Military Developments of Armed Forces in the European Union Caused by the War in Ukraine

Essay

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Abstract

The multipolar world is an ever-growing and a challenging environment for all the actors. The Russian offensive on Ukraine, being just one of the Black Swans in a multipolar world, was an eye-opener and a trial for all the European nations. The war provided a view of the challenges the citizens of the European Union (EU) can face in the future and gave an opportunity to prepare a unified response to safeguard European sovereignty and values. To stay on top of the challenges and provide security, High Representative of the European Union for Foreign Affairs and Security Policy / Vice-President of the European Commission (HR/VP) Josep Borrell said within the context of the EU Strategic Compass that Europe must make a "*quantum leap*".[1] What kind of a 'leap' in the military domain has a country made and how does it align in a greater context will be the main question that this paper addresses. To accomplish that, the military development will be shown as a function of parameters chosen by the author. Apart from that, the approach of the EU will be woven in throughout the structure of the essay.

The research conducted in this paper applies analysis and comparison methods, for more specific insights case studies are to be referred.

The structure of the essay follows the timeline of the Russian offensive which begun on 24th February 2022. Firstly, an overview of strategic climate caused by the conflict will be shown. Secondly, the European Union Member States (EU MS) response to the war as well as the EU framework that supports security development will be examined. And lastly, based on the data collected from the research questions, a conclusion will be drawn serving as a base for further discussion.

Keywords: European Union, War in Ukraine, Strategic Compass, Armed Forces, Research and development

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[1] The European Union Strategic Compass (2022). Introduction. Brussels. P. 15.

1. Table of Contents

2. Preface

Military development is an everlasting race with no clear end - a chess match involving more than two players.[2] No matter how you view this complex and changing situation, every country must strive to find the best approach to navigate such setting. Throughout this essay, the content will dive deep into the effects of those approaches or, in other words, national strategies, visible in the military domain. National strategies are to be shown as a part of a larger context; therefore, a broad perspective is used to show the relationships and dependencies between nations. Furthermore, some countries demonstrate a notable difference in their approach to security, so they will be studied more in detail. Alongside national strategies, the responses and actions of the EU will be examined throughout the documents, like EU Strategic Compass and EU Strategic Autonomy, to show the national interests coexist in a wider context. All the data mentioned provide a wide perspective of the geopolitical and geostrategic state on the European territory and serve as a base for discussion about the future of European defence. The EU citizens should be informed of such matters to create the desired future.

Due to sheer amount of information about the war in Ukraine and its consequences, the author felt inspired to compile useful knowledge and display it in a simple way, understandable even to readers without any military or geostrategic knowledge. To get the whole picture, this essay will cover all domains of warfare and developments happening in them, with a special comment on the future of military development. As a soon-to-be naval officer, the author will try to provide influential and interesting insights on warfare in the conflict already mentioned, especially the recent addition of unmanned combat systems which are being used in the conflict and by doing so, setting trends for their future usage and development.

[2] Interpretation by the author

3. Introduction

On 24th February 2022, the price of freedom on the 'European stock market' went up. Acquiring our rightful share demanded proactive efforts, transcending the realm of soft power.[3] To negotiate their share of freedom, the EU nations had to leverage their hard power. Hard power is a potent tool thanks to which a nation can preserve its interests and values. However, such tool alone achieves little without a skilled craftsman, therefore it was up to the EU to coordinate those craftsmen, in the form of its MS, to forge a shield - to protect the sovereignty of Europe.

On the day of the offensive, the EU received an injection that would be a catalyst for an urgent change. The war, being a fierce and comprehensive competition of power, gave nations the reference point to where they are currently standing in scope of the power balance. Military power took the main stage here, but other sources of power are not to be ignored since they play a supporting role, fortifying its foundation. Military power confrontation reveals which military systems are dominant and crucial on a modern battlefield. From studying such power balance, a starting point was established. Many nations switched to a higher gear - they took the matters in their hands, reviewing their strategies and started considering investing in hard power assets. Soon to follow, it was evident that every country had its dependencies in the military domain, but in other areas as well like energy, strategic resources and other. Those dependencies were also in the form of alliances and agreements regarding purchase or supply of equipment.

 The European Union was not spared; its capabilities were put to the test. Important questions were raised concerning European strategic position and its ability to assert itself.[4] Over-reliance on NATO and subsequently on the United States is not a fulfilling option, so it was up to the EU to take decisive steps to reinforce its strategic autonomy. The Brussels framework effectiveness and adaptability were also put to test, especially within the realm of the Common Security and Defence Policy (CSDP).

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[3]Cf.: EU Global Strategy (2016). Shared Vision, Common Action: A Stronger Europe. P. 44.

[4]Cf.: EU Strategic Autonomy Monitor (2022). From concept to capacity. P. 1.

The main focus of this essay will be to find the actionable steps that nations took in developing their armed forces to respond to the Russian offensive in Ukraine. The three parameters that will be used to describe the development of an armed force are namely budget, quantity of procured military assets, and research & development.[5] The author wants to solve this problem firstly by conducting a thorough research of the EU Member States in relation to the chosen criteria and then by comparing the results. The next goal will be to display the European Union framework that impacted the military development already mentioned. Finally, a discussion will be prompted based on the compiled research results.

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[5] Parameters defined by the author.

4. Current State of Research

"*If you want peace, be prepared for war*" these were the words written by a Roman military writer in the 4th century. Fast forward to the 21st century and the quote is more relevant than ever. Preparation can yield a huge advantage, but there is a big 'if'. For the preparation to be effective, it must follow the right path, which is paved by the innovations introduced during the conflict. In this regard, here are some of the most important changes introduced during the war that are to influence the course of military development across the globe and countries studied in this paper.

- **Land domain**

Early in the conflict, the effectiveness of tanks was highly doubted.[6] Even though being well armoured, they became vulnerable to drone strikes and portable anti-tank launchers. But it was not their doom. Modernisation has enabled them to still pose a great threat against fortified structures and light armoured vehicles. Additionally, high-end heavy tanks are strategically paired with a higher quantity of less capable and more affordable vehicles, transforming them into less conspicuous high-value targets while still capable of inflicting substantial damage, to enable the advance of lighter vehicles.

- **Maritime domain**

The conflict taking place on the Black Sea is greatly overlooked. There are significant changes emerging to the surface in the form of submarine drones[7]- a slightly different approach that used by a nation with quite limited naval capabilities can keep the Russian fleet on their toes[8] and cornered in relative safety of their ports. Another asset that, quite literally, goes under the radar is

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[6] Cf.: Homepage of The Washington Post. They said tanks were obsolete. Now, Ukraine can't get enough of them. URL: https://www.washingtonpost.com/opinions/2023/02/20/tanks-ukraine-war-missiles-mobility/. [31-10-23].

[7] Cf.: Homepage of Ukrainian World Congress. "MARICHKA": Unveiling the potential of the Ukraine's underwater drone. URL: https://www.ukrainianworldcongress.org/marichka-unveiling-the-potential-of-ukraines-underwater-drone/. [31-10-23].

[8] Cf.: Homepage of BBC News. Sea drones: What are they and how much do they cost? URL: https://www.bbc.com/news/world-europe-66373052. [31-10-23].

the unmanned surface craft used for intelligence/surveillance and suicide strikes on enemy ships. Such kamikaze boats are doubted one of the most cost-effective assets used by Ukraine.[9]

- **Air domain**

The name of the game is air superiority. A game with a wide variety of figures, starting from off-the-shelf or homemade drones to state-of-the-art fighter aircraft. The war in Ukraine, being the first conflict with substantial usage of drones[10], served as a testing field. The development of drones in the last two years has skyrocketed, and soon the drones became a Swiss army knife of military platforms possessing capabilities ranging from: surveillance, propaganda, intelligence gathering and delivering various lethal payloads.[11]

As a direct consequence of the highly contested airspace, the importance of anti-aircraft systems reached the sky. Evidence of their vital role almost comes on the daily basis and proves their effectiveness in protection of critical infrastructure.

- **Cyber domain**

Far from sight, but not so far from mind are cyber threats. Although being more frequent in the early stages of the war, Russian cyberattacks exert constant pressure on the Ukrainian networks. Kiev claims that it has a leading edge in defending from cyber threats[12]- cracking the Russian tactics in advance. Further implementation of the Artificial Intelligence (AI) technologies in cyber domain is accelerating the tempo of the conflict and raises uncertainty, due to the unpredictable nature of AI.

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[9] Cf.: Ibid.

[10] Cf.: Franke, U. & Söderström, J. (2023). Star tech enterprise: Emerging technologies in Russia's war on Ukraine. European Council on Foreign Relations. Brief. P. 1.

[11] Cf.: Ibid. P. 4.

[12] Cf.: Ibid. P. 7.

- **Space domain**

On the wings of Starlink, Ukraine stays a step ahead in gathering crucial information and their distribution. It provides a capability of an early warning to its full extent, which is prestigious commodity - almost an unfair advantage of having a live action theatre of war. Paired with satellite pictures with increasing resolution, Kiev has come so far to see car tires covering a Russian aircraft more than 700 km from the frontline.[13]

The listed data were collected by analysing the events that happened in the conflict and they will be used in comparison with other research material presented in the research part of this paper.

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[13] Cf.: Homepage of CNN. Russia is covering aircraft with car tires, potentially to protect them from Ukrainian drones. URL: https://edition.cnn.com/2023/09/06/europe/russia-aircraft-car-tires-ukraine-drones-intl-hnk/index.html. [31-10-23].

5. Research Gap

As HR/VP Josep Borrell mentioned many times that Europe must "*learn quickly to speak the language of power*"[14], this essay will examine how eloquent are the EU MS in the *language of power*. Throughout materials found there are no publications that provide a comprehensive view of defence development of the EU countries individually or in the context of the EU. Most references are short-sighted, focused solely on a single country or even a single domain of warfare. Such fragmentation negatively effects the understanding and makes room for potential false conclusions. The objective here is to take such information and piece it together, to get an all-encompassing picture of a geostrategic state that Europe has become since the beginning of the Russian offensive.

Furthermore, the news about defence developments lacks a clear cause-effect relationship due to the authors not including the context of such actions. Such information might have a drawback of not understanding the bigger picture and relationships. Therefore, some significant military purchases will be explained as a part of a greater context.

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[14] Homepage of EEAS. Several Outlets - Europe Must Learn Quickly to Speak the Language of Power. URL: https://www.eeas.europa.eu/eeas/several-outlets-europe-must-learn-quickly-speak-language-power_und_en. [01-11-23].

6. Research Questions

The main question to be answered in this paper is:

- How did the EU MS develop their armed forces as an answer to the war in Ukraine?

The related questions that lead to the answer to the main question are:

- How was the EU MS defence budget impacted by the war in Ukraine?
- Where were the military budget funds allocated?
- What research and technology initiatives are in progress?
- What was the impact of the EU framework on military development and cooperation of the EU MS?

7. Methodology

The first step in creating this essay was to define its scope of research. Upon defining the scope, a review of relevant literature was conducted. From studied literature, the research gap was revealed. It served as a base for formulation of the main research question which was divided into four subquestions. To provide answers to those questions, methods of comparison and data analysis were used. Finally, the research results were compiled to form a conclusion.
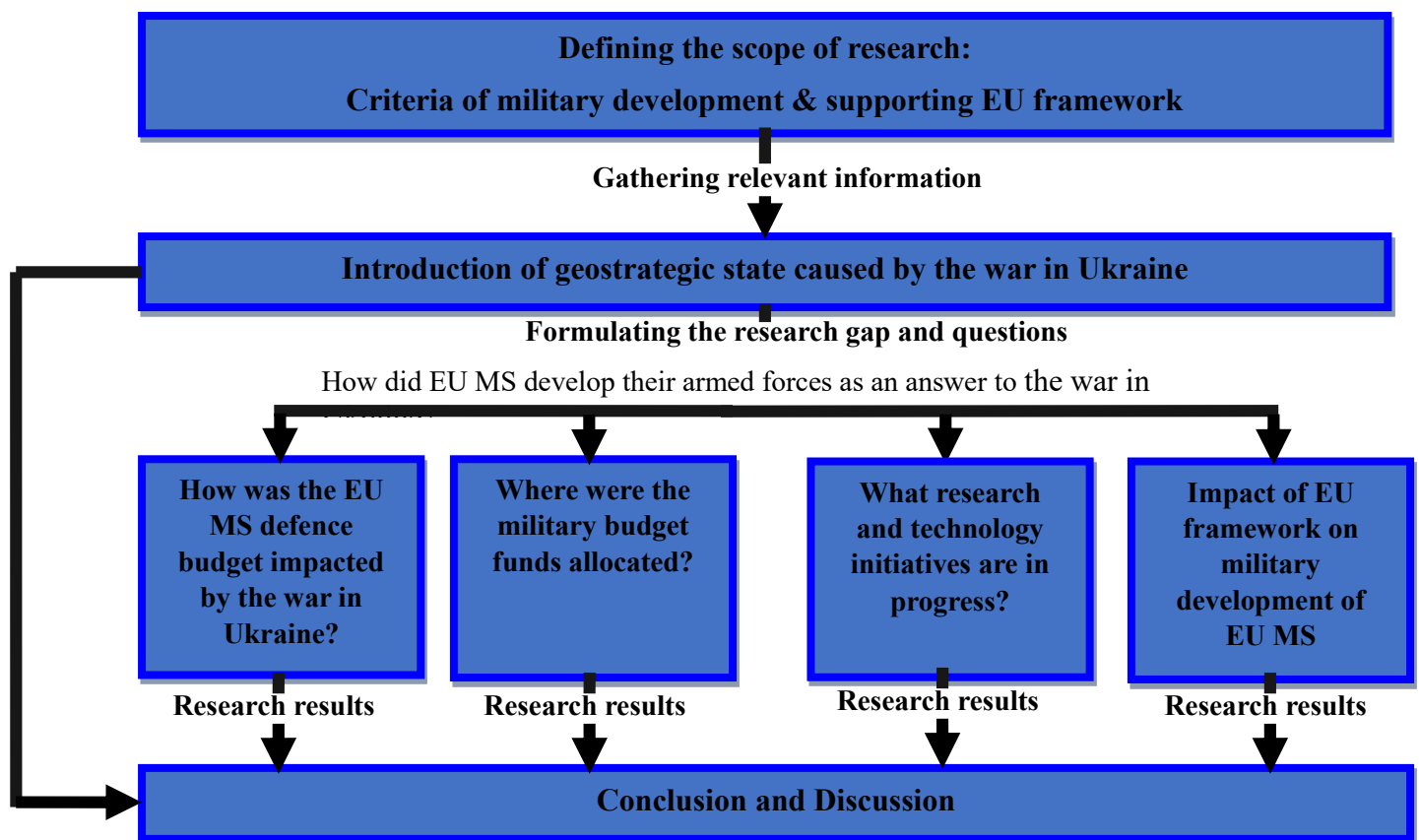

Figure 1: Research methodology applied in the study[15]

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[15] Figure created by the author.

8. Research and Results of Research

8.1 Development of the EU MS Armed Forces as an Answer to the War in Ukraine

8.1.1 Budget

The response of the EU MS was bold and uniform. It is well shown throughout the Stockholm International Peace Research Institute (SIPRI) factsheet from 2022 which states that: "*Military expenditure in Europe rose by 13 per cent during the year, which was the largest annual increase in total European spending in the post-Cold War era.*"[16] Many countries are now closer to meeting the NATO guideline of 2% of GDP contributed to defence spending. Since 21st of February, Belgium, the Netherlands, Norway, Romania, Sweden, Spain and Italy have announced plans to raise defence spending to at least 2% of their GDP.[17] The countries that have already met the criteria are Greece (3.69%), Lithuania (2.52%), Poland (2.39%), Croatia (2.17%), Estonia (2.09%) and Latvia (2.05%).[18] Note that all the nations mentioned above are located on the Eastern borders of the EU.

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[16] Tian, N. et al. (2023). SIPRI factsheet - Trends in world military expenditure, 2022. SIPRI. Factsheet. P. 1.

[17] Cf.: Homepage of Euractiv. To face the Russian threat, Europeans need to spend together – not side by side. URL: https://www.euractiv.com/section/defence-and-security/opinion/to-face-the-russian-threat-europeans-need-to-spend-together-not-side-by-side/. [31-10-23].

[18] Data provided by: Homepage of The Global Economy. Military spending, percent of GDP - Country rankings. URL: https://www.theglobaleconomy.com/rankings/mil_spend_gdp/Europe/. [31-10-23].
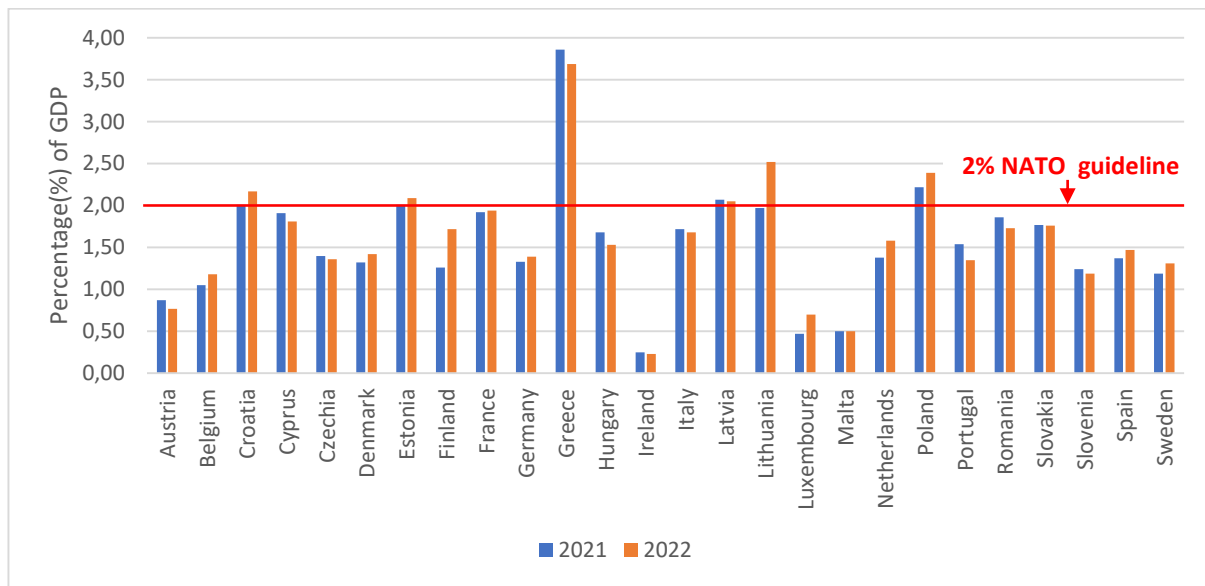
Figure 2: Military expenditure as a percentage of GDP per country[19,20]

As the Figure 2 above implies, the ramping of the military budget will keep a steady pace till the end of 2023 and possibly 2024. Furthermore, the EU MS is planning to increase its defence expenditure by some €70 billion by 2025 to fill the existing capability gaps.[21]

8.1.2 Budget Allocation

Sufficient funds were allocated to almost every EU MS ground force, reason being the '*war of attrition*' – a conflict in which stunning numbers of tanks, artillery, and ammunition are being thrown into combat.[22] Starting from the backbone of ground forces, the EU MS revisited their Main Battle Tanks (MBTs). To keep them up-to-date, the EU MS refurbished their tanks with improved fire-control systems, protection, and electronic equipment. This is clearly visible in

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[19] Figure created by the author.

[20] Data extracted from: Homepage of The Global Economy. Military spending, percent of GDP - Country rankings. Op. cit.

[21] Cf.: Andersson, J.J, & Cramer, S.C(2023) EUISS: Yearbook of European Security. Invest – Capabilities. EUISS. P. 9.

[22] Cf.: Franke, U. & Söderström, J. (2023). Star tech enterprise. Op. cit. P. 10.

actions of Austria, Estonia, Greece, Germany, Hungary, Italy, Lithuania and Poland to upgrade their Leopard MBT inventory to the latest 2A8 standard. Universally, there is a trend of increasing the quantity of Infantry Fighting vehicles (IFVs) and Armoured Personnel Carriers (APCs). The vehicles mentioned provide firepower, limited protection, and most importantly crucial military mobility for infantry troops - highly desired capabilities in modern warfare. The cherry on top of such vehicles is the Spike LR anti-tank guided missile, while similar missile systems proved their importance in attacking Russian tanks, with 17 EU MS already operating them or restocking since 2022. Furthermore, other systems that found their way in the EU MS militaries are artillery systems like: Korean K9 Thunder, German PzH 2000, French CAESAR, replacing the leftover Soviet systems and unifying the use of 155mm artillery ammunition. Additionally, the American rocket artillery system, a recently combat proven HIMARS system, is sought after in six EU MS including Bulgaria, Estonia, Italy, Latvia, Lithuania and Poland. Lastly, infantry did not experience any ground-breaking change. It received advancements in sensory and communication equipment and overall protection.

On the market of aeronautics, the American-made, leading edge multirole fighter F-35 Lighting, has been ordered by Finland, Germany and the Czech Republic since the 2022. The F-35 has also a reserved spot in the armed forces of Italy, Poland, the Netherlands, Belgium, and Denmark. An aircraft like that is 'a statement of NATO' to assert its supremacy in aerial combat. A notable aerial asset is the Eurofighter Typhoon which, as a joint project, strengthens the industry and defence of the EU MS. Since the beginning of the offensive, the Typhoon has been ordered by Germany (15 platforms)[23] and Spain (20 platforms)[24]. The European Consortium is further developing its Typhoon with focus on providing electronic warfare capabilities and cutting-edge air-to-air missiles.

In the field of air defence systems, Berlin has united 16 European countries in its European Sky Shield Initiative (ESSI) enabling them to use Raytheon's Patriot missile batteries, Israeli Arrow 3

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[23] Cf.: Homepage of Air & Space Force Magazine. Germany to Buy F-35 and Typhoon Fighters as It Boosts Defence Spending. URL: https://www.airandspaceforces.com/germany-to-buy-f-35-and-typhoon-fighters-as-it-boosts-defense-spending/. [08-11-23].

[24] Cf.: Homepage of Eurofighter Typhoon. A truly European programme. URL: https://www.eurofighter.com/the-programme#network. [08-11-23].

system alongside the German IRIS-T technology.[25] These three systems in conjunction form a *de facto* iron umbrella against aircraft, drones and missiles. Other big actors, namely France and Italy, are pushing their initiatives to buy and develop European systems like the MAMBA. Equally as their older brother, Man-Portable Air Defence Systems (MANPADS) are getting the attention of the European armies, namely the Swedish RBS-70 and the French Mistral.

Maritime domain, although having a large portion of the budget, has not experienced a major shift in capabilities required. There is a shift towards leaving the more conspicuous destroyer-type ship in favour of smaller platforms because they aren't targeted as much by similar drones used in Ukraine. One notable joint procurement, although not closely tied to the conflict, but to the overall instability is the Belgian-Dutch minehunter replacement programme totalling 2 billion for 12 ships.[26]

The figure below displays the distribution of the results mentioned above:
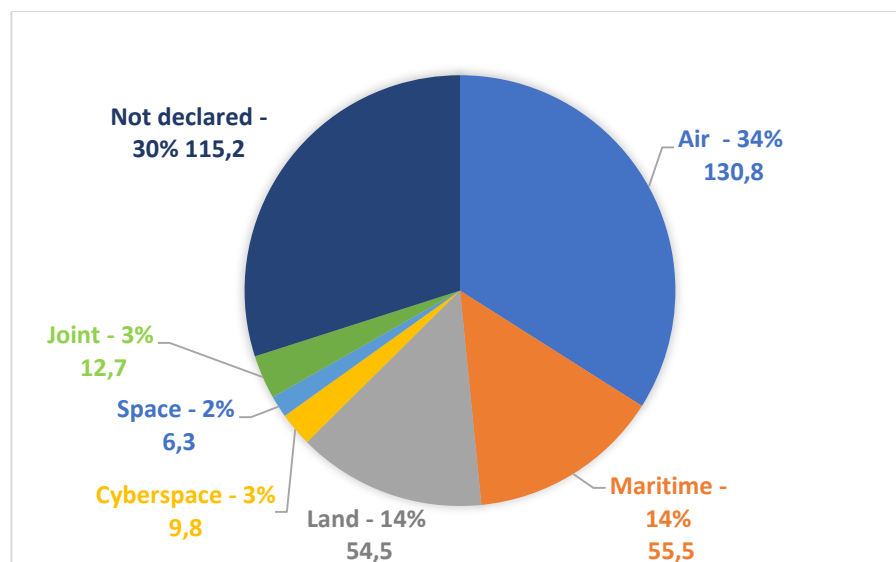
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[25] Cf.: Homepage of Euro News. Homemade or imported - France and Germany have different strategies on air defence systems URL: https://www.euronews.com/2023/06/29/homemade-or-imported-france-and-germany-have-different-strategies-on-air-defence-systems. [31-10-23].

[26] Cf.: Andersson, J.J. (2023). Buying weapons together (or not). EUISS. Brief. P. 4.

8.1.3 Research and Development

"*Research & technology (R&T) is at the heart of defence capability development and, therefore, one of the Agency's top priorities*"[28], led by this statement, the European Defence Agency (EDA) continues to provide support to the EU MS and Permanent Structured Cooperation (PESCO) in capability-building projects. PESCO also serves a vital role in developing crucial assets like critical seabed infrastructure protection, next generation medium helicopter, counter battery sensors, air-to-air and anti-torpedo munitions[29], just name a few recent ones. Although they were initiated before the war in Ukraine, only two major European projects remain: The European Patrol Corvette and the Future Air Combat Systems. The European Patrol Corvette aims to provide a modular ship suitable for the EU navies. Similarly, the Future Air Combat Systems project is working on constructing a new generation fighter aircraft by 2040. Both projects have predecessor projects behind them which prove that a mutual benefit can be achieved. They are to be key instruments in ensuring European autonomy and sovereignty in defence and security.[30] Not only they exert autonomy and sovereignty, but they also provide much-needed interoperability, joint capabilities and industrial benefits.

8.1.4 Impact of the EU framework on Military Development and Cooperation of the EU MS

Brussels also introduced new 'weapons' to its arsenal. The first decisive step was the adoption of the Versailles Declaration which paved the way for stronger defence cooperation and strategic

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[27] Figure derived from: EDA (2022). 2022 Coordinated annual review on defence report. Brussels. Report. P. 3.

[28] Homepage of EDA. Research & Technology. URL: https://eda.europa.eu/what-we-do/research-technology. [01-11-23].

[29] Cf.: Homepage of EDA. 11 new PESCO projects focus on critical defence capabilities and interoperability. URL: https://eda.europa.eu/news-and-events/news/2023/05/23/11-new-pesco-projects-to-focus-on-critical-defence-capabilities-and-interoperability. [25-10-23].

[30] Cf.: Homepage of Airbus. Future Combat Air System (FCAS) Shaping the future of air power   URL: https://www.airbus.com/en/products-services/defence/multi-domain-superiority/future-combat-air-system-fcas.   [01-11-23].

autonomy. The 8th point of the Declaration emphasizes the need for joint defence projects, enhanced defence spending, energy independence and resilient economic foundation.[31] Secondly, the EU Commission identified critical gaps and prescribed measures to replenish stockpiles, replace Soviet-era systems and patch the existing gaps in air defence.[32]

A major addition to the EU framework was adoption of the EU Strategic Compass as a direct answer to the intense multi-layered threats Europe is facing. The Strategic Compass is comprised of four pillars named: Act, Secure, Invest and Partner. The 'Act' section prescribes the means to create an assertive and coherent approach to crisis management and defence. Those means are the establishment of the EU Rapid Deployment Capacity till 2025, a more decisive approach of the Military Planning and Conduct Capability practiced in live exercises, strengthened CSDP missions and operations and their enhanced cooperation, and finally wider and meticulous monitoring via the Coordinated Maritime Presences and air security operations.[33] The next part of the Strategic Compass emphasizes the areas that need to be secured. Information and communications will be protected and provided by the EU Threat Analysis, the EU Satellite Centre and arranged with a new set of rules and standards.[34] Furthermore, this part is concerned about countering hybrid, cyber, terrorist, environmental and other threats. Thus, it proposes strengthening of the existing framework and establishment of a new one, such as the EU Hybrid Toolbox, the Cyber Resilience Act, the Climate Change and Defence Roadmap.[35] The 'Invest' segment is vital since it is closely tied with military development examined in this essay. It calls for increased research via the Defence Innovation Hub, defence budget, gap analysis, capability, and incentive development.[36] It does so by defining strategic capabilities to tackle emerging challenges in all domains, which are described in the "Current State of Research" part of this paper. However, caution is advised since

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[31] Cf.: Versailles Declaration (2022). Informal meeting of the Heads of State or Government. Versailles. Declaration. P. 8.

[32] Cf.: EU Strategic Autonomy Monitor (2022). Op. cit. P. 6.

[33] Cf.: EU Strategic Compass (2022). Op. cit. P. 30-32.

[34] Cf.: Ibid. P. 40-41.

[35] Cf.: Ibid. P. 40-41.

[36] Cf.: Ibid. P. 49-51.

acquiring such competencies is prone to form new dependencies. The last part also refers to dependencies, but in the form of alliances and partnerships. Its goal is to support cooperation, joint exercises, and overall situational awareness.[37]

The Strategic Compass served as a roadmap for:

The European Defence Agency (EDA) which initiated Project Arrangements (PAs), one of which was a much-needed PA for collaborative procurement of ammunition signed by 25 states.[38] The role of the EDA was to harmonise requirements, develop defence technologies and encourage joint defence capabilities. This role proved to be vital in case of crisis in the neighbourhood.

The Permanent Structured Cooperation (PESCO) – PESCO ensured cooperation towards common goals of the EU MS in fulfilling defence gaps. The year 2022 was a record year for PESCO, numbering a staggering 18 projects.[39]

The European Peace Facility (EPF) – provided resources and funds for conducting CSDP mission and encouraged military assistance from MS. When put in numbers, it has contributed 5.6 billion euros[40] till October 2023.

The European Union Military Assistance Mission (EUMAM Ukraine) – a tangible result of collaboration of the EU bodies and the EU MS in crisis management by means of military assistance. In total 25 billion euros[41] worth of support (including 5.6 billion EPF funds) were invested in training of the Ukrainian troops and reinforcing their capabilities.

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[37] Cf.: Ibid. P. 59-60.

[38] Cf.: Homepage of European Defence Agency. EDA brings together 25 countries for Common Procurement of Ammunition URL: https://eda.europa.eu/news-and-events/news/2023/03/20/eda-brings-together-18-countries-for-common-procurement-of-ammunition. [31-10-23].

[39] Cf.: Homepage of European Defence Agency. PESCO Projects Adapt and Accelerate Amid Shifting European Security Landscape, EU Report Finds. URL: https://eda.europa.eu/news-and-events/news/2023/07/11/pesco-projects-adapt-and-accelerate-amid-shifting-european-security-landscape-eu-report-finds. [31-10-23].

[40] Cf.: Homepage of Concilium Europa. EU action in support of Ukraine. URL: https://www.consilium.europa.eu/media/65478/eu-action-in-support-of-ukraine-factsheet.pdf. [01-11-23].

[41] Cf.: Ibid.

9. Discussion of Results and Conclusions

9.1 Discussion of Results

To summarise, the war in Ukraine caused a decisive reaction from the EU MS. The first visible reaction of the EU MS was the ramped-up military budget with an intention to take the NATO guideline seriously. The question that naturally follows is: How were the funds spent? In a nutshell, they were spent on procurement of assets with either high mobility, long-range capabilities or high processing power. Those assets are primarily: fighter aircraft, air defence systems, armoured vehicles, artillery systems and a range of sensory, command or communication equipment.

It can be argued that those assets were procured *'pro tempore'*. This can be economically pleasing, but short-sightedness might create strategic problems in the future. As shown in research results, it is evident that a large portion of funds went abroad the EU, namely in states like: the United States, Israel, and South Korea. Dependencies on any level hinder the EU intention to strengthen its strategic autonomy and assert itself. Buying non-European can also be viewed as a positive course of action since it strengthens alliances and diversifies supply chains.

Another potential inhibitor of European relations is the purchase of individual, off-the-shelf military solutions. It puts aside collaborative needs as well as neglecting research and development, further enhancing the fragmentation.[42] The following figure clearly shows the ratio of funds allocated during the 2022 Coordinated Annual Review of Defence (CARD) cycle:
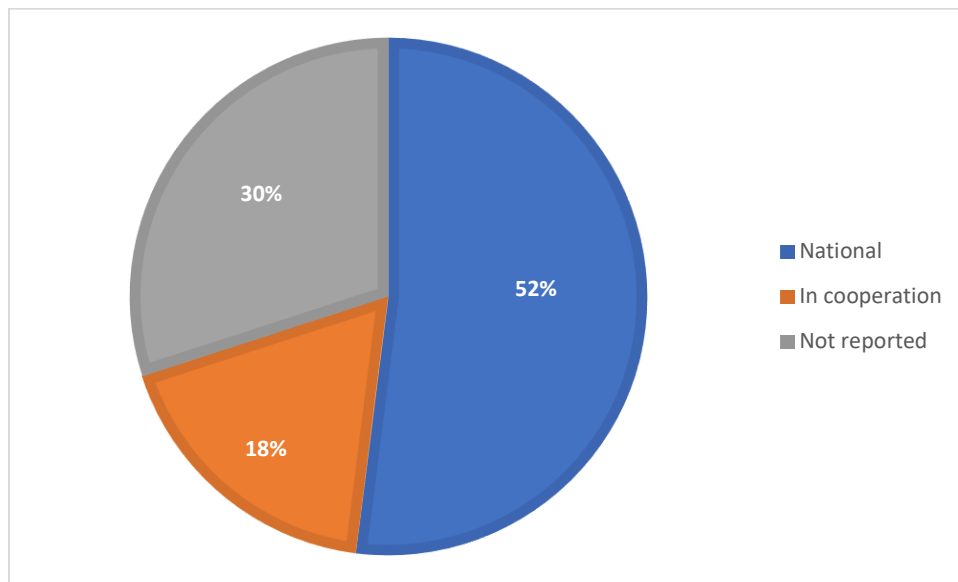
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[42] Opinion of the author.

Figure 4: Procurement drivers[43]

Figure 4 shows that the main driver of military programmes is based on national interests. Although, a rather 'selfish' approach might not necessarily be a negative trend, it may be necessary to create a stable foundation on which joint capabilities and actions can be cultivated. Cooperative solutions between the MS, although being more suitable in the long run, tend to be neglected since they are time-consuming and require some kind of compromise.

Lastly, the EU also took the measures to answer the crisis in its neighbourhood. The paramount measure was the adoption of the EU Strategic Compass which described the European stance in a world with increasing number of Black Swans. A guiding light presented in the form of the Strategic Compass was sought after, it showed a way for the EDA, PESCO, EPF and CSDP to follow in order to form a comprehensive approach to the crisis in the vicinity. The EU institutions continue to provide support in joint initiatives by framework, funding, and risk assessment.

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[43]Figure derived from: EDA (2022). 2022 Coordinated annual review on defence report. Brussels. Op. cit. P. 3.

9.2 Personal Conclusion

It is the author's opinion that the EU MS and the EU took the necessary measures to respond to the crisis. It is justified to increase the defence expenditure in such environment. Judging on the type and quantity of military assets procured, the author thinks that the EU MS succeeded in researching and implementing crucial shifts in a military environment initiated by the war in Ukraine. Furthermore, as the EDA stated that R&T is a cornerstone of future defence capabilities, it is surely a way to go. As well as R&T, the author would like to encourage projects that are of a collaborative nature, since it is seen that they provide long-term mutual benefits. Lastly, the author's only concern is whether the EU MS will experience any consequences in the form of dependencies on non-European states. All in all, it is yet to be revealed what kind of effects will military developments caused by the war in Ukraine have on the EU citizens in the future.

Based on this paper, the author's vision of the future in the EU is that nations should invest in research and development of unmanned systems, known as drones. Drones are a game-changers and as such they should be procured, preferably in cooperation with the EU MS.

10. Annexes

10.1 List of Abbreviations

AI	Artificial Intelligence
APCs	Armoured Personnel Carriers
CSDP	Common Security and Defence Policy
EDA	European Defence Agency
EPF	European Peace Facility
ESSI	European Sky Shield Initiative
EU	European Union
EUMAM	European Union Military Assistance Mission
EU MS	European Union Member States
GDP	Gross Domestic Product
HIMARS	High Mobility Artillery Rocket System
HR/VP	High Representative of the European Union for Foreign Affairs and Security Policy / Vice-President of the European Commission
IFVs	Infantry Fighting Vehicles
IRIS-T	InfraRed Imaging System Tail/Thrust
LR	Long Range
MANPADS	Man-Portable Air Defence Systems
MBTs	Main Battle Tanks
MS	Member States
NATO	The North Atlantic Treaty Organisation

PAs   Project Arrangements

PESCO   Permanent Structured Cooperation

R&T   Research & Technology

SIPRI   Stockholm International Peace Research Institute

10.2 List of Figures

10.3 List of Literature

10.3.1 Documents

01. EDA (2022). 2022 Coordinated Annual Review on Defence report. Brussels.

02. EU Global Strategy (2016). Shared Vision, Common Action: A Stronger Europe.

03. EU Strategic Autonomy Monitor (2022). From concept to capacity.

04. European Union Strategic Compass (2022). Brussels.

05. Versailles Declaration (2022). Informal meeting of the Heads of State or Government. Declaration. Versailles.

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11. Affidavit

I declare that I have written the present essay independently and on my own. I have clearly marked any language or ideas borrowed from other sources as not my own and documented their sources. The essay does not contain any work that I have handed in or have had graded as a previous scientific paper earlier on.

I am aware that any failure to do so constitutes plagiarism. Plagiarism is the presentation of another person's thoughts or words as if they were my own – even if I summarise, paraphrase, condense, cut, rearrange, or otherwise alter them.

I am aware of the consequences and sanctions plagiarism entails. Among others, consequences may include nullification of the essay, exclusion from participation in the CSDP Olympiad. These consequences also apply retrospectively, i.e. if plagiarism is discovered after the essay has been accepted and graded. I am fully aware of the scope of these consequences.

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Cadet Luka Kirac

Split, Croatia

November 2023