2018/1092 of the European Parliament and of the Council of 18 July 2018 establishing the European Defence Industrial Development Programme aiming at supporting the competitiveness and innovation capacity of the Union's defence industry, art. 6 (6).

^{139.} European Parliament Resolution of 12 September 2018 on Autonomous Weapon Systems, 2018/2752, C433/86.

^{140.} European Parliament Resolution of 20 January 2021 on Artificial Intelligence.

programmes in the defence sector through the creation of economic incentives. However, as explained in the previous section, Article 346 TFEU allows EU MS to invoke national security considerations to avoid cross-border competition. Nevertheless, states use this article for economic reasons rather than for national security considerations.¹⁴¹

National governments have long governed the defence sector, and it will take time and money before the EDF is fully operational as intended. Will the 20% and 30% incentives be enough to overcome the complications of setting up the EDF? And will it be enough to stop MS from using Article 346 as this was the case with the DPD?¹⁴²

The Role of SMEs

By strengthening cooperation between MS in the field of defence, the EDF aims to reinforce competitiveness and innovation and thus contribute to the strategic autonomy of the Union. This involves the MS and their companies, research centres, etc., in the research and development stages of defence products and technologies. However, cooperation should not stop there. It must also be opened up to SMEs and mid-caps which are also operating in this sector.¹⁴³

SMEs constitute the core of technological innovation. Their involvement in EDF projects will be crucial. Indeed, SMEs have a huge potential in the European defence collaboration scene. However, in practice, they suffer from the lack of a level playing field which prevents them from accessing the European market. The lack of involvement of the SMEs was one of the factors that has been holding back the success of the Directive.

For decades, it has been the large companies from big countries that have been cooperating with the supply chains. Many factors also contribute to the difficulty for SMEs to enter the market. The same constraints can be observed concerning the involvement of SMEs in the DPD.

Indeed, it is difficult to conduct business when one does not speak the same language. Moreover, to operate on the European stage, it requires marketing efforts, a lot of personnel, and a good human resources department to manage the tendering procedures and the administrative tasks that come with such engagements. Unfortunately, most of the time, SMEs are not equipped to handle all these tasks. In addition, the issue of exporting equipment is also a matter of concern. We can cite as examples the Netherlands, which has very strict export control laws, and Flanders, which prohibits the participation of its region in research and technological development programmes if they have military applications.¹⁴⁴ This is all the more problematic as most SMEs produce technologies with multiple uses, including military applications.145 To remedy the burden on SMEs, the Commission offers financial incentives for collaborative defence research and defence industrial development, and a substantial amount of money has been allocated for the period 2021-2027. These financial tools can help overcome these difficulties and help the SMEs reach the

^{141.} Drent and Zandee, More European Defence Cooperation: the Road to a European Defence Industry?, 4.

^{142.} Ibid., 8.

^{143.} Regulation 2021/697 of the European Parliament and of the Council, L. 170/150.

^{144,} Dirk Hoke (CEO, Airbus Defence and Space) interview with the EDA, European Defence Matters, no. 14 (2017), 27-28, [online] Available at: https://eda.europa.eu/docs/de-

^{145.} Drent and Zandee, More European Defence Cooperation: the Road to a European Defence Industry?, 4.

European Defence Market, which was not achieved through the Directive. However, the Commission's conditions are complex, and it seems that MS are waiting for implementation before they will be willing to bind larger projects to the EDF's set of conditions.¹⁴⁶

Examples of Existing Clusters of Cooperation Currently, there are existing areas of cooperation between the political and industrial spheres. Namely, this is the case of the Euro-MALE2020 project, a medium altitude long endurance remotely piloted aircraft system, which brings together France, Germany, Italy, and Spain. The consortium created is composed of Airbus Defence and Space, Dassault Aviation, and Leonardo. There is also cooperation regarding the German and French tanks with Kraus-Maffei Wegmann and Nexter. Then, in the field of shipbuilding, we observe the Italian Fincantieri and the French Naval Group. Hence, there are acts of cooperation and even mergers, but there is a lack of other significant projects in other European countries.147

These existing cooperation clusters could show the best chance of success as there is already cross-border collaboration between them. Some examples are the Franco-British

Lancaster House cooperation on anti-ship missiles and air combat systems, the Benesam naval cooperation between Belgium and the Netherlands to replace the M Frigates, or the German-Dutch project to integrate Dutch tanks into a German tank battalion.

A future project could also be the replacement of Walrus submarines. The Netherlands could join forces with Norway and Germany, which are already considered strategic partners of the country. This project, if successful, could effectively strengthen European defence cooperation and thereby also pave the way for a positive impact on international collaborations.148

Existing clusters of deepening defence cooperation offer the best potential for planning common procurement programmes. Defence industrial cooperation should be part of that process from the start.¹⁴⁹ Therefore, it can be seen that European cooperation activities are limited, which weakens the process of Europeanisation of defence research and development. The Union has put in place a large number of initiatives to address this, but the real problem is the reluctance of MS and their entities to embrace multilateralism.150

CONCLUSION

Due to the institutional changes brought about by the Lisbon Treaty and the security challenges the EU has faced over the past decade, the EU's security and defence and security has gotten renewed attention by the EU and its MS. Since 2016, the EU has pro-

^{146.} Ibid., 11. 147. Ibid., 9. 148. Ibid., 10.

^{149.} Ibid., 11.

^{150.} Karampekios et al., The Emergence of EU Defence Research Policy: from Innovation to Militarization, viii

pounded the long-term objective to become strategically autonomous. To achieve this objective, the EU has launched initiatives to develop an EU single defence market backed by a competitive and innovative European defence industry. While the European institutions and the MS have endorsed this goal, the initiatives themselves and the response of states have shown great reluctance towards achieving this goal.

In this context, this Food For Thought paper has analysed two initiatives, the EDF and the DPD, that share the aim of the creation of an EU single defence market with a strong European defence industry to achieve the strategic autonomy of the EU. Despite the EDF and DPD having a partially common goal, it has become clear that there are also some differences. The DPD is a legislative instrument adopted in 2008 based on the single market competencies of the EU that regulates defence procurement within the EU, while the EDF of 2016 is a fund established in the context of CDSP that provides financial support for collaborative R&D.

Besides these commonalities and differences, this paper has proven another common ground, namely the reluctance of the EU and its MS to use these instruments for support of defence R&D and for AWS. The first initiative, the DPD, has been met with adverse responses, including circumvention of the Directive and lacking implementation. In this vein, this paper demonstrated through an analysis of ECJ jurisprudence, the TFEU and the DPD itself, how MS circumvent the DPD and how collaborative defence R&D, and AWS especially, is kept outside of the scope of EU law. The EDF, on the other hand, was a promising initiative that could partially compensate for the downfalls of the DPD by financially supporting collaborative defence R&D. However, an analysis of the responses from the European Parliament and MS has made clear that also in the context of the EDF, R&D of disruptive defence technologies and AWS in particular, is kept out of the scope of the initiative.

Thus, this Food-For-Thought has sought to assess to what extent the two initiatives actually contribute to creating a European single defence market with an industrial base in the light of the EU's long-term goal to achieve strategic autonomy. While both initiatives look promising on paper, the thorough analysis this paper has provided has demonstrated that MS are not using their full potential. While collaborative development of the most innovative disruptive defence technologies is crucial for these objectives, the EU and its MS have shown continued reluctance. Especially regarding AWS, major nations are researching and developing AWS to remain competitive defence actors in the world. The EU and its members, on the other hand, continuously keep R&D of AWS outside of the grasp of EU law. In conclusion, it seems that the EU and its MS shall have to change their course in the field of defence and security and start making full use of the potential provided by the EU initiatives if they truly want to achieve strategic autonomy. The creation of a European single defence market backed by a competitive and innovative industrial base seems difficult if R&D of the most innovative and most researched technologies in the world, *i.e.* AWS, remains at the national level and outside of the EU integration project.

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