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EUROPEAN DEFENCE INDUSTRY IN TIMES OF AUSTERITY

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DECLARATION:

I hereby declare that this thesis is my own work, based on the sources and literature listed in the appended bibliography. The thesis as submitted is 249007 keystrokes long (including spaces), i.e. 121 manuscript pages.

Mariia Kulichkina 19.05.2017

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LIST OF ABREVIATION

BG	Battle Group
CFSP	Common Foreign Security Policy
CSDP	Common Security and Defence Policy of EU
DGA	French Procurement Agency
GAF	German Armed Forces
GDP	Gross Domestic Product
EATC	European Air Transport Command
EC	European Commission
EDA	European Defence Agency
EDAP	European Defence Action Plan
EDTIB	European Defence Technological and Industrial Base
ESDP	European Security and Defence Policy
ESS	European Security Strategy
EU	European Union
EUGS	EU Global Strategy for Foreign and Security Policy
EUMC	EU Military Committee
FGB	EU Military Staff
GDP	Franco-German Brigade
HHG	Helsinki Headline Goal
HG 2010	Headline Goal 2010
MoD	Ministry of Defence
MPL	Military Programming Law in France
NATO	The North Atlantic Treaty Organization
NSS	The National Security Strategy of the U.K
RAF	British Royal Air Force
R&D	Research and Development
SDSR	The Strategic Defence and Security Review in the U.K.
SMEs	Small and Medium-sized Enterprises
SoS	Security of Supply
TEU	The Treaty on European Union
ToL	The Treaty of Lisbon

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1. INTRODUCTION

The end of the Cold War in the beginning of the1990s has marked the shift in a bipolar world order system. Changing geopolitical, economic and social environment, as well as rapid technological progress, has led to a deep restructuring and streamlining of the defence entities in Europe and the United States. National States had to adapt to changing conditions by redefining their Defence and Security policies. Consequently, in over a decade the defence sector has undergone a drastic restructuring and consolidation. With European states have redefined their defence industrial policies by mainly reducing their military expenditures the national defence industries have suffered greatly. Defence companies had to streamline their production into new operational dimension of greater capacity requirements and weapons efficiency. Furthermore, national defence contractor has to cope with new technological innovations while dealing with budget cuts in public procurement policies.

Moreover, in the course of defence industry transition the relationship between the industry and the state has been changing drastically. During the Cold War period, the military sector and resources were tightly controlled by the state, so defence industrial sector was largely national.[1] With the new world order, the relationship between states and their related defence industries gain more entrepreneurial character to a different extent. As national governments began to act as "real" customers, defence contractors had to adapt to a new market economy and competition. This led to gradual rationalization and institutionalization of defence sector beyond national border with a different degree of success.

1.2. CONCEPTUAL EXPLANATION

This research project seeks to investigate, analyse and compare how new geopolitical environment has affected defence industrial policy of the three major European military powers – France, Germany and the United Kingdom. Moreover, the analysis of national defence industrial policy will be conducted within its military and material dimension. With a considerable body of analysis attributing causal primary to economic and industrial aspects of the national defence, this study seeks to analyse dynamics of the state-industry relationship.

[1] Jocelyn Mawdsley, 'The European Union, the State and Multinational Defence Firms: The Emerging European Political Economy of Defence and ESDP", the British International Studies Association Annual Conference, London School of Economics, 16 – 18 December 2002

Therefore, the main objective of the research is to analyze national defence industry (being the targeted subject in this research) of chosen states and to examine the impact of economic and geopolitical pressures on their capacity.

This study is particularly relevant for the EU's common defence and security policy for two contrasting reasons. The first is the great sensitivity of Member States over their national preferences in military matters, as evidenced by their efforts over the years to ensure that every aspect of defence policy is kept under national control and separate from EU institutions. The second is the growing recognition by Member States of the need to pool and share their military capabilities in order to protect national security interest in an international environment where, individually, they are losing influence.[2] However, while there may be a rationale for greater defence cooperation if not further integration within EU, the institutional developments and legal framework of the cooperation on EU level indicates that nearly every attempt to facilitate defence cooperation is vigorously contested.

The issues of national defence policy dynamics in course of economic and budgetary crisis are both of political and academic relevance. Although, various aspects of the defence cooperation and integration within EU have received significant academia attention, the scholarship on the defence integration is generally fragmented in its theoretical inquiry. Thus, this research aims to explore an analytical utility of two main competing theories in the international relations, particularly Constructivism and Neorealism, in regards to the EU defence policy and interactions between main actors within. Critical assessment of two theories suggest that Neorealist insights on forms of alliance formation behavior and its systematic approach to international relations is of greater relevance for the present research's objectives. Taking into consideration, that national governments are at the same time the main customers, regulators and financers of the defence industry, they are in a position to directly influence its structure and performance.[3] With the assumption that states play a major role in the process of defence industry consolidation and they chose to participate in various integration projects in regards to their strategic objectives and interests, either it gaining more power or assuring its national sovereignty, this study lays within the Neorealist conceptual framework.

In this context, the central question of research is:

[2] UK Ministry of Defence's Green Paper, "Adaptability and Partnership: Issues for the Strategic Defence Review", 2010.

[3] BELIN, J., GUILLE, M. "R&D et innovation en France: Quel financement pour les entreprises de la defense", *Innovations*, 28, 2008, pp. 33-59.

- How did member states of EU respond to geopolitical and economical context of the post-Cold War era in regard to their national defence industrial policies?

In respect to the research question a set of supplementary questions has been drawn: How the change in the high politics affected the other dimensions of the non-traditional aspect of international security, in particular how the relationship among economics-power-security reconfigured? How national industrial policies have influence the defence integration and institutionalization process within EU? In what ways EU institutions adopted their reasons of existence and co-existence into this new defence architecture?

Drawing from the realism assumption on the role of state's interest in power configurations, the hypothesis of this study is:

➔ Despite geopolitical pressures and economic stagnation, national states of the EU do not transition its control over assets that are strategically important to national sovereignty towards supranational entities.

Therefore, the integration of national defence sectors in the EU remains rather limited and fragmented. Its trajectory is controlled and enforced by the national states acting in the line with their objectives.

1.3. RESEARCH DESIGN AND METHODOLOGY

Examining the restructuring of national defence industry appears to be challenging due to the dynamic character of events that shape policy in this area. However, in order to achieve stated objectives qualitative with elements of quantitative research methods have been selected. The analysis is operated in deductive manner which is characterized by top-down approach. Moreover, the research design is comparative and case-oriented. Comparative research analysis of selected cases is perfectly suited to examine multi-causality of external as well as internal factors on national defence sectors in particular and unique context. As well as it gives the opportunity to compare the impact of the implemented austerity and restructuring measures by the state on national defence industry capacity and examine certain features of national defence spending trends. Thus, independent variable is structural precondition and assembly of national defence sector in the Cold War. In turn, the degree of defence industry restructuring, its retrenchment and success of implemented efforts to security and military reforms on national and EU levels are dependent variables. This research comprises set of intermediate variables shaped by national policy directions and national strategic cultures along with dynamics of international and institutional cooperation on the EU level.

The thesis is orginised in the following manner. In the beginning, the in-depth description of main defence industry characteristics will be provided. The structure of supply and deman side will be discussed in a greater detail in order to provide readers with broader understanding of defence industry peculiarities. In the next chapter, dynamics of defence cooperation within EU framework will be examined. The greater attention will be given to the European institutional and legal instruments in shaping defence cooperation of the national states. In the third chapter the theoretical framework of this thesis will be provided. It will focus on two main competing theories in the international relations - Constructivism and Neorealism. Their theoretical utility, strength and limits in regards to defence cooperation process in the EU will be analysed.

In next chapters the case study of France, Germany and the U.K. will be presented. Case study will be implemented in the similar manner:1) analysis of the state positiong in the defence industry after the Cold war; 2) economic trends and indicators of the national DTIB; 3) armed forces structural reforms and national procurement policy; 4) defence industry: the supply side; 5) Multilateral cooperation; 6) approach to CSDP; 7) Conclusion. In the conclusion chapter, the comparative analysis of national defence industrial policies will be conducted alongside with application of the theoretical insights on the European defence integration.

1.4 COUNTRY SELECTION

Germany, France and the United Kingdom have been selected for the following reasons. First, each represents relatively great military power within the EU and their Defence Industrial and Technological Base (DTIB) are of great importance in Europe. Secondly, they all represent distinctive models of state-industry relationship configuration, which were developed over the last decades. During the Cold War, the states had very similar positions and structure of DTIBs, where states were largely involved in the organization of the defence sector as the client who determined the way military programmes were developed and financed.[4] However, in aftermath of the Cold War, each of these three states have chosen different path in developing state-industry relationship: the U.K. adopted the liberal model favoring open and competitive market;

[4] DUPUY, R."L'industrie européenne de défense : changements institutionnels et stratégies de coopétition des firmes, dans le dossier Fondements économiques et industriels de la defense", Innovations, 42(3),2013, pp. 85-107.

Germany decided to distance itself from its defence industry; France chose to preserve its military autonomy despite budgetary pressures.[5]

1.5. LITERATURE OVERVIEW

The case study analysis is conducted through archival research based on scholarly literature, national security documents, mission and capability analyses, official EU documents and statements, and published interviews. Among others, the archival research will focus on national security policy documents relating to initiatives conducted in respond to the budgetary pressures, reports and investigations by national Ministry of Defence, various domestic agencies and parliamentary bodies in each country. It will also involve the examination of similar documents and reports produced through the European institutions and agencies. Finally, it will include an examination of key policy speeches by responsible ministers and heads of government related to defence policy at national and EU level.

[5] Matelly, Sylvie and Marcos Lima. "The influence of the State on the strategic choices of Defence Companies: the cases of Germany, France and the EU after the Cold War", *Journal of Innovation Economics and Management* 2016/2 (n°20)

2. STRUCTURE OF EUROPEAN DEFENCE INDUSTRY

The defence industry is rather different from rest industries, due to its unique relationship within nation state. To many states an appropriate defence technological and industrial base (DTIB) is crucial to its political sovereignty. Throughout the last decades states have invested heavily into the industry in order to ensure security of supply (SoS) and make themselves as much independent as possible from exterior support and supplies. Consequently, national defence industry usually exists within the defence industrial triptych where national government is the main customer, sponsor and regulator.[6] Thus, the industry's configurations, ownership, performance and trade are determined by its national government policy. The general characteristics of defence industry market are:

a) An emphasis on the performance of high technology weaponry rather than on cost.

b) The bearing of risks by governments who often finance R&D and in some cases provides investment in capital and infrastructure.

c) Elaborate rules and regulations on contracts, as a result of the lack of a competitive market and to assure public accountability.

d) Close relations between the contractors, the procurement executive and the military.

e) Outside of the US many companies will be national monopolies or close to it.[7]

These characteristics led to the development of a trend within the market where national champions have an advantage in obtaining production contracts, as they have special relations with the military and the procurement executive. These contractors tend to seek involvement in the production of technologically advanced weapon systems with potential over time contract prolongation as governments frequently ask for technological improvements and/or modifications. Granting large research and design contracts with guaranteed cost coverage and/or risk borne by the state typically leads to high profitability despite the low efficiency in manufacturing.

The structure of the market compromises both barriers to entry and barriers to exit for defence producers. Those barriers are imposed by government procurement policy that often justifies national protectionism behavior on the ground of SoS and wider economic benefits such as jobs,

[6] Taylor, Trevor and Heidenkamp, Henrik et al. "The Defence Industrial Triptych : Government as Customer, Sponsor and Regulator" Routledge Journals, 2013

[7] Briani, Valerio and Marrone, Alessandro, et al. The Development of a European Defence Technological and Industrial Base (EDTIB). Directorate-General for External Policies of the Union, June 2013

exports, etc. The emphasis on performance and development of large scale projects, that is associated with constant rising costs of R&D, makes it significantly difficult for single companies to deliver new advanced weapon systems.[8] Consequently, the pressure in the defence industry has led to concentration of the production within fewer and larger companies, which are favored by national governments. The recent decrease of available resources for domestic orders and on-going national protectionist policy unveiled the inefficiencies of this arms industry configuration in following domains:

- Economics: constantly increasing per-unit costs, loss of economies of scale and learning, absence of competition among companies;
- Defence: lower levels of technological sophistication, poor availability of cutting edge capabilities;
- Technology: slower rates of innovation, growing gap to leading companies outside the EU;
- Industry: loss of production capacities and changing markets;
- Security: increasing dependency on foreign suppliers. [9]

In order to proceed with the analysis of the defence industry development within the EU, it's important to explore and define the market size, structure and drivers of the defence industry sector.

2.1. THE SUPPLY SIDE

Although an arm production is to a larger extend a core manufacturing branch of military and defence producers, civil production still represents a great share of their business. Companies in the defence sector deliver a broad range of products , as they called in the literature "defence products", "weapon systems", "military equipment", "arms" and/or "dual-use good" alongside with production of various components of these products. The term "dual-use goods" indicates specific feature of arms production process that often borders with other civil sectors (such as IT, electronics, civil aviation, etc.). Subsequently, an arms production is delivered by a mixture of various military and civilian companies of different size that are involved on different stages of the process, starting from various supplementary services to a full scale weapon manufacture.

[8] Briani, Valerio and Marrone, Alessandro, et al. The Development of a European Defence Technological and Industrial Base (EDTIB). Directorate-General for External Policies of the Union, June 2013

[9] Bekkers, F. et al. *Development of a European Defence Technological and Industrial Base.* Main report. TNO, 2009

Thus, a defence technology and industrial base is the group of companies that supply the military with a range of products and services needed for their operation. Precisely, DTIB can be defined as the combination of people, institutions, technological know-how, and facilities used to design, develop, manufacture and maintain the arms and supporting defence equipment necessary to meet nation state's security objectives.[10] The structure of DTIB is very heterogeneous and hierarchical.[11] Indeed, very few arms manufacturers are capable of putting together complicated weapon systems, incorporating various aspects of defence such as sensors, optics, navigation, etc., while being reliable partner to their government costumer. Thus, the top tier companies are supported by manufacturers that are lower in the production chain, who provide specific components and subsystems. And they, in turn, are supported by their own suppliers and so the production chain goes further down. (See Table 1)

Table 1: Hierarchical Structure of Defence Industries in Value Chain

<table>
<tr><td rowspan="2">Prime contractors</td><td colspan="5">Lead system integrators</td></tr>
<tr><td>Aeronautics System developers and platform assemblers</td><td>Space and missiles System developers and platform assemblers</td><td>Land defence System developers and platform assemblers</td><td>Naval industry System developers and platform assemblers</td><td>Engines and propulsion manufacturers</td></tr>
<tr><td>Tier 1 contractors</td><td colspan="3">Specialised systems' producers (electronics, etc.)</td><td colspan="2">Complete sub-systems producers and assemblers</td></tr>
<tr><td>Tier 2 contractors</td><td colspan="2">Electrical and electronic equipment</td><td>Mechanical engineering</td><td>Metal working casts and moulds</td><td>Etc…</td></tr>
<tr><td>Tie r3 contractors</td><td colspan="2">Commodity suppliers</td><td colspan="2">General service suppliers</td><td>Basic economic infrastructure</td></tr>
</table>

Source: Bekkers, F. et al. *Development of a European Defence Technological and Industrial Base.* Main report. TNO, 2009

Prime contractors are lead systems integrators, platform producers and manufacturers of weapon systems). Along EU lines these are mainly large companies (primarily national champions), specialised on defence and military systems production. Lead system integrators assemble

[10] Dunne 1995; U.S. Congress, Office of Technology Assessment, Building Future Security, OTA-ISC-530 Washington, DC: U.S. Government Printing Office, June 1992.

[11] BLOM, M., CASTELLACCI, F., FEVOLDEN, A. (2014), Defence Firms Facing Liberalization: Innovation and Export in an Agent-based Model of the Defence Industry, Computational and Mathematical Organization Theory, 20(4), 430-461.

defence systems from several defence domains, such as BAE Systems (UK) and Airbus Group (ex EADS – Pan-European).

Others focus its production in mostly one area: Thales (France), Saab (Sweden) in fighter aircraft; Leonardo (ex Finmeccanica -Italy) in aeronautics, helicopters and armoured vehicles; Nexter (former Giat, of France) and Krauss-Maffei Wegmann (Germany) in major battle tanks and armoured vehicles; Thyssen Krupp (Germany), Fincantieri (Italy) and DCNS (France) in naval vessels and logistic support.

Tier 1 contractors are the specialised systems, complete sub-systems or major components producers: these are often specialized firms which are subcontracted by the prime contractors. Often, these are also risk sharing partners. Solid example of such company is Rolls Royce (UK) specializing in defence aero-engine products. It has registered 24.20% of its revenue to come from defence related contracts in 2016.[12] Alongside, great examples of these contractors are Safran Group(France) producing systems and equipment for aerospace, defense and security, Rheimetall (Germany) leading producers of systems and equipment for ground, air and naval forces.

Tier 2 contractors are producers of wide range of supplementary components and supply services: electrical & electronic equipment, mechanical engineering, metal working, casts & moulds, etc., along with a variety of services. Typically tier 2 contractors are small and medium enterprises (SME) or subsidiaries of the major defence producers (prime contractors and subcontractors). These contractors usually operate at the margin of the defence sector as they often supply dual-use goods and services. Therefore, they are frequently not listed as defence producers.

Tier 3 contractors are commodity providers and general service suppliers, as well as capacity contractors. This level also includes all providers of general economic infrastructure services (logistics, communications, education, etc.). Companies on this level of supply chain compromise small and medium enterprises that are subsidiaries of producers higher in the chain. These contractors supply dual-use products and usually are not listed as defence producers.[13]

[12] Rolls Royce Holding Plc., *Annual Report 2016*, London, 2016. Available at https://www.rolls-royce.com/~/media/Files/R/Rolls-Royce/documents/annual-report/rr-2016-full-annual-report.pdf

[13] The chapter on hierarchical structure of value chain is mainly based on Bekkers, F. et al. *Development of a European Defence Technological and Industrial Base.* Main report. TNO, 2009

The position on value chain indicates how countries and companies are affected to changes within international arms market. Formation of a new major company by a merger or acquisitions can lead to emergence of a new significant competitor within global defence market. This, in turn, may provoke rationalization and consolidation of the supply chain. Thus, companies on the lower position on the chain frequently find themselves in rather thought conditions. In times of austerity shrinking national demand, costly regulation, time consumption and lack of financing make it complicated for smaller producers to enter the defence market.

A gradual shift in relations between producers on the different level of the value chain has been occurring. As in the past, relations down the value chain were based upon transactions relating to cost and efficiency. For instance, the initial upfront investment for weapon contractures is numerous and with five-to ten-year life cycles being the norm for weapon systems, it can take a long time for the companies to profit. Thus, it may potentially leave the tier 1st constructors financially vulnerable.

For example, for a massive project such as the development of a recent Rolls-Royce engine, it takes up to five years to develop the product and every time it is ordered, it could be in service for up to 30 years. Thus, the project would potentially boost the suppliers' revenue on weapon maintenance. Taking into account the potential benefits for these constructors, it seems logical that by sharing some of the investment they could also qualify for the rewards.

Thus, in order to raise the efficiency and minimalize cost-related risks, constructors tend to implement "risk and revenue sharing" system. This system allows redistribution of the development costs of new equipment and weapon systems among the prime constructors and its partners within the value chain. By forging risk-sharing partnerships, tier 1st manufacturers can share the burden of the initial expense, while the suppliers can benefit from a percentage cut of the proceeds.[14]

However, the risk and revenue sharing system has more than just financial implications to it. Previously, interactions within the chain were mostly transactional. However, in the risk-sharing system of partnership, by its nature of co-dependency, the long-term relations are build united the suppliers and manufactures under a common goal. These partnerships based not only on simple contractual obligation, common long-running objectives facilitate integration of ideas,

[14] Jones, Chris. "United we stand, divided we fall: Supply chain consolidation and the rise of risk-sharing partners". *MRO*, June 2015.

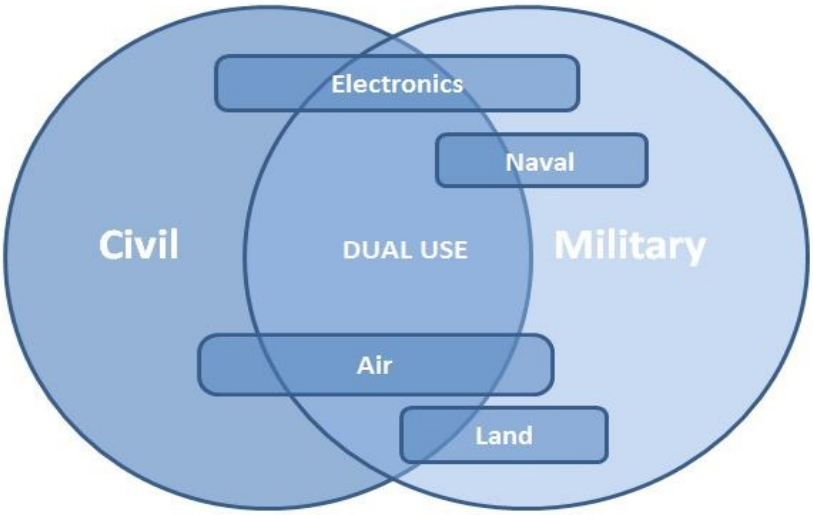
knowledge and skills. The united effort expands capabilities, and it all derives from the collective investment that is risk-sharing system. [15]

2.2. DEFENCE TECHNOLOGY, RESEARCH AND DEVELOPMENT

As it has been described above the defence industry is unique in many ways, as it compromises the mixture of numerous industrial sectors, actors and technologies. It is a combination of various industries and/or companies that are incorporated into supply chain for the military. Thus, it includes all industrial sectors and technologies that are relevant and involved in generating defence-related products and services. Along with others branches, arms industry sector includes explicitly dual-use products and services, such as electronics, IT, logistics, as well as companies which mainly operate in the civilian sector.

As the dual-use products and services has been a great part of DTIB for a long time, it has affected policies and statistics making it challenging to reckon the defence sector. However, the techonogy diffusion between military and civil dimensions varies for different industry sectors – the Air, Land, Naval and Electronics.

Figure 1: Defence industrial sectors related to Civil, Dual Use and Military applications.



Source: Briani, Valerio and Marrone, Alessandro, et al. *The Development of a European Defence Technological and Industrial Base (EDTIB).* Directorate-General for External Policies of the Union, June 2013, p.16

[15] ibid

Research and Development provides the basis for nearly every large-scale arm system delivery. As it was described above, the term indicates all industrial activities related to development of a platform, system, or subparts of them and complementary goods. Defence Research and Technology (R&T) as a sub-set of R&D refers to expenditures for basic research, applied research and technology demonstration for defence purposes. Therefore, the intensity of R&T within R&D spending is an important indicator for the degree of development of an industrial sector: more money devoted to R&D – the more advanced capabilities will be developed and the more innovation products will be delivered.[16]

According to the European Defence Agency, the European Union defence investment into equipment procurement and R&D has been on constant decline since 2011. A trend that started with 11.6% real decrease in 2011 and followed by another fall of 9.1% in 2014. Taking into account already relatively low investments into R&D, this industrial sector has been heavily affected by the drop of 15% in the equipment procurement in 2014. However, the share of R&D spending in total defence expenditure has been slowly increasing and stood at around 4.3% between 2006 and 2014. However, in real terms R&D expenditure decreased by around EUR 2 billion or 18.5% from 2006 up to 2014. [17] This trend of constant decrease in R&D is even more illustrative if to look into expenditure by EU-28, where R&D on defence made up a negligible part of government expenditure in all countries except the United Kingdom (0.2 % of GDP) and France (0.1 % of GDP).[18] As figure below indicates, resources allocated to R&T by European governments remains too little over the years. (See Figure 2)

Addressing the lack of funding of the R&D, the European Union agreed to a number of fresh initiatives designed to articulate a new level of ambition for security and defence in 2016. With the Commission presented its European Defence Action Plan (EDAP) on 30 November 2016, the EU member states have agreed to stimulate demand by encouraging increase in investment, advancing towards strategic autonomy by developing military capabilities and strengthening industrial competitiveness by supporting R&D. In other words, it can be summarised as providing funds for European defence, therefore ensuring investment in the supply chain and strengthening the single market.

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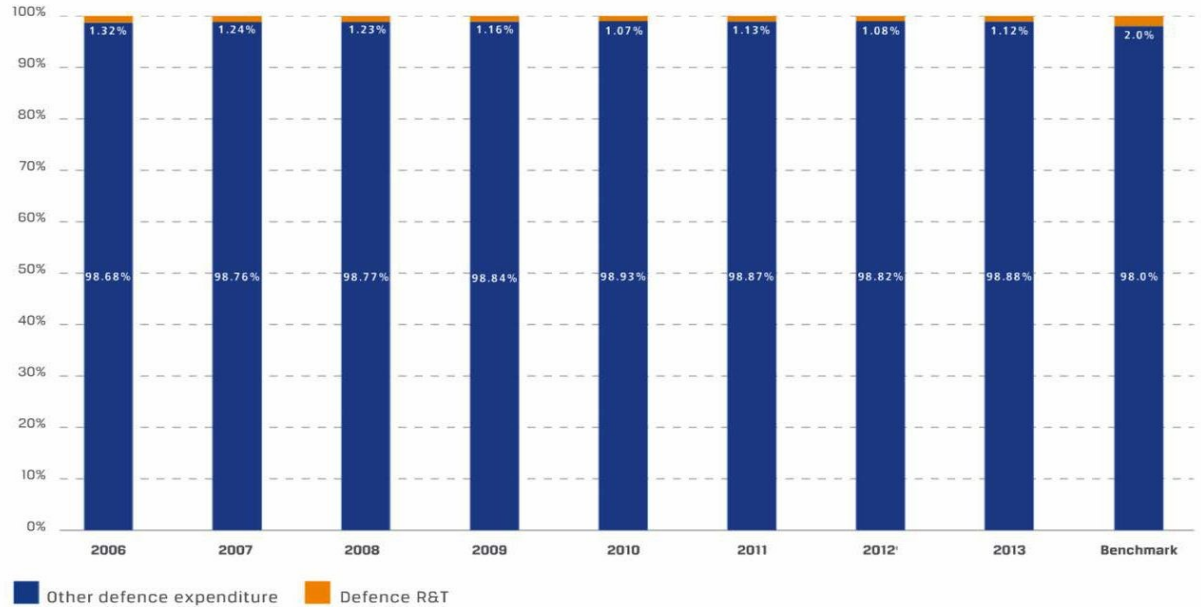
[16] Hartley, Keith. "The Arms Industry, Procurement and Industrial Policies", Chapter 33 in *Handbook of Defense Economics*, Volume 2, edited by Sandler and Hartley, 2007., pp. 1152-1154.

[17] EDA Press Center. "Aggregated defence data 2014 and 2015 (estimated)". *European Defence Agency*, June 07, 2016. Available at https://www.eda.europa.eu/info-hub/press-centre/latest-news/2016/06/07/aggregated-defence-data-2014-and-2015-(estimated)

[18] *EUROSTAT*. "Government expenditure on defence", March 2017. Available at http://ec.europa.eu/eurostat/statistics-explained/index.php/Government_expenditure_on_defence

Figure 2: Defence R&T as a percent of total defence expenditure in the EU



Source: Violakis P., 2016, p. 180.

A new European Defence Fund is to start on a small scale in 2017, with pilot project funding drone, cyber defence and maritime surveillance research. The programme is expected to run from 2018-2019, starting small with a budget of around €25 million.[19] It is expected that this budget allocation could grow to a total of EUR 90 million until 2020. Under the post-2020 EU multiannual financial framework, the Commission intends to propose a dedicated defence research programme with an estimated amount of EUR 500 million per year.[20]

2.3. THE DEMAND SIDE

Over last decades the structure of defence industry and its restructuring process has been strongly influenced by trends in military expenditure and redistribution of procurement budgets within the EU. Although global real military spending has been growing since 1960, the median share of military expenditure as % of GDP has fallen since the end of the Cold War. This indicates that, on average, countries are allocating more of their income to nondefense spending. Following the end of the Cold War, European governments preferred re-investing the "peace

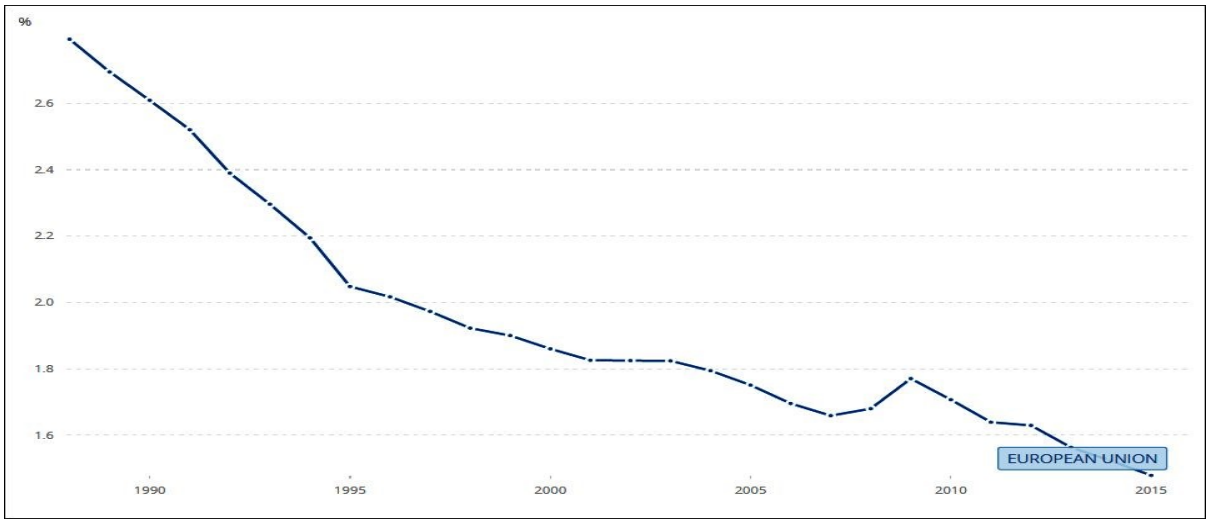
[19] Eanna Kelly. "Why the EU needs to start spending on defence R&D" paper presented at the European Defence Procurement Conference, September 22, 2016. Available at http://www.eudefenceprocurement.com/single-post/2016/10/13/Why-the-EU-needs-to-start-spending-on-defence-RD

[20] European Commission. *European Defence Action Plan: Towards a European Defence Fund*. Brussels, November 30, 2016.

dividend" into states' welfare programmes.[21] However, with a number of defence assets have been privatized and defence budget being reduced, the European governments have straggled to streamline procurement projects from the Cold-War era and to re-orient them into efficient industry configuration required in modern times.[22] Alongside, downfall in sources allocated to defence resulted in major reduction in capacity and procurement orders (both national procurement and arms exports) in the European defence industry between 1990 and 2003. Arms industries have followed the pattern with many rationalization and consolidation initiatives taking place. Restructuring of the industry resulted in various merges and acquisition, which in turn led to emergence of the new names among the top European arms companies, such as BAE Systems, EADS and Thales. With fewer but larger European arms producers entering the defence market, some arms firms have dropped out of the top group or have been forced to exit the industry.

Despite the restructuring attempts of EU-28, with a different degree of success, and a slight increase in nominal spending in the Western Europe, effective European defence budgets in real terms have decreased constantly. (See figure 3) A slight decrease in the share of defence expenditure compared to total expenditure were noted over 2002-2015 (2002: 1.5 % of GDP vs. 2015: 1.4 % of GDP), with the share in total expenditure dropping from 3.3 % in 2002 to 2.9 % in 2015.[23]

Figure 3: EU-28 Military Expenditure in % of GDP after the Cold-War



Source: The World Bank| SIPRI: Yearbook: Armaments, Disarmament and International Security. 2016

[21] Fabio Liberti, "Defence spending in Europe: Can we do better without spending more?", In*stitut Jacques Delors*, June 2011.
[22] Valasek, Tomas. "Surviving austerity: The case for a new approach to EU military collaboration", *Centre for European Reform*, 2011.
[23] EUROSTAT DATABASE 2017

2.4. CRITICALITY OF GLOBAL MARKETS AND ARMS TRANSFERS

In recent times nearly every defence producing company and state are largely depended on foreign sales. For many of them the foreign trade has become vital for the survival and maintenance of efficient DTIBs. Meanwhile, the global market in defence goods and services has grown into highly competitive and complex space. While the majority of exporters are located in the West, the certain tendency of favoring the importers from the rest of the world has occurred. This, in turn, led to increase in application of various incentive practices such as foreign direct investments, technology and knowledge transfers, offsets.

With the end of the Cold War the structure of global arms market has changed dramatically. Many national defence industries have shifted from single country to transnational production. For many of them it was the only possibility to keep up a sufficient DTIB. During the Cold War, European arms manufacturers tended to sell as much weapons as possible in order to protect production lines and employment. However, with the end of the Cold War, shrinking domestic defense budgets intensified pressures to internationalize, diversify and restructure defence industries in Europe. Multinational production became more attractive due its potential cost-efficiency. As the result a bunch of new regional companies entered the international arms market: BAE Systems, EADS, Fimeccanica and Thales.

With the globalization process the different form of military-civil interaction in technology. The dual use technology became broadly available around the world; meanwhile the military industry has expanded itself into area of information technology.

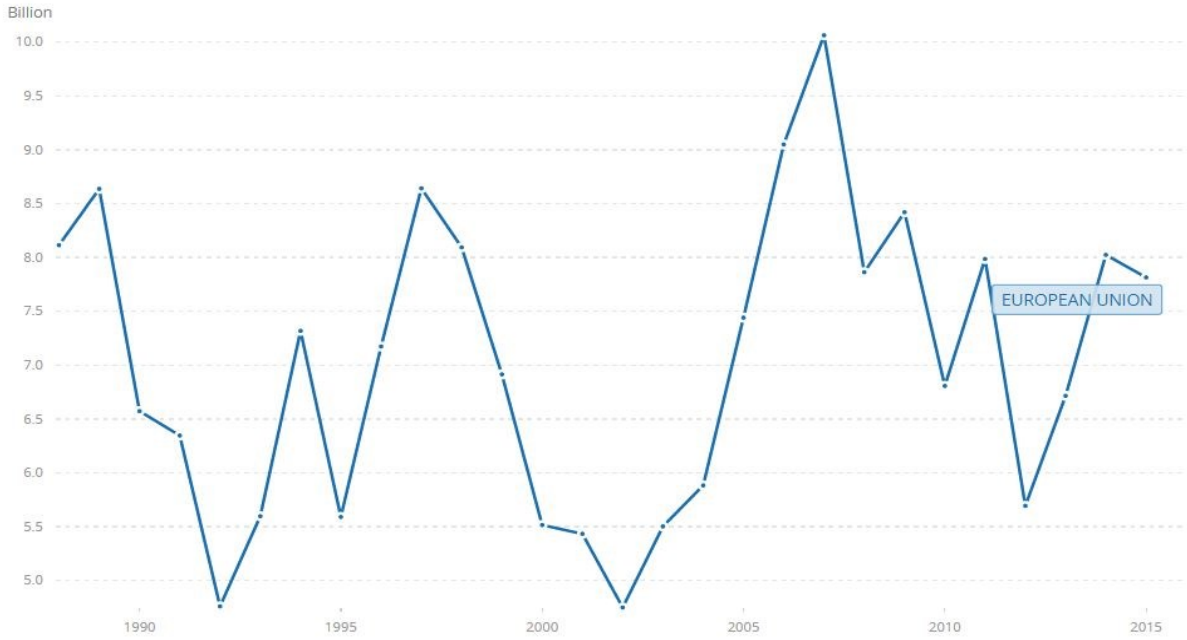
In regards to global trends in defence trade, in aftermath the Cold War global arms exports dropped significantly. However, European companies were able to recover faster than those of the former Soviet Union. As it is indicated in the Figure 4, European arms exports fall dramatically in early 1990s and early 2000s, however were able to rise back every time.

As it was mentioned above, the military expenditures of the EU countries have visibly decreased in the last few years. This means that fewer arms are sold on the internal European market. The European defence industry is therefore more and more dependent on exports that occasionally decrease as well.[24] According to SIPRI, the top five West European suppliers—France, Germany, the UK, Spain and Italy—together accounted for 21.7 per cent of global arms transfers in 2012–16. However, many top arms exporters in the EU have seen the decrease in their revenues in comparison to 2007-11 period, with only Italy and the UK notably increasing their

[24] European Commission press release, "A new deal for European Defence: towards a more competitive and efficient defence and security sector", p.25, Brussels, 2013.

arms exports. The combined arms exports by European Union (EU) member states accounted for 26 per cent of the global total in 2012–16, a 9.8 per cent decrease compared with 2007–11.[25]

Figure 4: The European Union value of arms exports in billion USD, 1988-2015



Source: SIPRI database 2016| World Bank database

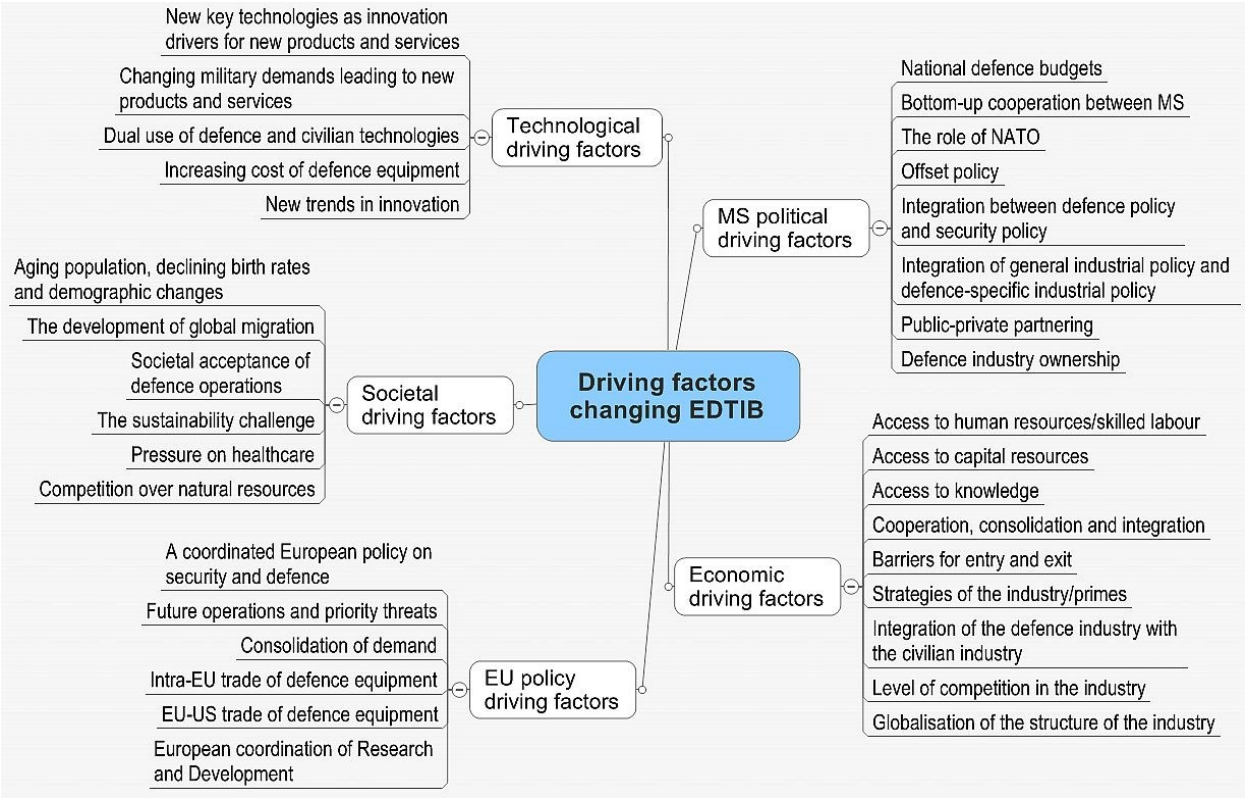
2.5. DRIING FACTORS CHANGING EDTIB

As it was briefly described above, national DTIB operates in a specific regime influenced by various politico- and socio-economic incentives. These incentives impose pressure on the DTIB for change and therefore potentially affect the way certain national DTIBs are developed and incorporated into the EDTIB. Some of the driving factors also serve as intermediate variables for this research and will be described below. (see figure) Importantly, many of the drivers are interconnected and mutually depended; therefore they are re-appeared in different set of factors.[26] (See Figure 5)

[25] SIPRI. *Trends in International Arms* Transfers, 2016. Stockholm, February 2017, pp.4-6

[26] This chapter based on Bekkers, F. et al. *Development of a European Defence Technological and Industrial Base.* Main report. TNO, 2009.

Figure 5: Driving factors changing EDTIB



Source: Bekkers, F. et al. *Development of a European Defence Technological and Industrial Base.* Main report. TNO, 2009. p.31

2.5.1. NATIONAL POLICY DRIVERS

The defence industries is highly influenced by national policies, such as defence and security policy including adopting and redistributing defence budgets; industrial policy; research and innovation policy; regulative and instrumental framework for the defence industry within the state.

For instance, the defence industry budgets reflect and constitute the demand for firms. As since the end of the Cold War the military expenditures were broadly reduced, the defence firms tend to move into the wider security sector and/or search for new export opportunities elsewhere outside the EU, thus, reshaping the composition of national defence industries as well as EDTIB. The other important factor in this category is public/private partnership. It reflects the trend of development of certain public-private partnership with increase in practice of leasing of specific service goods. Although EU member states are less inclined to outsource core military programmes, it is quite likely that an increasing number of services traditionally performed in-house, such as administrative, communication, logistics and information serves, will be obtained

from the market. The reluctance to share the responsibility for the goods among member states keeps their public-private partnerships low, thus potentially negatively affects sufficiency of the defence industry sector.

Going further, defence industry ownership factor is one of a great importance. Many of the present prime contractors and other defence firms are partly or fully owned by a government, having a golden share in stakes. In many EU member states public ownership ensures security of supply, while providing means for operational independency and sovereignty. It also gives an opportunity to support national industry and maintaining employment level. On the other hand, the state's ownership of defence producers slows influences the development of multinational cooperation and limits opportunities for contractors to enter the international market. Less government ownership may lead to increase productivity, competitiveness and efficiency of DTIB, giving it an opportunity to redistribute production chains among the most cost-efficient entities.

2.5.2. ECONOMIC DRIVING FACTORS

This category consists with economic factors that influence development of the defence industry. It is evident, that the economic environment pressures have a great impact on national and EU DTIBs. In the light of recent economic crisis in the EU, available financial resources for defence research and production have decreased notably. In other words, economic pressures post certain constrains on defence industry development, such as downsize of national procurement programmes or re-location of the resources. Economic driving factors can be summirised under four dimensions: factor conditions, demand condition, related industries and strategy.[27]

Factor conditions constitute of availability of high-skilled human resources, know-hows and capital resources. As DTIB is a highly knowledge-based industry, it requires a highly competent workforce, necessary capital for investment in new technologies and innovations. The availability of required quality and quantity of skilled labor has a major impact on the DTIB development. The defence industry is highly innovative and technically advanced sector, which cannot function without highly-skilled and educated personnel. Taking into account that R&D is of great importance for the DTIB, the lack of necessary workforce can and will affect the evolution of the DTIB. With the shortage of the personnel the competition will decrease as well as industry's capacity to develop advanced weapon systems. Alongside the availability of skilled workforce, the access to necessary capital is crucial for the DTIB. In order to maintain

[27] Porter, M. E. *The Competitive Advantage of Nations*. New York: Free Press, 1990.

competitive and advanced DTIB, states need to invest heavily to keep up with the market or gave up their stakes in national defence producers for a privatization. As DTIB is a capital-intensive industry, it requires considerable investments in order to grow. With the lack of capital, the defence production may suffer significantly, thus affecting sufficiency of DTIB.

Other economic factors that influence development of DTIB and have been described above are increasing integration between civil and defence industries, globalization of the defence market, level of consolidation of European defence firms and market constrains (such as barriers to entry and exit).

2.5.3. SOCIETAL DRIVING FACTORS

National defence industrial policy is a subject to a great socio-economic pressure. Societal factors have a major impact on the perception and objectives of military activities. Moreover, as defence industrial sector is capital-intensive, national decision-makers are often face a hard decision on where to allocate resources, for instant whether to invest in defence equipment or into welfare. Over the years the voice of public has become stronger with various activists group campaigning against increasing funding for military activities and defence production for a various reasons (e.g. environmental, religious, pacifistic, etc.).

Changing demographic of population, rise of global migration, environmental and sustainable challenges - all these factors have direct or indirect impact on DTIB development as part of the broader security strategy. The combination of various factors may influence public opinion, thus justify more robust defence industry development or otherwise.[28]

2.5.4. EUROPEAN UNION POLICY FACTORS

These drivers include the policy trends and institutional developments that are developed within the political context of the EU and have impact on the structure of the DIB. The EU political factors are originate from the EU institutions, such as the European Commission, European Defence Agency and the Council of the European Union, and delivered in various EU policy papers, directives and documents.

Under the analysis of these documents it is possible to highlight several important drivers that influence development of national defence industries within EDTIB. For example, the development of a coordinated EU policy on defence and security and its implementation may enhance the structure, efficiency and equality of the EDTIB. As well as consolidation of the

[28] Bekker, Sonja, and Ton Wilthagen. "Europe's pathways to flexicurity: Lessons presented from and to the Netherlands." (2008).. 2008

demand side, streamlining procurement procedures, enhancing intra-EU trade of defence equipment, services and know-hows may lead to development of a more open and sufficient European defence equipment market, and potentially influence domestics DTIBs. The EU political factors are presented in the figure: Driving factors of changing EDTIB and will be analysed in more details in next chapters of this research.

2.5.5. TECHNOLOGICAL DRIVING FACTORS

Technological progress is of importance for defence industry and military as whole. Highly-advanced defence industry may not be developed without cutting-edge technologies. With the market so dynamic and competitive, defence industries have to adopt quickly. For example, with the innovation comes the change in supply side. New technologies developed not just in a military field but also in civil sector may greatly impact defence production, leading to development of new products and its applications. Going further, the growing interconnection between military and civil sector technologies enforce the technological progress for both sides. The change in military demands requires new adjustments in products and services, which come with new trends in innovation. Therefore, constantly changing demand and supply trends re-shape the DTIB.

3. HISTORICAL BACKGROUND AND INSTITUTIONAL FRAMEWORK OF EUROPEAN DEFENCE COOPERATION

The Maastricht Treaty[29] (formally, the Treaty on European Union or TEU) brought defence policy into the EU for the first time on 7 February 1992. Since then, the defence policy cooperation in Europe has been formalized within legal and institutional framework. However, arrangements to make it efficient through the Western European Union were quite unsuccessful, that resulted in the weak military presence of the EU in the Balkans in the 1990s.

Sharing the conviction that the EU should play a greater role in the world, the United Kingdom and France proposed at the Saint-Malo Summit in 1998 to develop the European Security and Defence Policy (ESDP), which would be aimed to cope with challenges of effective crisis management. Next year their joint initiative was adopted by the European Council in Cologne alongside with the appointment of Javier Solana as High Representative for the Common Foreign and Security Policy. As the Cologne communiqué put it:

"The Union must have the capacity for autonomous action, backed by credible military forces, the means to decide to use them, and the readiness to do so, in order to respond to international crises without prejudice to actions by NATO".[30]

Details of the new approach were elaborated at the Helsinki European Council in December 1999 and have been summarized under the Helsinki Headline Goal (HHG). They included ambitious force goals to be implemented by 2003, particularly a corps level of up to 60,000 troops available in 60 days and to be expected to remain in the theatre for one year in order to fully address set of scenarios established in Peterberg tasks (1992), i.e. humanitarian and rescue tasks, peace-keeping and peace-making tasks as well as tasks of combat forces in crisis management.[31] Along mentioned, the HHG included new command, control and politico-military structures (Military Committee, Military Staff, political control by the Political and Security Committee) and ambitious capabilities on the civilian (civ-mil) side to promote preventive action to avoid a war as well as to establish the peace.[32]

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[29] Treaty on European Union (Maastricht text), July 29, 1992, O.J. C 191/1.

[30] Council of the European Union. *European Council declaration on strengthening the Common European Policy on Security and Defence*. Cologne, 1999.

[31] Under Article 17(J7)(4) the Treaty of Amsterdam incorporated into the TEU the so-called Petersberg tasks as the point of reference for the scenarios used to specify the capability needs. Later these have been extended to "Petersberg Plus Tasks" by the Lisbon Treaty (2009), which additionally includes military advice, join disarmament operations and assistance tasks.

[32] Council of the European Union. *Presidency Progress Report to the Helsinki European Council on Strengthening the Common European Policy on Security and Defence*. Annex I to Annex IV, Helsinki, 10-11 December 1999.

Furthermore, European Security Strategy (ESS) has provided the coherent framework for policy in this area.[33] The new strategy, originally adopted in 2003 and revised in the light of changing security circumstances in 2008, defines strategic objectives and set out the potential threats to Europe. It points out the necessity of the EU member states to become active, capable and coherent as well as importance of further development of defence cooperation and integration. The main five threats identified in ESS: terrorism, weapon of mass destruction, regional conflicts, failure of states and organized crime. Importantly, The ESS has had a direct impact on the ESDP: it led to comprehensive review and update of the capability goals, which were translated into concrete military objectives under Headline Goal 2010 (HG 2010)[34].

3.1. HELSINKI HEADLINE GOAL 2010

In May 2004 EU member states agreed to "commit themselves to be able by 2010 to respond with rapid and decisive action applying a fully coherent approach to the whole spectrum of crisis management operations covered by the Treaty".[35] Therefore, the EU ability to deploy rapid reaction forces to response a crisis was defined as a key element of the Headline Goal 2010 and to be implemented in form of EU-Battlegroups (BG). Precisely, BG units of about 1500 troops to be composed of national or multinational forces and have to be deployable at any one time in a six-monthly rotation, at very short notice, for urgent and short operations. Furthermore, the ESS comprised following capability development targets presented in the Table[36] below:

Table 2: Helsinki Headline Goal 2010

Capability to be deployed	Implemented by
Establishment of a civil-military cell within the EUMS	2004
Establishment of the Agency in the field of defence capability development, research, acquisition and armaments (European Defence Agency)	2005
EU Strategic lift joint coordination, with a view to achieving by 2010 necessary capacity and full efficiency in strategic lift (air, land and sea) in support of anticipated operations;	2004
Specifically for Airlift: the transformation of the EACC into the EAC is	2008

[33] Council of the European Union. *A secure Europe in a better world - European security strategy*. Brussels, 12 December 2003.
[34] Thessaloniki European Council, *Presidency Conclusions,* 19-20 June 2003, no. 56.
[35] The European Council. *Helsinki Headline Goal 2010.* 17 and 18 June 2004.

welcomed, as is the intention on the part of some Member States who so wish to develop a European Airlift command fully efficient by 2010	
Developing appropriate compatibility and network linkage of all communications equipment and assets both terrestrial and space based	2010

Source: Sophie-Charlotte Brune and Christian Molling. *The Impact of the Financial Crisis on European Defence*. European Parliament, Directorate General for External Policies, 2011, pp.20-21.

Importantly, the development from the HHG to the HG 2010 designated the learning process has been taken place within the context of European Defence cooperation and integration. In general, the HG2010 was adopted to remedy the capability shortfalls have been recognized in the implementation of the HHG. The HG2010 aimed to link EU's capability development process with a new framework of recent institutional innovations such as the ESS and newly-established European Defence Agency (EDA). Unlike its predecessor, the HG2010 could build upon a consensus, reached within the EU in the form of the ESS, over the definition of threats, possible scenarios, the means to address them, and further role of military force. In contrast to the HHG, which was focused on platforms, numbers and available capabilities, the HG 2010 had a more qualitative approach: it focused more on the capabilities needed to develop the EU militaries into more flexible, mobile forces and enable them to address new threats. While the HHG was geared to the Balkan wars and focused in particular on quantitative targets, the HG 2010 focused on crisis management and qualitative targets. The force generation process under the new Headline Goal became more transparent. This in turn facilitated its adoption and increased its acceptance among EU Member States.[37]

Nonetheless, the overall method of governance within Headline Goals remained unchanged; there was still no sanction mechanism to monitor the commitments of the Member States. In other words, the HG 2010 contributed more in an adjusting the list of goals and tasks rather improving method of governance that was already hardly functional within the HHG. Going further, there was already a certain tendency within EU defence sector: the market and industry were still mostly excluded from the EU integration process and the EU single market traditions. As under EU law the armament sector de facto is exempted from the EU integration process, the several attempts by the European Commision to introduce several structural changes to improve defence cooperation and procurement faced strong resistance from the national governments.

[37] Ettore Greco, N. Pirozzi, Stefano Silvestri (eds). "EU Crisis Management: Institutions and Capabilities in the Making." *IAI*, Rome, November 2010, p.14.

3.2. EUROPEAN DEFENCE AGENCY

The disappointing results of the capability development review called for the development of comprehensive solutions in this area to be undertaken collectively. France and the UK developed the idea of the EU Agency to encourage Member States to improve their defence capabilities. As a result, in 2004 a Joint Action of the European Council established the European Defence Agency (EDA) which was a step towards rationalization of EU military capacity. The rationale behind the formation of EDA was affirmation of existing problems within EU member states military capabilities and armament cooperation. Functionally, the agency serves as a coordinator between the EU-institutions, national governments, multinational defence organizations and the defence companies. Its mandate compromises nearly all aspects of the armaments sector in Europe: Capabilities, Research and Technology, Armament and Industry and the Market research and technology, industry and market, armaments cooperation, and capabilities.[38]

However, the EDA's capacity remains very limited to the political willingness of the Member States. Taking into account the difficulties within EU defence cooperation mentioned before, it is not surprising that the success of the EDA has so far been limited. Starting with a very broad mandate, the agency soon felt the limitations imposed by the national governments. The first projects have severely suffered from the ongoing influence of the intergovernmental approach that interferes with economic rules of the Single Market in regard to the armaments sector.

The Treaty of Lisbon (ToL) in 2007 came with the several structural reforms in the ESDP-related issues, the prime of which was to rename the ESDP to Common Security and Defence Policy (CSDP).[39] Furthermore, it was agreed to create the post of High Representative of the Union for Foreign Affairs and Security Policy, while the head of Military Committee became the top military advisor to this post. The EU Military Committee (EUMC), which consists of the member states' Defence Chiefs represented by permanent envoys, undertakes the top advisory role to the EU in this summit. In the meantime, the Political and Security Committee provides monitoring and advisory services to the High Representative.

Following the adoption of the HG2010, the EU Military Committee tasked the EU Military Staff (EUMS) in coordination with other Council Secretariat bodies to analyse the capabilities that the

[38] Council of the European Union. *Council Joint Action 2004/551/CFSP of 12 July 2004 on the establishment of the European Defence Agency*, OJ L 245, Article 5, 2004, pp. 17-28.
[39] European Union, *Treaty of Lisbon Amending the Treaty on European Union and the Treaty Establishing the European Community*, 13 December 2007.

Member States could provide to ESDP and identified the EU's shortfalls to fulfill the tasks set out in the Headline Goal 2010. In order to address existing shortfalls, the EDA issued the Long Term Vision Report, which underlined the key aspects of the capability development EU Member States should concentrate on. Particularly, the key issues are: knowledge exploitation (intelligence, information and analysis); interoperability (equipment and systems; manpower balance; rapid acquisition; Industrial policy (increasing investment and consolidating the European Defence Technological and Industrial Base); flexibility in the case of the unforeseen.[40]

Based on the aspects outlined in the Report, the EDA in collaboration with EUMS and the Council Secretariat proceed to issue the Capability Development Plan (CDP). It provides a more realistic structured and systematic approach to Member States in terms of capacity building process. The CDP was established in order to facilitate EUMS' decision making process in realm of national capability choices and perspectives; encourage their further cooperation; and enable the development and following launch of new joint programmes which correspond current and future capability shortfalls.[41] By that time, the EDA formulate the list of initial capability areas for Member States to focus on.[42] Importantly, the CDP was a starting point for capability development initiatives which reflected current condition of the national defence sectors within EU.

Despite all mentioned declaration, plans and initiatives, the original outlines of the Headline Goal 2003 had been not completely implemented. Nevertheless, in December 2008 Member States signed the new Declaration on Strengthening Capabilities with even more ambitious goals. It describes scenarios in which the Union wants to be able to intervene, and the means with which it would do so. This six page segment outlines a significantly increased quantity of capabilities, based on the 2003 goals (60 000 troops deployable in 60 days), but with a more ambitious framework, such as the ability to simultaneously conduct two major operations of up to 10 000 troops plus a civilian contingent for 2 years; two rapid response operations using inter alia EU-Battlegroups; a civilian-military humanitarian assistance mission up to 90 days; and

[40] European Defence Agency. *An Initial Long-Term Vision for European Defence Capability and Capacity Needs.* October 2006.
[41] Baudouin Heuninckx. "The European Defence Agency Capability Development Plan and the European Armaments Cooperation Strategy: Two Steps in the Right Direction." *Public Procurement Law Review*, Volume 18, Issue 4, Sweet & Maxwell, 2009.
[42] Council of the European Union European Union . *European Security and Defence Policy : Development of European Military Capabilities*. 2008, p. 4.

around one dozen ESDP civilian missions of varying formats with a major mission (up to 3000 experts) to last several years.[43]

The declaration also called for the establishment of a European air transport fleet; an airlift command and an airbase for a European force; observation satellites (the MUSIS programme) and taking account of military requirements in space surveillance. In terms of harmonisation, it set outs the development a military exchange programme and improvement in the structure and the functioning of the European Security and Defence College. Moreover the declaration stressed the necessity of pooling of efforts are to be explored further, by looking at new methods for multinational management of assets, joint capabilities, collective capacity and voluntary specialisation provision through mutual interdependence.[44]

A problem of the Headline Goals and the Declaration on Strengthening Capabilities[45] is that even through certain progress has been done, they tend to include rather quantitative than qualitative goals. The level of ambition has not yet been translated into a new step-by-step plan to generate the necessary sources for its implementation. The character of crisis management is also shifting from traditional military tasks. Future engagements should to have more civilian component in order to cope with complexity of environment. Currently the EU only has civilian or military capabilities; neither of them is genuinely made for integrated scenarios. The EU Member States' defence industry sectors have to adapt themselves to integrated environments on a case-by-case basis. While the new level of ambition addresses the complexity of crisis scenarios, this is not reflected in the capability-development process, where civil and military demands continue to be treated separately. Frankly, the Declaration seemed to only widen the gap between available and intended capabilities.

European responses to global and local security threats and challenges have mainly come from the member states, with few concerted actions taking place at EU level. Moreover, the EU has a very limited budget for defence and security matters in contrast with other policies. For instance, the EDA's budget for 2015 was EUR 30.5 million — EUR 24.4 to cover the personnel and general costs.[46] While the scope of funding of the European Parliament pilot project on CSDP

[43] Council of the European Union. *Declaration on Strengthening Capabilities*. 11 December 2008.
[44] Giji Gya. 'The ESS Scorecard'. *European Security Review* , No 42, ISIS Europe, December 2008, pp 2.
[45] Council of the European Union. *Declaration on Strengthening Capabilities*. 11 December 2008.
[46] http://www.eda.europa.eu/aboutus/who-we-are/Finance

remains at EUR 1.5 million for the fiscal years 2016 and 2017.[47] Therefore, the collaboration among Member States in security and defence has been far from desired.

3.3. EUROPEAN DEFENCE ACTION PLAN 2016

In order to address constantly changing security treats and rising gap between military and civil domains, in 2016 the EU has adapted its strategic framework. The newly-published EU Global Strategy for Foreign and Security Policy (EUGS) aims to bring together all means and tools for the EU to act as a coherent and efficient actor on the international arena.

Regarding security and defence policy, the EUGS represents the new ambition level for the CSDP. Under the EUGS the European Commission introduced the new European Defence Action Plan (EDAP) which is focused on opening new avenues for underpinning military capabilities through future funding of research and procurement in the EU.[48] The EDAP marks a certain shift in the European Commission's approach towards European defence, as it unlocks possibilities to fund defence related activities and projects through the EU budget, particularly – the European Defence Fund. (EDF).As the Commission seeks to strengthen competiveness and openness of the EDEM, support further cooperation in defence procurement and to help EU-28 to benefit from liberalizations of the defence markets, the actions proposed in the EDAP are aimed to support further development of defence and security capabilities among the member states.

The EDF consist of two separated but complementary "windows" – a research window and a capability window.

- A research window through which the Commission supports collaborative defence research. Between 2017 and 2020, €90 million will be made available to this end under the Preparatory Action (PA) .The Commission proposes to spend €500 million annually under the 2021-2027 Multi-annual Financial Framework.
- A capability window which brings together member states' investments in collaborative capability development, with an estimated total worth of €5 billion annually. The capability window consists of an 'umbrella structure' open to all member states and specific projects in which several member states jointly procure capabilities. To get

[47] M. F. Mauro et K. Thoma, 'The future of EU defence research', Directorate-General for External Policies, Policy Department, European Parliament, March 2016, p. 30.
[48] Margriet Drent and Dick Zandee. *European defence: action and commitment*. EU Strategy to Defence Series March 2017. Available at https://www.clingendael.nl/sites/default/files/PB_European_Defence_action_and_commitment_0.pdf

member states to pool their resources under this window, the Commission offers several financial incentives. For example, contributions to the EDF will be discounted from the structural fiscal efforts which member states have to make under the Stability and Growth Pact.[49]

Going further, the EDAP potentially may create more favorable conditions for the integration of national supply chains, by establishing new opportunity for the European Investment Bank to provide loans for SMEs. Alongside, the new EU financial instruments can lead to establishment of a new framework for cooperation in European Defence. Indeed, as of 2021, EU funding would certainly require more robust managing structures. This would open new avenues for European capability priority-setting, planning tools and framework for defence cooperation, and would thus channel future European defence funding towards European strategic autonomy.[50]

3.4. LEGAL UNDERPININGS

As in absence of literal definition of 'defence' notion in the EU Treaty, it is possible to distinguish two main dimensions to the term by EU law within the context of CSDP. According to the Article 42 (2) TEU:

'The common security and defence policy shall include the progressive framing of a common Union defence policy. This will lead to a common defence, when the European Council, acting unanimously, so decides. It shall in that case recommend to the Member States the adoption of such a decision in accordance with their respective constitutional requirements.'[51]

Thus, there is a clear distinction between 'common defence policy' and 'common defence' in the Treaty of Lisbon: where the first is addressed on EU level, thus is one of EU competence; and the last is rather optional and largely dependent on political will of EU member states.

As was mentioned before, 'common defence policy' formation is well elaborated and conceptualized by the ToL and its predecessors. The CSDP includes coherent legal infrastructure; set of multidimensional tasks and goals; and developed institutional framework.

[49] Ibid.
[50] De La Brosse, Guillaume. "Deploying financial tools in support of European Defence Cooperation", *Armament Industry European Research Group*, March 2017, p.7. Available at http://www.iris-france.org/wp-content/uploads/2017/03/ARES-Group-Comment-G-DelaBrosse-f%C3%A9v-17.pdf
[51] European Union, *Treaty of Lisbon Amending the Treaty on European Union and the Treaty Establishing the European Community*, Article 42(2), 13 December 2007.

With regard to 'common defence' as the second conceptual dimension of the CSDP, the elaboration of common Union defence policy to 'common defence' will have to be adopted by the Member States. Thus, despite the ambitious HG 2003 and the Declaration on Strengthening Capabilities calls for self-sustaining EU forces, the CSDP legal framework determines that member states are still prime actors in policy agenda-setting and its further implementation. Therefore, EU law does not challenge prime position of state actors in defense policy neither does it opposes NATO's role in European Security. Thus, the relevant provisions of the Lisbon Treaty are not likely to accelerate integration which will correspond to the intergovernmental nature of the CSDP. This make a case especially since the principle of unanimity remains a cornerstone of security and defence cooperation in the EU. While Qualified Majority Voting applies in some cases for the CFSP, it is excluded altogether when it comes to decisions in regards military or defence areas. Thus, it is possible to argue that legal framework of the CSDP preserves the primacy of national sovereignty and as it was stated in ToL that national security remains the sole responsibility of each Member State.

3.5. LEGAL ASPECTS OF DEFENCE PROCUREMENT IN THE EU

Although EU Single Market has been quite successful in establishing the free movements of goods, services, people and capital, which in turn led to noticeable increase in trade and lowering of prices; EU has not succeed to transfer these economic freedoms towards European Defence Industry. It is still highly fragmented along national boundaries.

Perhaps the most significant difference between acquisition of public goods and of defence goods by national governments may lies within its sensitive nature, which in extreme case may mean the national survival. Therefore, there is a certain level of secrecy and strategic importance of national defence procurement process, which legitimately prompts the member states to protect local markets and to rely largely on national suppliers in order to retain a certain degree of autonomy and reactivity. This tendency of the defence market separation has resulted in twenty-eight compartmentalized national markets with different rules, standards and administrations. The lack of a coherent internal market of armaments limits the scope of market competition, thus hinders further development of defence industrial sector. Ultimately it threatens the growth and even the survival of European defence industries, on which Europe's own defence capacity relies.[52]

[52] Blanca Ballester. *Cost of Non-Europe Report: European Common Security and Defence Policy*. EPRS CoNE 4/2013, Brussels, 2013, pp. 50-52.

Currently, EU defence procurement legal norms fall under the EU Treaties and 'Defence' Directives' subordination. Despite attempts to harmonize national defence procurement laws through EU legislation, Member States are still reluctant to inscribe aspects related to defence procurement into EU law.

Continuing with EU law, Article 346 TEU allows national governments to refuse multinational defence and security contracts if the implementation of them would undermine essential security interests. Article 346 (1)(a) allows EU countries to keep secret any information the disclosure of which they consider contrary to their essential security interests. Article 346 (1)(b) allows EU countries '… [to] take measures as it considers necessary … for the protection of the essential security interests… connected with production of trade military items…'. Measures taken under Article 346 (1)(b) may not adversely affect competition on the common market for products not specifically intended for military purposes. Although the European Commission highlighted in an interpretive communication that Article 346 should be treated as an exception rather than the norm, in reality it is difficult to define what supposed to be 'necessary for the protection of the essential interests of its security' and under what circumstances this reference may be eligible.[53] Thus, it is possible to argue that area of defence procurement is de facto excluded from the EU integration process.

The EU Defence and Security Procurement Directive 2009/81/EC was adopted by the European Parliament and the Council in 2009 in order to open up the EU defence industry to cross-border competition. Furthermore, one of the main objectives was to facilitate EU defence market's development by establishing a formal framework for cross-border defence procurement within the EU. This directive is focused on the sensitive issues around security of information and security of supply and lately, has been integrated into national legislation of 23 EU Member States.[54]

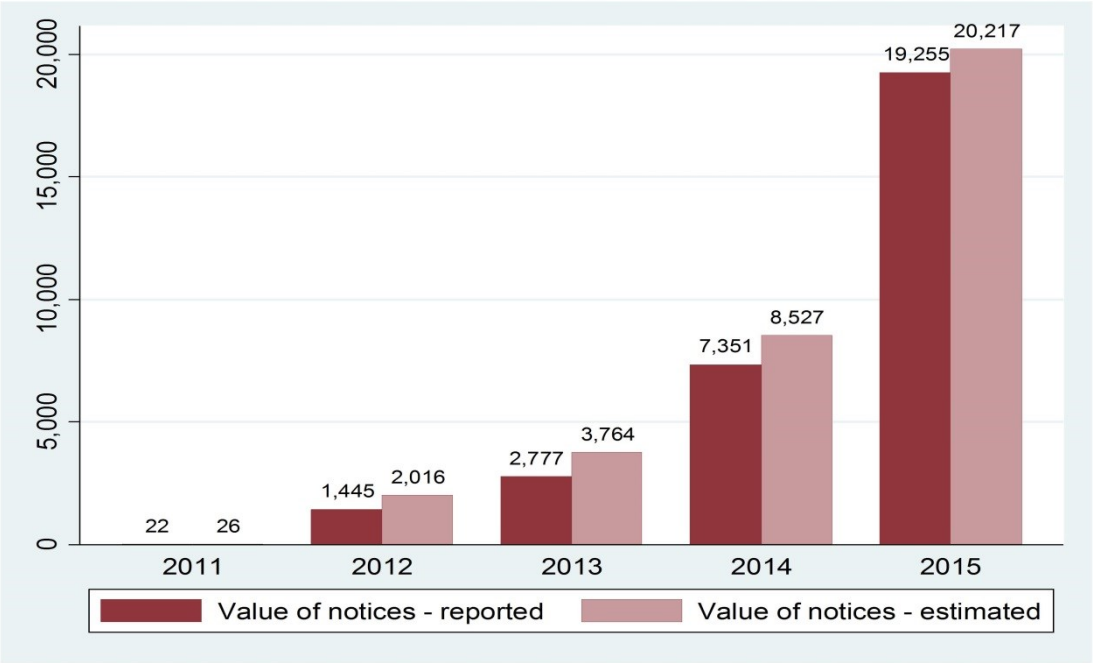
Although the integration of the Directive into national laws was challenging, many states have also transposed non- compulsory subcontracting provisions. As it is one of great importance for strengthening the EDTIB and development of the openness of the defence market, the European Commission through EDA tool regularly monitors the use of exclusions and termination of existed agreements. Starting September 2011and up to March 2015, more than 3500 contracts have been awarded under the Directive representing a total of €34 500 millions. These contracts

[53] Jay Edwards. "The EU Defence and Security Procurement Directive: A Step towards Affordability?" Chatham House, 2011.

[54] Council of the European Union. *Report from the Commission to the European Parliament and the Council on transposition of directive 2009/81/EC on Defence and Security Procurement*. 2009.

were published in TED, the official EU Public Procurement portal which covers all procurement announcements covered by EU legislation.[55] (See Figure 6)

Figure 6: Reported and estimated value of contract award notices published under the Directive, by year [value in million EUR]



Source: OJ/TED, manual corrections by DG GROW[56]

The second important EU instrument for regulating defence procurement law is the Directive 2009/43/EC which was adopted in order to simplify terms and conditions for transfer of defence-related products within the EU. It intends to ease cooperation of defence-related industries and functioning of EU internal market. The scope of defence-related products is set out in the Derictive's Annex which has to be updated regularly under the terms of Article 13(1) TEU, so that it strictly corresponds to the Common Military List of the European Union.[57]

Main tasks of the Directive include but no limited to stimulation of common production projects, erasing trade barriers for defined defence-related products and consolidation of the internal market. The new rules were also intended to create opportunities for small and medium-sized enterprises in the defence sector to join the supply chain within member states, thus

[55] The official EU Public Procurement portal. http://export.gov/europeanunion/defenseprocurement/
[56] Cited in http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=SWD:2016:407:FIN
[57] European Parliament and Council. *Directive 2009/43/EC: simplifying terms and conditions of transfers of defence-related products within the Community*. 6 May 2009.

strengthening the DTIB. It was believed that the efficiency of export controls in the EU would increase; therefore the risk of illicit transfers would be reduced.

Although the Directive contained a transposition period of more than two years after its publication in the Official Journal of the EU, a timely transposition seemed to have been quite challenging for several member states. A real problem arises with the updating of the Annex to the Derective, which is supposed to coincide with the Common Military List of the EU at every time, nonetheless in practice it is out of synch for at least half of the given year.[58]

Prior to the Treaty of Lisbon, in the time of adaptation of defence procurement secondary legislation, which was anaysed before, there was a parallel development of the former Second Pillar, particularly the establishment of the European Defence Agency under the Article 42(3) TEU. The EDA is a centralized European defence procurement agency, which was set up by a Council Join Action within CSFP, where all Member States are participants with exception of Denmark.[59] Its main tasks are to promote European defence cooperation by opening up armaments markets within EU and establishing fair competition. Under the ToL, Article 45 TEU provides for the institutionalisation of the EDA within the legal framework of the CSDP. Thus, the Agency represents a legal body of the CSDP and acts under the EU framework. It enables the participants to establish cooperation and develop administrative arrangements with third parties while being party of legal proceedings.

Importantly, the EDA is not aimed to duplicate already existing collaborative programmes in the EU but mostly to support the Member States and Council in improving defence capabilities within a voluntary and non-binding intergovernmental framework. It is expected that all public contracts have to be put out to tender and would be awarded by the EDA on behalf of the Member States. Nonetheless, the EDA procurement rules should not prejudice the measures adopted by Member States invoking the exception clause of Article 346 TFEU or Articles 10 and 14 of the Public Sector Directive 2004/18/EC.[60]

Despite its intend to facilitate defence cooperation towards deeper EU integration, the EDA's possibilities are limited. First of all, as was noted before, its activities are strongly depended on the Member States' interests and willingness. For instance, as the Agency is not an armament

[58] European Commission. *Report on transposition of Directive 2009/43/EC simplifying terms and conditions for transfer of defence-related products within the EU*. COM/2012/0359 final, 2012.
[59] Council of the European Union. *Council Joint Action 2004/551/CFSP.* OJL 245/17, 2004.
[60] Tom Dyson and Theodore Konstadinides. "Understanding the Limitations of the EU's Common Security and Defence Policy." Routledge, 2013, pp.7-8.

acquisition agency, the Member States still can indicate it as a central purchasing body for selected initiatives. It, in turn, makes it uncertain in regard of applying the public procurement Directives as they were adopted in order to harmonise national procurements process rather than to be used towards EU agencies. Secondly, as the EDA has no influence over the participant's essential security interests, it is no able by itself to invoke the Article 346 TFEU to derogate from the Treaties' application; it is up to the Member States to decide whether to apply the Directives it in relation to EDA procurement programmes. Finally, the EDA is not yet a coordinator of defence procurement programme. It manages projects under the Member States' supervision; it is financed and directed by them.[61] Nevertheless, the EDA was the first agency to bring European cooperation within defence sector under the umbrella of EU law. As such it contributed to the progress within the area of European defence cooperation by addressing the existing capabilities gap in the EU.

3.6. CONCLUSION

As this section examined the various initiatives were undertaken in order to facilitate and harmonize cooperation in the European Defence and Security Policy, it is possible to make certain conclusions on the progress of armaments cooperation and defence procurement within the context of EU legal framework.

First of all, the conclusion can be drawn from the legal analysis is that despite the common perception on EU's role in security-related tasks, there is lack of consensus between the member states on key questions of foreign policy, which in turn is reflected in the limited powers of CSDP initiatives and bodies. Alongside, it is apparent the Treaty of Lisbon has not changed considerably the way CSDP policy-making process and its implementation are executed. The defence-related decisions are still taken unanimously by the Member States. Therefore, the ToL still preserves the separation between the former First and Second Pillars.[62]

Through the examination of institutional innovations and legal developments within European defence cooperation framework, it is possible to claim that area of European defence industry cooperation is strongly bound to its legal limitations. As the following sections will demonstrate, those limitations directly reflect the lack of political will among Member States to generate concrete initiatives in order to enhance cooperation under the CSDP framework. As such, the use

[61] Panos Koutrakos. "The Role of Law in Common Security and Defence Policy: Functions, Limitations and Perceptions." 2011.
[62] Tom Dyson and Theodore Konstadinides. "Understanding the Limitations of the EU's Common Security and Defence Policy." Routledge, 2013, pp.8-9.

of CSDP by member states as an effective tool to cope with global threats and as credible means to facilitate intergovernmental coordination of defence industries remains rather limited. Thus, despite the introduction and adaptation of new defence collaboration initiatives in the EU, in the absence of structured coordination of national policies, the European armaments market remains fragmented along national lines.

4. THEORETICAL FRAMEWORK

Since the first initiatives towards the development of more coherent European Defence, the EU has undergone a long path towards establishing authoritative legal and political entities operating in defence-related areas. There have been over 30 civilian and military missions of different nature deployed under the CSDP framework to various locations around the world. Moreover, besides the importance of the CSDP's role within EU foreign policy, it has significant impact on encouraging and harmonizing cooperation between the member states towards military capability development and defence industry consolidation. Nevertheless, as it was outlined in the previous section, European institutions are not exclusive actors in shaping and conducting the military policy of the EU. Indeed, nation states have a great impact on the defence integration process, as they pursue their own roles, interests and objectives within the process.

Considering that this research seeks to analyse the complexity of interaction among actors within European defence structure, to explore the way the member states choose to restructure their defence industries in times of austerity and to draw possible implications of those policies on the state of defence in EU. It is important to draw a comprehensive theoretical framework which would meet the purposes of the paper. Thus, this section will provide a brief outline of the selected theoretical approaches towards phenomenon of European defence cooperation and integration.

Importantly, despite on-going theoretical debates over the nature of the European defence integration within the field of International Relations theories and its sub-field of European integration theories, it has been noted that scholarship on the CSDP is generally 'fragmented in its theoretical inquiry', and that 'a loud normative debate dominates in the absence of systemic, empirically grounded theoretical inquiry'.[63] As the phenomenon of European defence integration appeared to be largely undertheorised, in 2011 a 'second wave' of scholarship was called to be focused more on theory building, its expansion and applicability rather than on descriptive and normative analyses that has been dominating the field.[64] This task has been warmly welcomed by the academia so a number of newly published studies increased. Although debate on CSDP's features and drivers is highly contested, it is possible to distinguish two dominant competitive approaches in the field: constructivism and neorealism. Thus, these

[63] Chris J. Bickerton, C., Irondelle, B. and Menon, A. "Security Co-operation Beyond the Nation-State: The EU's Common Security and Defence Policy", *Journal for Common Market Studies*, vol. 49, no. 1, 2011. p. 10.
[64] Ibid.

two approaches will be examined in more detail considering analysis of the legal and institutional framework of European defence integration provided in previous chapters.

The normative approach towards European Defence integration is indeed substantial. For instance, the liberal institutionalist school argues that the aim of the CSDP is to endorse EU's commitment to multilateralism, transnational dialogue and international environment, which are the drivers that gave rise to the ESDP as such. Apparently, for the long time the liberal institutionalism and constructivism were predominant schools of thought in relation to the CSDP and appeared to gain more analytical utility in approaching defence cooperation in Europe after the Cold War.

Furthermore, certain scholars distinguish the importance of the socialization within institutional settings, where the CSDP is defined as a group of policy-makers within a 'social field', which seek to elaborate the rules and features of CSDP structuring and consequently affect the defence integration process.[65] Other scholars emphasize supranational character of European integration process with its self-sustaining and reinforcing dynamic. Meaning that, the integration process is boosted by the constant spill-over effect from one sector to another.[66] However, these theories have failed to provide insights on a lack of positive developments in defence cooperation.

4.1. CONSTRUCTIVIST APPROACH

The core Constructivism's believe is that socially and institutionally-embedded norms characterize identities and, therefore, interests. Hence, from Constructivists point of view, the evolution of the CSDP is characterized by the development of a European 'strategic culture' and progress of 'Europeanisation' process within national defence policies.[67] Whereas normative convergence between national strategic cultures has been developing around key security issues of the post-Cold War period, instruments to tackle these challenges have evolved. According to Howorth, the CSDP represents a 'new normative approach to the International Relations' which is autonomous from NATO. Going further, he argues that in contrast to NATO policies and tools, which include hard power projection and involvement in high-intensity operations on the global scale, the European strategic culture compromises various policy instruments with an

[65] Frederic Mérand. "Pierre Bourdieu and the Birth of European Defence", *Security Studies*, vol. 19, no. 2, 2010, pp. 342-374.
[66] See for example: Haas, Ernst B. 1958. *The uniting of Europe: political, social, and economic forces, 1950-1957*. Stanford, Calif: Stanford University Press.; Cooper, I. 'The euro crisis as the revenge of neo-functionalism' EU Observer, 2011.
[67] Paul Cornish and Geoffrey Edwards. "Beyond the EU/NATO dichotomy: the beginnings of a European strategic culture". *International Affairs* ,Volume 77, Issue 3, pages 587–603, July 2001.

emphasis on civilian crisis-management and prevention characterized by multilateralism and mix of soft and hard power.[68] Thus, while national strategic cultures retain a high-level of rigidity, slowing convergence, Constructivist optimistically perceives the phenomenon of European defence cooperation. They believe that states will be able to escape the pervasive effects of anarchy through establishing supranational institutions.

4.1.1. CONCEPT OF SECURITY GOVERNANCE

Constructivist approach to European defence cooperation is also associated with the concept of 'Security Governance'. It points out the growing tendency of erosion of a national state's role in policy agenda-setting and implementation with reference to a general move from government to governance within European security.[69] Thus, instead of treating the EU security system as a product of functional spill-over or intergovernmental bargaining, the governance approach sees the shape of the European security structure as an independent variable which explains the policies within.[70]

Existing literature on security governance argues that the traditional state-centric approach cannot fully explain current security developments that are taking place within EU. There are several assumptions that security governance approach relies on, which are: (I) hierarchy, or the existence of multiple centers of power, (II) the interaction of multiple actors, both public and private, (III) formal and informal institutionalisation, (IV) relations between actors that are ideational in character, and (V) a collective purpose.[71]

Therefore, followers of security governance approach argue that there is certain degree of evolution within European security system from an intergovernmental towards more institutionalised. Thus, current European security system is less hierarchical than it used to be. Although the second pillar remains the subject to intergovernmental procedures, the security environment has changed. There is a greater role of individual agencies, which tend to act in more "European" manner, for instance, when it is up to agenda-setting and consolidating a common EU security discourse or strategic narrative.[72]

Going further, within a less hierarchical security order, new actors within and beyond the state became more influential. This reflects a certain trend in the development of security system

[68] Jolyon Howorth. *Security and Defence Policy in the European Union*. London & New York, Palgrave, 2007, p.205.
[69] Mark Webber, Stuart Croft, Terry Terriff and Elke Krahman, 'The Governance of European Security', *Review of International Studies*, vol. 30, no. 1, January 2004, pp. 3–26.
[70] Hartmut Mayer and Henri Vogt (Ed.) *A Responsible Europe?* . Palgrave Macmillan, August 200, p. 40.
[71] Mark Webber, Stuart Croft, Terry Terriff and Elke Krahman, 'The Governance of European Security', *Review of International Studies*, vol. 30, no. 1, January 2004, pp. 4-8.
[72] Elke Krahmann. "Conceptualising Security and Governance." *Cooperation and Conflict* 38(1), 2003.

which comprises various processes of fragmentation and separation in the monitoring, delivery and coordination. This particularly makes the case in regard to an institution like the EU, where the general level of integration is high and interaction between state and non-state actors is extensive. Since European security is a cross-pillar issue, there is a necessity for better coordination between the different units of the Council and the Commission. However, there is a general proliferation of various entities under the Council Secretariat and of institutions such as the European Defence Agency, the Counter Terrorism Group (CTG) and various research or advisory agencies. As such, ESDP/CSDP represents a highly-networked policy area.[73]

Thirdly, the EU is an institutionalised entity. So in order to analyse security system of the EU it is important to understand the dynamics and the processes of institutionalization process within it. There are lots of permanent representatives and seconded personnel are working for the ESDP. Therefore, through interaction and socialisation, they are likely to develop some degree of common attitude and collective perception. This can be observed through prism of the sociological institutionalism in what it has been referred to as the "Brusselsization" of the second pillar.[74]

Fourthly, the ideational dimension of the EU is one of importance for security governance approach. Indeed, any claims to Europeanisation process should comprise claims on some shared norms and ideas. In area of ESDP/CSDP collective action is largely dependent upon a consistency of views why, how and when to act commonly. To the extent that the EU appears to act in accordance with a "logic of appropriateness" rather than a "logic of consequences", security governance scholars claim that ESDP is rather determined by ideational than material considerations.[75]

The last but not least, a collective purpose is the less convenient description of the environment in which CSDP has evolved. European security architecture has been developed in rather arbitrary and opportunistic way. Nevertheless, the governance approach specifies that some policy outcomes can be obtained under some circumstances, but the likelihood of diversion remains high due to the complexity of various processes within policy-making and governance. In other words, the actors within a governance system initially may pursue collective objectives but as the system depends on competing preferences, under these patterns of influence the system evolves over time, so the outcome may be different from what was expected. However,

[73] Per M. Norheim-Martinsen. "Beyond Intergovernmentalism: the Governance Approach to the European Security and Defence Policy." University of Latvia, Riga, 25-27 September 2008, pp. 5-6.
[74] Mark Webber, Stuart Croft, Terry Terriff and Elke Krahman, 'The Governance of European Security', *Review of International Studies*, vol. 30, no. 1, January 2004.
[75] For more on Europeanisation concept see e.g. Manners and Whitman 2000; Olsen 2002.

there is belief among security governance scholars that eventually the momentum and unity of the whole process should grow stronger. Thus, the totality of the first four features of security governance comes together in a fifth one, which describes the overall process of how a system of governance is likely to evolve in the future.[76]

To conclude, main arguments of the Constructivist approach lay within assumption that institutional structures has been established above the nation-state and while the nature of European defence integration becomes increasingly multi-level, a gradual 'socialisation' and 'policy-learning' tendencies emerges. This in turn accelerates processes of normative convergence at the national level and increases the willingness of states to allocate more competencies to the supranational level.[77] Therefore, even if national governments preserve a high-level of rigidity, which interrupts with normative convergence, Constructivists remain quite optimistic over the development of integrated European Defence Market where the member states will overcome the effects of anarchy with establishment of supranational institutions. Particularly, Webber et al argue that: 'The involvement…of hierarchical power centres, multiple actors, new institutions and ideational exchanges has generated a powerful and purposeful momentum in favor of ESDP…The Europeanisation of security has been the great political revolution of the late twentieth and early twenty-first century'.[78]

However, the funding of the previous sections suggests that there are certain limitations that member states face on the path from the sovereign to the functional in European defence system. Indeed, Constructivist interpretations of drivers and potential destinations of European defence is challenged by Neorealist scholars, who argue that CSDP's emergence and evolution is determined by the adherence of the member states to the powerful material forces of the balance of power.[79] Although these forces has led to further development of the convergence in terms of defence and security policy objectives and instruments, such as military structures, doctrine and capabilities, however, they still entail challenges within the scope of cooperation in European defence. Frankly, the Constructivist studies on CSDP are dismissive of the theoretical insights has been provided by Neorealism.

[76] Webber, Croft et al. 2004, p.8.
[77] Jolyon Howorth. *Security and Defence Policy in the European Union*. Houndmills, Basingstoke, Palgrave, 2007, pp. 196-197.
[78] Webber, Croft et al. 2004, p.19.
[79] Barry Posen. "ESDP and the Structure of World Power." *The International Spectator*, vol. 39, no. 1, 2004, pp. 1-7.

4.2. NEOREALIST APPROACH

Neorealism describes nature of the international system as one of uncertainty, anarchy and competition, in which unknowns of other states' intentions force states to adopt offensive strategies in order to maximise their security.[80] Although, the international system is not always postulates the state of the 'pure war', there is always a risk that security competition will lead to a war due the anarchic nature of international relations. Therefore, core element of Neorealist argumentation is that the drivers of conflict are not primarily determined by the domestic character of individual states or regimes, but by the structure and dynamics of the international system these actors are part of.[81]

Nevertheless, the state is the most important actor in dynamics of international politics.[82] States, especially the great powers, determine and establish the context and the rules for other actors, including international organizations such as the European Union. Going further, Neorealists assume that in anarchic nature of international politics states remain rational and functionally similar actors. Functional similarity means that all states and especially great powers seek to maintain a balance of capabilities across the three main dimensions of power: military power, economic power and power over opinion.[83]

In turn, the dynamic and the nature of the international system generate security competition across the states, where actors should rely on their own resource, or on resources of the allies. While the level of the completion can vary under the structural distribution of power within the international system, the cooperation remains difficult and is based primarily on self-interest calculations. Furthermore, in order to assure their own survival states seek to maximize their relative power in regards to other actors.[84] That means that states' focus on relative gains limits the probability of cooperation. As states are concerned about their position in the international system in relation to their main rivals and potential enemies, therefore, they are likely to engage in a cooperation only if they benefit as much or more than their peer equivalents.[85]

While concept of power is of the great importance in the international system dynamics, Hyde-Price analyses four typologies of power configuration: unipolarity; bipolarity; balanced

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[80] Kenneth Waltz. *Theory of International Politics*. Addison-Wesley, 1979.
[81] William Wohlforth, 'The Russian-Soviet Empire: A Test of Neorealism', *Review of International Studies*, vol. 27, December 2001, pp. 213–36.
[82] Kenneth Waltz. "The Emerging Structure of International Politics." *International Security*, vol. 18, no. 2, Fall 1993, p. 52.
[83] Jonh J. Mearsheimer. *The Tragedy of Great Power Politics*. W.W. Norton, New York, 2001, p. 394.
[84] Hans Morgenthau. *Politics Among Nations. The Struggle for Power and Peace*. brief edition, revised by Kenneth Thompson, New York: McGraw-Hill, 1993.
[85] Ibid. p. 205.

multipolarity, and unbalanced multipolarity.[86] Unipolarity is characterised by the economic and military dominance of a single great power which has no other equivalent competitors. An actor empowered by their geopolitical dominance and relative power advantage tends to behave in capricious, arbitrary and unpredictable ways. This suggests unipolar system to be unstable and unpredictable.[87] The second power configuration – bipolarity – is characterized by the dominance of two great powers, whose power capabilities are greater than those of others. Bipolarity is usually assumed to be more stable form of power distribution.[88] Balanced multipolarity configuration lies within the international system, where three or more states enjoy relatively similar material power, but none of them has the potential to achieve regional hegemony. Hence, states tend to favor security maximisation over power maximisation, so the cooperation among great powers is likely to occur. In contrast, unbalanced multipolarity, where one of the system's great powers has greater power resources so it has the potential to achieve regional hegemony, is particularly unstable configuration of the international system with more intense security competition.[89]

Following Hyde-Price's study on the European Security dynamics, it is possible to claim that Post-Cold War Europe suited within a unipolar international system in which the US is a regional hegemon, which is able to act unilaterally and coercively as offensive unipolarity suggests.[90] At the same time, Europe is subject to regional 'balanced multipolarity' due to the power balance between European major military powers (i.e. Germany, France and the U.K.) and the fact that currently none of them can make a credible bid for a regional hegemony. Importantly, as balance multipolarity is charactirised by smaller degree of competition than in other types of power formation, the development of cooperation between the states in order to address shared security concerns and collectively shape the regional security is likely to occur.[91]

From this perspective, European states have two possible ways to respond to unipolarity. First of all, it is to 'balance' the state of greater capability by comprehensive re-armament and formation of a strong military alliance. As neorealists argue, the CSDP is an example of 'soft balancing' against the U.S. This strategy involves the use of non-military tools to frustrate unilateral action by the hegemon and sets out the ground for a more explicit military alliance to develop. From the

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[86] Adrian Hyde-Price, *European Security in the Twenty-First Century: The Challenge of Multipolarity*. London: Routledge, 2007.
[87] Michael Oakeshott, 'The Moral Life in the Writings of Thomas Hobbes', Rationalism in Politics and Other Essays, 1960, pp. 295–350.
[88] Michael Oakeshott, 'On Being Conservative', Rationalism in Politics and Other Essays, 1991, p. 408.
[89] Adrian Hyde-Price, *European Security in the Twenty-First Century: The Challenge of Multipolarity*. London: Routledge, 2007. p.63.
[90] Ibid. pp.81-86.
[91] Ibid. pp.69-71.

other hand, there is different approach, so-called 'bandwagoing' on US power, in which European states choose to cooperate on the side with the stronger power for 'opportunistic gain'. Taking into account empirical findings, it is possible to argue that EU member states' choice to develop defence cooperation through NATO and CSDP forms a key pillar for a process of 'reformed' bandwagoning on US power.[92] (Schweller, 1994: 81-82). Furthermore, due to growing concerns among member states on various scenarios when the U.S. might choose not to involve in the conflict, the second key pillar of European 'reformed' bandwagoning has emerged through the Battlegroup Initiatives and calls for further militarization of the CSDP.[93]

However, the solidarity of European states around a process of 'reformed' bandwagoning on US power is not without contestation. Indeed, taking into account the development of CSDP and NATO with similar instruments competing over similar objectives, it is possible to claim the emergence of regional security competition. However, efforts have been taken during recent years to facilitate cooperation in force planning command and strategic coherence between CSDP and NATO.[94] Yet these arrangements have faltered due to differences between France and the UK vision of NATO and the EU in the structure of European security.

Along with theoretical insights that Neorealism provides the explanation of drivers and dynamics within process of European defence cooperation, the theory also provides tools for the further analysis of the highly-intergovernmental nature of European Defence. Due to the uncertainty on other states' intentions and taking into account anarchical nature of international politics, European states fear the risk of abandonment by the U.S. or other European alliance partners. Therefore, EU member states are trapped in 'alliance security dilemma'. Developed by Glenn Snyder, this concept posits that the scope and depth of cooperation within alliances and other forms of cross-national defence collaboration is limited by the fear of abandonment or entrapment by other participants.[95] Furthermore, Snyder highlights, an abandonment refers not only to full defection from an Alliance but also to the following set of probabilities: 'the ally may realign with the opponent; he may merely de-align, abrogating the alliance contract; he may fail to make good on his specific commitments, or he may fail to provide support in contingencies where his support is expected'.[96]Therefore, European states cannot be sure that their respective

[92] Randall L. Schweller, "Bandwagoning for Profit: Bringing the Revisionist State Back In." *International Security 19:1*, 1994, pp. 81-82.
[93] Hyde-Price, 2007, pp. 88-90.
[94] Sten Rynning, 'Return of the Jedi: Realism and the Study of the European Union', *Politique européenne*, no. 17, Autumn 2005, pp. 11–34.
[95] Glenn Snyder, 'The Security Dilemma in Alliance Politics', World Politics Vol.36, No.4 (1984), p.461.
[96] Ibid. p.466.

partners will fulfill their obligations and promises. Consequently, states are highly concerned with potential threat of losses in relative power as a consequence of defection and remain highly-cautious about passing sovereignty in defence up. Therefore, Neorealist scholars argue that in EU a shift toward integration in defence policy is not likely to occur as well as the pooling and sharing of capabilities and forces will be limited.

To conclude, taking into account empirical findings on the development of European defence cooperation in terms of institutional formation and legal background, the Neorealist approach provides an effective theoretical foundation for the analysis of the state European defence cooperation. Indeed, as it was deliberated in the previous chapter the institutional instruments of European defence are non-binding: the EDA had a little power and less success initiatives, the applicability of the Code of Conduct was up to the will of the states, and the national protectionism prevailed in matters of high politics. Although, Constructivist school grasps the importance of normative aspects within the context of EU defence cooperation, Neorealist approach provides a more precise explanation of the intergovernmental nature of cooperation in defence, therefore it has been selected as main theoretical approach towards analysing states policy towards defence cooperation in the EU.

5. FRANCE

Since the end of the Cold War, France has faced the challenge of restructuring and streamlining its defence industrial base in response to declining defence funding and export sales, while retaining its core design and producing capabilities**.** In an effort to manage the transition from the Cold War legacy of arms production and to lower its negative effects on employment and economy, the General Delegation for Armament (DGA) has been pursuing an active defense-industrial policy focused around two aspects. The first policy seeks to preserve and promote the technological competencies of the defense industry. Thus, the DGA proceed to regroup French national arsenals into state-owned companies, pushing defense companies to involve into the civil sector more, investing in defense R&D at the expense of current production, encouraging defence contractors to concentrate on certain areas of the best performance in order to improve their competitiveness, and promoting greater reliance on dual-use products. The second policy sought to enable French defense companies to play a leading role in the restructuring of DTIB on the European scale. This objective has being pursued through collaborative research and development programmes, strategic alliances, acquisitions of foreign firms, and cross-border mergers.[97]

For instance, In October 1997, the French government announced that it would privatize Thomson-CSF, and bring Dassault Electronique, the space and defense electronics businesses of Alcatel, and the satellite businesses of Aérospatiale within the company. Thomson-CSF acquired Racal Electronics of the UK in June 2000 and was renamed Thales. The company now is leading on technology development for Europe's helicopter business.[98] Moreover, decreased demand and shrinking defence budget led to the consolidation of French and other European companies across the boundaries – notably EADS, MBDA and SAFRAN Group.[99] The reshaping of the national DTIB had several consequences. For instance, increasing privatization of defence contractors has led to concentration of production over larger French companies with greater capabilities and competiveness factors, where state has retained its shares.

[97] http://archive.grip.org/en/siteweb/images/RAPPORTS/1999/1999-03.pdf post cold war convertions
[98] The Transatlantic Defense Industrial Base: Restructuring Scenarios and Their Implications
[99] Fortresses and Icebergs (ADA53…on desk)

5.1. STATE POSITIONING IN DEFENCE INDUSTRY

Table 3: France State positioning towards the defence industry

Socio-economic environment	- Orginised industries around 'national champions' - Weight of the state in the National Innovation System, strong importance of DTIB
Political context	- Strategic autonomy and independence
State position as custumer	- State as a shareholder - Centralisation at the DGA
Consequences for DTIB	- DTIB focus and prioritize national champions

Source: Lember 2014

Historically, France's approach to national security was channeled through prioritization of national independence and strategic autonomy.[100] Within the framework of deterrence the national DTIB has a crucial influence on the innovation system. Thus, without the state's involvement, defence market alone cannot ensure development and delivery of advanced technologies and equipment required by national security policies. [101]

Despite revision of the national procurement programme in 1990s, DGA save it position as a strong influencer in the process and trajectory of defence capabilities development, through its involvement into major arms acquisition programs. Throughout the wave of privatization, France was able to maintain its stakes in the national defence companies while seeking industrial partners rather than institutional investors.[102] The French state adopted the approach to the defence sector promoting the arms exports while relying on national preferences for public procurement. (See table 3)

5.1. DEFENCE SPENDING TRENDS

During last decade French defense spending has fared well in comparison to many EU member states. France has been able to maintain a rather ambitious defense agenda, preserving its independent nuclear deterrence, professionalizing and rationalizing its military and modernising its defence equipment while deploying its troops in variety of conflicts overseas.

[100] Fontanel, J., Hebert, J. , The End of the "French Grandeur Policy", *Defence and Peace Economics*, 8(1), 1997, pp. 37-55.

[101] Miotti, L. and Sachwald, F. Patterns of R&D Cooperation by European Firms: Cost-Economizing vs. Technology-Seeking, DRAFT for discussion, *AITEG Workshop Madrid*, May 25-26 2001.

[102] Hebert, J. La transformation du systиme franзais de production d'armement : une vue d'ensemble, in Hebert, J., Pascallon, P. (eds), *La politique industrielle d'armement et de dйfense de la Vume Rйpublique. Evolution, bilan et perspectives*, Paris, L'Harmattan. 2010

Nevertheless, the overall economic situation in France is deplorable, as the debt rate increased dramatically over last decade, from 68.2% in 2008 up to 96% in 2016 to GDP.[103] The French government has aimed to cut public spending by 50 billion euros during over last three years, partially by freezing a range of welfare benefits and wage of most public sector workers. Thus, it intends to bring its deficit below the European Union's ceiling of three percent of GDP. In light of the economic and budgetary crisis, a revised defence spending law for the period 2011-2013 was presented in late September 2010.[104] From then on, the total defence spending for stated period would amount to €91.6bn, instead of €95.3bn that was initially planned in the 2009-2014 Military Programming Law (MPL).[105]

Moreover, it was expected from French defence sector to accumulate of about €3.5 bn. in savings over three year period. Given an annual defense budget of about €32 billion (about 40 bl. including pensions), the cuts has been not as brutal as those initially introduced in Germany. However, the defence retrenchment programme proved to be challenging.

The first cost-saving measures comprise shutting down a significant number of military bases and installations, both at home and abroad. France's military presence in Africa, in particular, has to be downgraded significantly. Thereof, the defence budget has been expected to benefit from €2.4bn due to the selling of real estate and military radio frequencies in 2010. However, French MoD has had only partial success in doing so to date.[106] So far the greatest revenue from selling military assets was in 2011, which brought exceptional 1.1 billion euros. The military radio frequencies that would bring about €850m have yet to find buyers.[107]

Furthermore, cuts in defence budget have forced the French military to streamline its armed forces and pursue a strategy of moving toward a medium-weight force suitable for the broad array of contingencies. Nevertheless, France has been striving to maintain its commitment to full spectrum of operations; autonomous action; and multiple, sustained operations. There are multiple reasons for this. The first is that the budget cuts have been light, at least in comparison to those faced by the British and German MoDs. The budget has, in effect, grown slightly or remained flat since 2009. For instance, the 2011 budget was €31.2 billion and the 2013 budget

[103] INSEE DATABASE, FRANCE

[104] French Ministry of Defence, *Ministry of Defense budget guidelines for 2011-2013*, Paris, July 7, 2010. http://ambafrance-us.org/spip.php?article1751

[105] French Ministry of Defence, *Projet de loi relatif à la programmation militaire pour les années 2009 à 2014 et portant diverses dispositions concernant la défense* [Draft military planning law 2009–2014 and diverse defence measures], 2008.

[106] Véronique Guillermard, Cécile Crouzel. "Budget de la Défense: la recherché preserve." [Defence Budget: to preserve desired], *Le Figaro,* 8 January 2011.

[107] Louis Gautier, 'Budget de la defense: tour d'écrou et escamotage,'[Defence Budget: Round of retraction], L*es Echos*, 1 December 2010.

was set to be €31.4 billion (both without pensions), despite the fact that earlier the Defense Ministry has been asked to lower its budget by seven percent in 2013, and by four precent in both, 2014 and 2015 budgets.

France now disposes of two resources to set the agenda for its defence and strategic policy in up-coming years: a White Paper on Defence (published on April 29, 2013)[108] and programme Loi de programmation militaire[109] (LPM 2014-2019) concerning military spending and budgetary provisions for the period of 2014-2019. Although constant debates among French political elite on future destination of the French military in the light of economic stagnation, the 2013 White Paper was not a major break from its 2008 predecessor. Nevertheless, the document calls for further reduction in forces, argues for resizing the geographic region in which French military interventions would be legitimate, and indicates that military resources will be redistributed according to the readiness and operational requirements of particular military units.

The White paper set out the defense budget of $235 billion between 2014 and 2019. The equipment budget is foreseen at about $21 billion per year, which is down from $24 billion that was initially suggested in 2008, but still reasonable for the 4,000 or so defense-related enterprises in France, which employ about 165,000 people.[110]

French Defence Minister Jean-Yves Le Drian presented France's six-year defence funding programme, the LPM2014-2019, on 2 August 2013. The LPM sets out defence spending to remain flat in nominal terms from 2013 to 2016 at EUR31.38 billion a year, rising slightly to EUR31.56 billion in 2017, EUR31.78 billion in 2018 and EUR32.51 billion in 2019.[111] However, the HIS Jane's analysis indicated that the 2017 budget will be at EUR32.44 billion, a 1.8% increase over 2016. With the latest revisions of the French defence budget, with the new 2017 figures about EUR1.1 billion higher than was set by the 2014-2019 Military Programming Law (LPM) and EUR775 million higher than the revised LPM of July 2015. With EUR8.15 billion in spending on military pensions incorporated French defence spending will total EUR40.84 billion in 2017, or 1.77% of gross domestic product.[112](See figure 7)

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[108] French Ministry of Defence. *White Paper on Defence and National Security,* April 2013.

[109] French Ministry of Defence. *Programme Loi de Programmation Militaire*, [military planning law 2014-2019]. May 2013.

[110] Steven Erlanger. "Grim Economics Shape France's Military Spending." *The New York Times*, 29 April 2013. Available at http://www.nytimes.com/2013/04/30/world/europe/grim-economics-shape-frances-military-spending.html?_r=0

[111] French Ministry of Defence. *Programme Loi de Programmation Militaire*, [military planning law 2014-2019]. May 2013. pp.3-4

[112] Frederic Lert. "French set to increase defence spending in 2017". HIS Jane's Defence Industry. November 2016

Figure 7: French Annual Defence Budgets, 2015-2019*

*In the red is the amount expected from real estate disposals; the top line is the additional funds to the budget approved in 2015. Source: French MoD graphic

But numbers do not show the full picture of challenges France and EU's major military powers have been facing. As military operations today require a precise military savoir-faire, well-trained armed forces, reliable intelligence capacities, and adequate equipment, it is important to analyse the scope of reductions in France's defence capabilities. Although, today's military requirements are accounted for recent military provisions – in 2014, for example, the intelligence budget will benefit from an increase of 39 million euros (not including wages), and an additional 500 million euros will be allocated to troop equipment, weapons maintenance, training, and research and development. Nevertheless, it is important to note that there is already a gap of approximately €45 billion between the past defence funding programmes and resulting budgets. Therefore, taking into account growing budgetary crisis in France, it is highly disputable whether the 2013 white paper is a realistic assessment of French military capabilities in regard to the country's strategic ambitions.[113]

5.2. ARMED FORCES: STRUCTURAL REFORMS

In the post-Cold War period, France along with other major Western powers has been reforming its armed forces to cope with the new threats to security. Therefore, in 1994, a government white paper was set out to create a plan for the military that was focused on dealing

[113] Frederic Charillon. "France and its new military budget: rethinking power." RUSI Newsbrief , Vol. 33, No. 6, November 2013. Available at http://fredericcharillon.blogspot.cz/2013/12/france-and-its-new-military-budget.html

with various threats of instability around the globe, such as the proliferation of weapons of mass destruction and the appearance of new asymmetric threats. In order to maintain strategic relevance, a new model of armed forces was introduced. The so-called 'Model 2015' was to be "a professional, more compact army, better equipped, better adapted to actions outside the national territory. Its capacities were defined so as to allow, simultaneously, the development of permanent arrangement of prevention, a visible and significant presence in an international coalition, as well as more limited operations under national command, while providing the protection of the territory and its approaches."[114] Therefore, in 1995 under the Jacques Chirac presidency it was decided to end conscription and transform the army into an all-professional armed force. From then on the French army has undergone fundamental transformation both in terms of capabilities and size.

According to the International Institute for Strategic Studies' annual Military Balance, France's active duty forces in 1997 comprised of 358,800 shranked to 259,050 in 2002. [115] In 2015, French active-duty personnel accounts for 202,964.[116] By 2020, the expectation is that the military's active-duty numbers will decline even further, dropping to approximately 190,000.[117]

According to the white paper 2013, in up-coming years France is compelled to cut nearly 24,000 military personnel from the current staff of the MoD, including troops and civilians in addition to the 54,000 announced in the last white paper in 2008. Thus, by 2019 the French Ministry of Defence is expected to meet an overall strength of 240 000 people (180 000 military and 60 000 civilians). Furthermore, the white paper seeks for a reorganization of the armed forces on the basis of "the principle of differentiation." Although there were no exact description the way this principle to be implemented, it is described as "giving priority to the equipment and training" of some elements of the armed forces versus others.[118] In other words, it appears that there will be a two-tiered structure of the armed forces: one well-equipped and trained to contribute to military operations overseas, and the other to be formed primarily for domestic tasks not requiring such costly equipment and/or training. Although this approach appears to be justified in terms of budget savings, in future it may bring certain problems within 'domestic' armed forces

[114] Government of France, "LOI no 96-589 du 2 juillet 1996 relative à la programmation militaire pour les années 1997 à 2002" [Law No. 96-589 of July 2, 1996, Related to the the Military Programming Law for the Years 1997 to 2002], July 2, 1996.
[115] International Institute for Strategic Studies, "Chapter Four: Europe," The Military Balance 2013 113, no. 1, 131
[116] France in figures
[117] Emmanuel Cugny, "Budget Defense 2014–2019: Les longs soupirs de la Grande mette" [Defense Budget 2014–19, The Army's Big Sigh], November 26, 2013.
[118] Government of France, Livre Blanc: Défense et Sécurité Nationale 2013, 69.

deployability abroad in case it is needed, as well as it makes the French Army less attractive as a profession in overall.[119]

Furthermore, the French Chief of the Army Staff, General Bernard Ract-Radoux, pointed out the negative impact the reduction of training periods have on armed forces: "[T]he Army is insufficiently funded to completely undertake an operational preparation of quality".[120] Due to the budgetary constraints, the mandatory preparation period was previously reduced from 150 to 120 days; meanwhile the average operational preparation period among the armed forces was only around 111 days in 2012. This led General Ract-Madoux to say that "the Army is now under a critical threshold which endangers the operational preparation, the success of the mission and then our soldiers' life."[121] Taking into account that weapon systems are becoming more complex and require even more qualification to handle them, the shortage in training is becoming a critical issue and may have negative consequences on the effectiveness of French forces on the battlefield. Additionally, the 'operational contract' of the French forces has to be reduced in up-coming decade.

The French army is one of the largest armies in Europe with capacity of 106,000 soldiers in 81 specialized regiments. It is also one of the best equipped with VBCIs, an integrated infantry combat system (FELIN), self-propelled howitzers (CAESER), and attack helicopters (Tiger). However, as it was outlined previously, there is probability this advanced equipment will not be used to its best due to the lack of sustained training among personnel.

Furthermore, the 2013 white paper also suggests a reduction in rapid deployment forces from the 2008 white paper's goal of 30,000to between 15,000 and 20,000. Additionally, the new military programme emphasizes the ability to deploy up to 7,000 troops in three concurrent missions. Furthermore, the recent experience in Mali, and above all in Afghanistan, has shown that large number of multirole helicopters at command is of great importance to cope with missions' needs. Thus, the one of the 2013 white paper's goals is to equip the army with 140 reconnaissance and attack helicopters, 115 tactical helicopters, and 30 tactical drones.[122]

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[119] Dorothée Fouchaux. "French hard power: Living on the strategic edge." *American Enterprise Institute,* February 04, 2014. Available at: http://www.aei.org/outlook/foreign-and-defense-policy/defense/nato/french-hard-power-living-on-the-strategic-edge

[120] Patricia Adam, "l'Armée de Terre ne Dispose Plus Totalement des Ressources Nécessaires à Une Préparation Opérationnelle de Qualité", in Ract-Madoux's Audition to Parliament, available at http://www.assemblee-nationale.fr/14/cr-cdef/11-12/c1112007.asp#P6_477

[121] Ibid.

[122] Government of France, Livre Blanc: Défense et Sécurité Nationale 2013, p. 73.

In the course of the resource reconsolidation by the French MoD, since 2008 navy personnel have been reduced by 11,000 to 35411 servicemen in 2015[123]. Meanwhile nineteen ships were taking out of the exploitation, only four new ships were purchased by 2012. Nevertheless, in 2013 the French navy has received the highest funding for equipment of 4.37EUR bn. It was planned to replace six Rubis-class, nuclear-powered attack submarines with the latest generation of Barracuda-class submarines, however, the only one submarine been under construction by 2013.[124] Additionally, the White Paper addresses the number of existing shortfalls in the fleet's capabilities through the acquisition of "15 first-class frigates, about 15 patrol vessels and six surveillance frigates, as well as maritime patrol aircraft and a mine warfare capability sufficient to protect our approaches and projection in expeditionary operations."[125] However, taking into account budgetary pressures the French MoD is facing currently, there is possibility that orders for the FREMM frigates may be cut back. France has already reduced its orders from 18 in 2005 to 11 in 2008. In June 2013, report said the final number may be as low as 8.[126]

The French air force has been a subject to budget cuts as well. France's air fleet was cut by 30 percent, six fighter squadrons were taking out of service, and twelve domestic and overseas air bases were shut down. However, the 2013 white paper stated that the air force is to be reduced further. As it was stated in the paper the air fleet to consist of 225 aircrafts instead of the 300 initially planned in 2008. This means the orders for the Rafale multirole fighter to be reduced. In addition, the French air force will be downsizing the number of aircrafts available for major operations from 70 to just 45.[127]

Importantly, the air force is probably the most problematic branch of French military power. As the French air fleet lacks long-distance strategic airlift, it challenges France's ability to act independently in course of the military operations abroad. Due to delays in delivery of Airbus A400Ms, France has to relay on available 54 C-130 Hercules and Transall aircraft, which are outdated and expensive to maintain. Further, the eight CASA/IPTN CN-235s purchased in order to fill the capability gap did not meet the missions' needs, as it was in the 2013 operation in Mali when France has to rely on air logistic support of its allies.[128] Second, as military operations in

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[123] France in figure, French MoD

[124] Dorothée Fouchaux. "French hard power: Living on the strategic edge." *American Enterprise Institute,* February 04, 2014.

[125] Government of France, Livre Blanc: Défense et Sécurité Nationale 2013, p. 110.

[126] Jean-Marc Tanguy, "Le Livre blanc lave plus blanc que blanc" [The White Paper Washes Whiter than White], Le mamouth blog, April 30, 2013, http://lemamouth.blogspot.com/2013/04/le-livre-blanc-lave-plus-blanc-que-blanc.html

[127] The French Navy, "Projet de LPM: Un moindre mal" [MPL Project: A Lesser Evil], Mer et Marine, August 5, 2013.

[128] *Le Monde*, "Qui participe à l'opération Serval au Mali?" [Who Is Participating in the Operation Serval in Mali?], January 21, 2013.

Mali and Libya revealed there is a major gap in French air force's capabilities concerns tanker aircraft. In order to overcome this obstacle, France has ordered A330 MRTT, which should to replace the aging fleet of French tankers. However, the first delivery of the aircraft is not expected until 2017 at the earliest. Furthermore, despite that initially it was planned to acquire 14 planes, in 2013 the number has dropped to 12 tankers.[129]

In regards to the strategic forces, nuclear deterrence remains the core aspect of French defense policy. France's nuclear forces comprise four ballistic missile–carrying submarines and a squadron of fighter bombers carrying cruise missiles. Ten percent of the overall defense budget and 20 percent of R&D funds were allocated to maintain these forces in 2016, which amount to 3.6 EUR billions.

5.3. DEFENCE EQUIPMENT AND PUBLIC PROCUREMENT

Through the analysis of current features of the structure and equipment of France's army provided in the previous section, it is possible to argue that the 2013 white paper emphasizes France's strategic autonomy and calls for various investments to support France's capacity to act unilaterally. Therefore, the white paper confirms Paris' determination to fill capability gaps in such areas as air transport as well as it seeks to modernize and re-equip every branch of the France's armed forces.

Importantly, in France the defense budget is perceived differently than other elements of public spending. French defense producers are seen as a one of the key pillars of French industry; they provide high-skilled jobs and generate technological innovations. According to the General Directorate for Armament (DGA), the defense industry also contributes significantly to France's balance of trade: nearly €15 billion in revenue comes from defense-related exports.[130]

Therefore, to rationalize budget spending but to support France's defense industrial base in the same time, Hollande has decided to continue procurement of most major weapons systems. However, certain contracts were renegotiated in the way of either buying fewer units or delaying deliveries and payments. Defense companies were compensated for the renegotiation of the contracts with the amount of €45.2 billion.[131] However, while the French army remains one of the best-equipped militaries around the globe in terms of the systems themselves, there is rising

[129] Government of France, Livre Blanc: Défense et Sécurité Nationale 2013, 74.
[130] Direction Générale de l'Armement [General Directorate for Armament, or DGA] is the French government defense procurement agency.
[131] French Senate, Rapport D'Information N°680 [Information Report No. 680] (July 18, 2012), 42,

uncertainty whether they will be fielded in operationally relevant numbers.[132] Additionally, postponements in equipment delivery obligate French military to rely on outdated equipment with significantly higher maintenance costs that initially are not planned under the military bill. In other words, the growing number of postponements in capital delivery leads to structural disarmament where the armed forces would be supplied with old equipment and in numbers which are not sufficient under operational requirements.[133] In regards to the French defence procurement plans, it was translated into following revisions. (See table 4)

Table 4: Revisions to Equipment Initially Planned between 2009 and 2014

Equipment	**Military Spending Bill 2009-2014**	**Revision**	**Difference**
FELIN (future infantry soldier system)	22,230	17,884	-4,346
Caesar (fire support)	69	67	-2
PPT (logistical transport vehicles)	500	287	-213
NH90-TTH helicopter	23	22	-1
Rafale combat aircraft	50	66	+16
Mirage 2000D combat aircraft	5	-	-5
A400 M (tactical transport aircraft)	18	8	-10

Source: French Senat. *Rapport general commission des finances* , No. 107, p.39, 2012.

5.4. DEFENCE INDUSTRY – THE SUPPLY SIDE

Although France economy has been under budgetary pressures in last decades, French defence industry is booming. French arms manufacturers have confirmed €6.3 billion in orders to foreign countries in 2013, which represents a 31 percent increase in comparison to 2012.The figures released by the Ministry of Defence ensure France keeps its spot at number four among the world's largest providers of weapons.[134]

[132] Dorothée Fouchaux. "French hard power: Living on the strategic edge." *American Enterprise Institute,* February 04, 2014.
[133] Martial Foucault. "The Defence Budget in France: Between Denial and Decline", IFRI, December 2012, pp. 24-27.
[134] Joshua Melvin. "French arms industry enjoys boom in trade." The Local, 30 January 2014. Available at: http://www.thelocal.fr/20140130/arms-france-sold-a-lot-of-weapons-in-2013

The top seven constructors in France are: Safran (producing navigation systems, optronics, software for submarines, ships, aircraft and soldiers), Thales (producer of radars, secure communications, drones, electronic missile systems) , Dassault Aviation (aircraft maker of the Rafale and Mirage fighter jets.) , EADS (co-manufacturer of MBDA missile systems, NH90 helicopters for troop transfer and Tiger combat helicopters, Airbus A400M military transport planes, Harfang drones, Astrium anti-missile defense system), NEXTER (supplier of leclerc tanks, VBCI armored vehicles, Caesar wheeled self-propelled guns, Aravis tanks, munitions), DCNIS (producing conventional and nuclear powered submarines, Fremm frigates, Mistral aircraft carrier) and MBDA (manufacturer of Meteor air-to-air missiles, Storm shadow/Scalp cruise missile, Aster missile-based air defense capability, Milan anti-tank missile).[135]

Importantly, French government retains a significant degree of political intervention in the defence industry. As the arm industry is of the vital strategic importance, France has controlling stakes in many leading arm producing firms. For instance, the state controls 26.6 per cent of stake in Thales, which is the second largest defence contractor in France. Furthermore, France exercises considerable control and political influence over the pan-European defence concern European Aeronautics, Defence and Space owning 15 percent of it.[136] (See Table 5)

Table 5: Capital Structure of defence companies in France

	Public	Private	Number of shareholders	Major Investor	Shares Owned
Dassault Aviation	3.1%	96.9%	3	Groupe Industriel Marcel Dassault	50%
DCNS	64%	36%	3	French State	64%
Nexter	100%		1	French State	100%
Saffron	22.4%	77.6%	4	French State	22.4%
Thales	26.6%	64.4%	-	French State	26.6%

Source: Matelly (2016)

In the time of austerity, DGA has aimed to restructure certain elements of France's defence industry, however the results were mixed. For example, it tried to oblige Sagem and Thales to merge their opsonic assets, as the market's demand is limited for two companies. Even though the French government is a shareholder of both companies, Sagem and Thales have not

[135] SIPRI database

[136] Matelly, Sylvie and Marcos Lima. "The influence of the State on the strategic choices of Defence Companies: the cases of Germany, France and the EU after the Cold War", *Journal of Innovation Economics and Management* 2016/2 (n°20), p. 61-88.

submitted to the requirements of the French state so far. In terms of army equipment, some changes have been introduced to the industrial landscape, most notably with the recent merger of land vehicles specialists Panhard with Renault Trucks Defence. This reduced the number of French companies specializing in military vehicles to two with Nexter included.[137]

The 2013 White Paper underlines the fact that France sees the European military-technological and industrial base as a means to forwarding its own national military-industrial interests. Therefore, at the European level, the Franco-British initiative aims to develop the collaboration between France and the UK in the missile domain. Both nations are moving forward with the development of a new helicopter-launched anti-shipping missile in the guise of the Future Air-Surface Guided Weapon-Heavy (FASGW-Heavy) which is expected to be ready for use by the Royal Navy and the Marine Nationale (French Navy) after 2015. Paris and London also agreed to cooperate on the next generation of nuclear submarines, mine countermeasures and Satellite Communication. All these co-operation items could lead to greater industrial consolidation. However, this is not stated as core political goal, except for missiles, where the objective is to have further consolidation within the Franco-British-German-Italian company MBDA.[138]

At the domestic level, French land armaments companies dependent on the Scorpion, VBMR (Véhicule Blinde Multi-Role/ 'Multi-Role Armoured Vehicle') and EBRC (Engin Blindé Reconnaissance et Combat/ 'Armoured Combat and Reconnaissance Platform') programmes for domestic orders. The Scorpion initiative is transformational programme towards French Army with objective to improve weaponry, land force connectivity and force mobility .Furthermore, the VBMR and EBRC projects on producing armoured vehicles that started in 2016. In terms of military aviation sector, the development of new military aviation programmes by the governments is important for Dassault Aviation. Presently, the company builds eleven Rafales per year for its French customer. Meanwhile, French naval shipbuilding is dominated by DCN. The company has been leading three important national programmes in producing the Franco-Italian 'Horizon' class air defence destroyer, the 'Acquitaine' class FREMM (Fregate Multi-Mission) multi-purpose frigate and 'Barracuda' class nuclear-powered attack submarine.[139]

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[137] Thomas Withington, "French defence industrial base: looking beyond the budget." *Indian Defence Review*, Vol. 28.1, March 2013. Available at: http://www.indiandefencereview.com/spotlights/french-defence-industrial-base-looking-beyond-the-budget/

[138] Sophie-Charlotte Brune Brune and Christian Molling. *The Impact of the Financial Crisis on European Defence*. European Parliament, Directorate General for External Policies, 2011. pp.14-15.

[139] Thomas Withington, "French defence industrial base: looking beyond the budget." *Indian Defence Review*, Vol. 28.1, March 2013.

5.5. DEFENCE COOPERATION AND POOLING AND SHARING OPTIONS

In light of budgetary constraints of France's military and in order to project its strategic ambitions, French government has become more pragmatic in its defence cooperation arrangements and has sought to benefit in terms of military and material capabilities rather than mere political agreements. Consequently, despite the vocal support for development of the EU's military capacity, France is not likely to push it at all costs and is increasingly reluctant to invest in CSDP. At the same time, NATO is not considered to be desired security cooperation framework as it challenges French strategic culture and interest to be perceived as a distinctive security actor, having its own, rather than NATO-dependent strategic prospects. Despite the above, the EU's pooling and sharing and NATO's smart defence initiatives remain important to France, which seeks economic, military and operational benefits from collaboration in various projects, such as helicopter training programs or by pooling maritime patrol aircraft.

The strategic and economic motives for France to sign the 2010 Franco-British Lancaster House agreement are those of collaborating with the state of similar strategic culture and sharing the costs of capabilities development. Furthermore, as U.K. proved to be a reliable partner in robust military operations as well as in delivery of necessary capabilities, it is more likely to remain France's key partner. Among other arrangements, in November 2010 France and U.K. agreed to cooperate in nuclear testing and to pool logistics and training capacity for the A400M.[140] Moreover, France will use UK air-tanker capabilities as well as a research and technology cooperation will be continued with a joint annual budget of €100m.[141]

Apart from the UK, France has hard time finding possible European partnerships from which it might benefit. An exception might be Germany, but as it was outlined above, it is rather challenging for states to establish trustful partnership due to their different strategic cultures and interests.

Under financial pressures France has to seek collaboration in specific capability development and industrial projects. France already considers Poland to be among such potential partners. However, the prospects for closer Franco-Polish defence cooperation are mixed. On the political level, both countries can facilitate cooperation through already existing on the Weimar and "Weimar plus" formats and pursue the concept of a more robust CSDP. In regards to military cooperation, Poland and France may establish bilateral collaboration in different forms of joint training programme for personnel. However, France's priority to secure its own political and

[140] UK-France Summit 2010 Declaration on Defence and Security Co-operation, 2 November 2010.
[141] Ibid.

military capacity impedes negotiations on possible prospects for pooling and sharing. It is currently unacceptable to the French government to rely on the military capabilities of other state without a guarantee that those would be available to France to pursue its national security policy.[142]

5.6. APPROACH TO CSDP

Of all the EU member states, France has arguably been the strongest proponent of a robust European defence policy by leading and promoting the development of EU's capacity for rapid and robust action on international level. France has played a key role in the establishment of the CSDP and has been prominent supporter for development and empowerment of the EU defence-related institutions and initiatives. However, recently, the general feeling among French policy-makers is one of disappointment with the EU member states. There have been plenty of times, was it Libya, Syria or recently Mali, when French called for decisive action have gone in vain. Therefore, due to the failure in collective response to crisis overseas along with poor development of military capabilities across Europe, France has become frustrated of CSDP. This makes a case especially in regard to German's perception on the role of CSDP and general reluctance of the federation to use hard power means.

In order to compensate for the loss of great power status over last century, France has been inspired by the European project that would transfer its national ambitions to the European level. From the initial stage of the European integration process, France perceived the robust military, political and economic cooperation of European states as one of the appropriate means to balance the U.S. as well as to act independently from NATO.

Furthermore, France's recent strategic documents addressed the importance of European integration. As it is described in the 2008 White Paper: "France wants to be in the front rank of this drive for progressive political unification… (and) will work for a more unified, stronger European Union, with a greater presence in the fields of security and defence".[143] Along others, main objectives that France has in regard to the CSDP includes developing of intervention capacity to conduct two or three peacekeeping missions and boosting cooperation across every spectrum of defence capabilities, mainly through pooling and sharing programmes.[144]

[142] Pinar Elmanand Marcin Terlikowski. "Balancing Austerity with Ambitions: The (Close) Future of French Defence Policy." The Polish Institute of International Affairs, January 2013.
[143] The French White Paper on Defence and National Security 2008, Odile Jacob Publishing Corporation, New York, p. 75.
[144] Ibid. pp.82-85

However, this enthusiasm in the paper does not reflect the state of European defence integration in reality. The EU member states have proven to be unable or unwilling to engage in robust and complex military activities in the wider European neighborhood. The economic crisis in Europe has further contributed to states' reluctance to contribute and invest in CSDP.

As France has been becoming more and more frustrated with other member states' attitude of rising indifference and reluctance, France has moved to the practice of bilateral cooperation with U.K and the U.S. Particularly, taking into account France's area of strategic priority, so called 'arc of crisis', in North Africa, the Sahel, the Horn of Africa and the Persian Gulf, not only cooperation with U.K and the U.S. provide more flexibility for France's action, but strategic interests and cultures of these partners make them more willing and able to cope with crisis in proactive and robust manner.[145]

For instance, in the time of EU's failure to respond to the crisis in Libya, Britain and France led the coalition of the willing under the NATO framework with additional support from U.S. side. Meanwhile, during the recent crisis in Mali, France decided to launch counter-insurgency campaign outside the framework of the CSDP with military support of U.K. and U.S.A. The situation with the EU member states' disengagement was especially problematic during crisis in Syria, when German decided not to involve. As well as EUFOR Tchad mission under CSDP framework was not as smooth as it could be, as one more time the EU member states failed to deliver required funding and military capabilities.[146]

After all it is not surprising that France's 2013 White Paper on Defence is less optimistic about European defence cooperation. It contains a comprehensive list of the shortfalls of CSDP including differences in objectives within the common defence, different strategic cultures, and different interests. The paper also addresses the inability of Europe to integrate: "Europe does not yet seem willing to assume a greater responsibility in securing the European continent and the world, despite the encouragement of the US. On the contrary, many European states fall below the bar of a defence spending of 1% of GDP".[147] Thus, it is possible to argue that French government is clearly skeptical about the capacity of Europe to integrate and to put defence matters as a priority.

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[145] Mieke Molthof. "France: The Disillusioned Leader of l'Europe de la Défense." November 2013. Available at: http://studentthinktank.eu/blogs/france-the-disillusioned-leader-of-leurope-de-la-defense/

[146] Interview with General Jean Philippe Ganascia, Paris, 25 June 2012. Cited in Manuel Muniz "France" The Frustrated Leader." Centre for European Policy Studies, 2013.

[147] Livre Blanc the de Défense et la Sécurité Nationale 2013, Direction de l'information légale et administrative, Paris, p. 17.

5.7. CONCLUSION

The French military has been less affected by defence budget cuts in comparison to the U.K. This has enabled it to move forward modernization while restructuring its military forces. The French military have been cutting support and logistical units, which might affect the army's capabilities, however, its force size and force generation system, should provide commanders with adequate numbers of well-trained and deployable troops. Importantly, despite proposed budget cuts, France has been reluctant to substitute quality for quantity, as arguably U.K. has done. Indeed, the French MoD was able to keep major acquisition programmes. The one of the greatest issues French military commanders has been facing concerns lack of aircraft carriers, which significantly reduce French air forces deployability. The capability gab in this sector makes France highly dependent on allies support and justifies development of closer defence cooperation with the U.K. and U.S.A. However, France remains well-advanced military power in EU with regard to the medium-weight and high-tech force, which could repeat its contribution to the International Security Assistance Force and probably go beyond that.

With regards to the defence integration process and EDEM development, France emphasizes its pro-European position. However, state's efforts on creating a real "common" European defence and security policy have been rather unsuccessful. The problem lies within the Frenchidea that CSDP should in fact deals with security and defence, and the EU states should cooperate in these policy areas. Howover, most of EU 28 either don't want to or cannot. The lack of strategic interest and/or inadequate capabilities limits possibilities for cooperation in security and defence matters.

Historically, it is of strategic importance for France to maintain the autonomous DTIB based on independent intelligence. France makes sure to procced in developing necessary capacity to act independently on global arena, thus to maintain its power over strategic decisions and available capabilities. As the French military power has been decreasing over the years, the CSDP seems to be a logical and calculative instrument to increase France's position on the international arena upon it reflects France's position and benefit its capabilities.

6. GERMANY

The end of the Cold War had a tremendous impact on the German military industry. In 10 years German defence budget has been reduced by 25% in real terms, which represented a considerable loss of funds for the Bundeswehr. Consequently the arms procurement fund was reduced by the half, from 12 billion DM to 5.3 billion DM in 1989-1998.[148] Following the drop off in amount of orders, military companies have been subjected to internal rationalization and business concentration. While some of the arms companies were forced to sell the enterprises or liquidate themselves or parts of the production facilities, the workforce for military industry had decreased of nearly 40%. Therefore, the aim of a concerted effort of the government and the military industry has been to preserve and develop the technological efficiency and competence of the industry in a way, which maintains it as a technological attractive and industrially essential partner for the production of weapon systems in international cooperation.[149]

The necessary capacity reduction has led to restructuring of arms companies. As German companies faced a notable drop in their sales and some of them even exit the market, those which remained had to concentrate and focus on defence production. The one of significance is the merger of Krauss-Maffei AG and the Wegmann & Co. GmbH in 1999 into Krauss-Maffei Wegmann (KMW) The resulting synergies, the broad product portfolio and the united system competencies enabled KMW to gain a leading position in the world market. Later, the company was awarded the procurement contract for the German Army's armoured transporter. This contract was the largest procurement project placed in the German army industry at that time. The transformation of the Bundeswehr and also of the armament industry that occurred in the aftermath of the Cold War has led to a great restructure of defence sector, which is not complete yet.[150]

[148] BMVg 1998a, p.3
[149] Ibid. p.2
[150] Jauhiainen,Jussi S., Luc Mampaey. Post-cold war conversion in Europe: defence restructuring in the 1990s and the regional dimension, LES RAPPORTS DU GRIP :1999. Available at http://archive.grip.org/en/siteweb/images/RAPPORTS/1999/1999-03.pdf

6.1. POSITIONING OF THE STATE IN DEFENCE INDUSTRY

Table 6: Positioning of German state in the defence industry

Socio-economic environment	- Weight of industry in the country and relatively weak DTIB - Weak public funding and support to the industry
Political context	- Re-unification and Federal State
State position as a customer	- Trivialisation of defence industrial activites - Prioritization of national products
Consequences to DTIB	- Closed DTIB with national, specialized companies, mainly in aerospace, land and maritime equipment. - Export orientation and implementation in emerging countries.

Source: Lember 2014

The German model significantly differs from those of France and the UK. In aftermath of the Cold War the German government found itself in a complicated situation in regards to pursuing country's defence policy objectives. From one side, it aimed to establish an autonomous national defence sector in the light of German reunification and in the context of European defence integration process. While on the other side, German government sought to downstream the cold war legacy by reducing military expenditure and restructuring weapons production. Consequently, military spending has decreased by 31.4% between 1990 and 1997. The decrease in acquisition funding in Germany in the same period was even larger at 58%. These policies reflected the belief of German authorities that the defence industry is dynamic and efficient enough to evolve with little direct support from the state.[151]

Moreover, since the end of the Cold War the state had nearly never held shares in German defence companies.[152] With many arms producers choosing to discard from the national acquisition programmes, the German defence industry has relatively declined in the 1990's .

[151] BMVg 1998a

[152] Masson, H., Industrie de defence et soutien public a la R&D en Europe, *Recherche et documents de la Fondation pour la recherche stratügique*. 2010

Addressing these difficulties, the German government have started to prioritize domestic suppliers in its arms procurement programmes. It had favored domestic companies in producing land and naval military equipment.[153] Additionally, since 2009 the Defence Ministry has been implementing a policy of focusing its investments mainly into larger companies, hence limiting the ambition of SMEs. Likewise, the 11th Amendment Act on foreign trade of July 2004 has introduced strict and systematic control over foreign acquisitions of defence companies, limiting possible share of acquisition to a quarter.[154] Under these conditions, German arms producing companies became ultraspecialized and heavily dependent on public procurement orders, and as so, their scope of production has evolved little and investments have remained private.[155] (See table 7)

Interesting, that German Federal States involvement in the defence industry has a major impact on the development of some defence companies. For instance, OHB System AG, which is a major player in the European Galileo programme, has benefited largerly from the Bremen region support, growing in six times since 2004. This policy promotes developing of regional defence industrial centres and creates an opportunity to develop a robust network of SMEs. Although such regional cluster boosts cooperation between civil and military contractors, they also limited German companies' interest in European integration. However, the recent successful merger between KMW and Nexter seems to be an exception to this rule.[156]

Table 7: Capital Structure of major defence companies in Germany (as of 2016)

	Public	Private	Number of Shareholders	Majority investor	Shares owned
Atlas Elektronik		100%	2	Thyssen Krupp	51%
Diehl BGT Defence		100%	1	Diehl family	100%
KMW		100%	1	Wergnann & Co	100%
Rheinmetall Defence		100%	-	Harris Associates	5.52%
MTU Aero Engines		100%	-	Artisan Parthner	4.56%

[153] UTTERWEDE, H. (2009), *L'avenir du capitalisme allemand, dans l'Allemagne rŭunifiŭe, 20 ans aprus la chute du mur*, Lille, Presses Universitaires du Septentrion.
[154] Act No. 38/1994 Coll. on Foreign Trade with Military Material, as amended.
[155] Matelly, Sylvie and Marcos Lima. "The influence of the State on the strategic choices of Defence Companies: the cases of Germany, France and the EU after the Cold War", *Journal of Innovation Economics and Management* 2016/2 (n°20), p. 61-88.
[156] MASSON, H.,Industrie de dŭfense et soutien public a la R&D en Europe, *Recherche et documents de la Fondation pour la recherche stratŭgique*. 2010

OHB		100%	-	Fucks family	69.72%
TKMS		100%	1	ThysseKrupp AG	100%

Source: Matelly et all (2016)

6.2. DEFENCE SPENDING TRENDS

Germany's current trends in defence policy, the allocation of fundings and on-going structural reform of armed forces can be explained through broader government efforts to consolidate the federal budget and the intention to build a smaller, more flexible and fully capable all-volunteer force. Although defense budget cuts have been not as severe as in other European states, the state of the German DTIB has left much to be improved. The German defence sector has been significantly underfinanced during last decades. Consequently, there is a lack of equipment and facilities, which are necessary to respond to the broad range of possible threats to the national security. In terms of military reform, the government has decided to maintain the broadest spectrum of military capabilities possible, while accepting a reduced ability to sustain troops for long deployments abroad.

Figure 8: Germany and the EU military expenditure as % of GDP in 1988-2015

Source: SIPRI|WORLDBANK DATABASE

In comparison to other major military powers in the EU, Germany spends significantly less on defence, around 1.2 percent in 2015. (See figure 8) During the initial years of economic and budgetary crisis in Europe, German chose to respond in a similar manner as other European states in order to secure defence fundings in times of budgetary austerity. However, from 2008 to 2010, European members of NATO cut on average 7.4 percent of their military expenditure. Yet Germany's defense budget grew by 1.4 percent in real terms and has proceeded to increase slowly since then, with the exception of 2011.[157]

From the one side, the slow growth in the state's defence budget may designate a positive tendency in terms of the defence sector's development; however, in reality it is rather questionable. Germany already has been spending considerably less than others European major military powers, and the further reduction of defence fundings would not be an option, if the state was willing to maintain its commitment to full spectrum of defence capacity. However, even if the German military cannot be described as drained of resources as the British one, it has been subject to series of deep cuts while being in the middle of constantly changing political and economic environment within the federation. The German military is committed to a full spectrum of capabilities and has been going through a set of reforms aimed to restructure the armed forces, foremost to make it more einsatzfähig[158] and expeditionary, while at the same time reducing its numbers.[159]

In 2009 Germany introduced the so-called 'debt-brake' legalislation, which was constitutionally enshrined in the German Basic Law (Grundgesetz). Under its provisions, the federal government must cut its structural deficit to 0.35 percent of GDP to 2016 and onwards. The idea is to slash public debt from unprecedented 80 percent by setting out a flexible fiscal tool which can limit possibility of politics interference to and manipulation of public debt.[160]

Simultaneously, Chancellor Angela Merkel's Cabinet initiated the reform of the German armed forces as a part of budget consolidation effort. The Ministry of Defence was expected to generate savings of €8.3bn between 2011 and 2014, lately extended till 2015. Taking into consideration that the annual German defense budget was only about €30 billion, the expected reduction was substantial, especially for a military entity already existing on very limited means. However, it was decided that almost half of the cost reductions would come from spending on personnel.

[157] Bastian Giegerich and Alexander Nicoll, 'The Struggle for Value in European Defence', Survival 54: 1, 2012, p. 56.
[158] Einsatzfahig means usable, or, literally, capable of operating.
[159] Michael Shurkin, "Setting Priorities in the Age of Austerity: British, French, and German Experiences." RAND Corporation, RR-222, 2013.
[160] Bundestagsdrucksache 16/12410, pp.10-11; Basic Law for the Federal Republic of Germany (Grundgesetz, GG), Art. 109

Alongside, the size of the German armed forces, the Bundeswehr, would shrink significantly. Particularly, planners hoped to cover most of cost reductions by closing several hundred of military facilities and through cutting the overall size of the military personnel to 185,000. Additionally, it was agreed that the suspension of conscription and rationalization in procurement, as well as revision of administration would take place. Moreover, the Commission on Structural Reforms noted that defence budget cuts should open the door to new options for savings through better pooling and sharing with EU and NATO partners.[161]

However, it became apparent that restructuring of the German armed forces would cost money before it saves it. The MoD so far was not able to generate the savings it agreed to. The defense budget cuts have been implemented were more modest than it was primarily suggested. When in 2011 Thomas de Maizière took over the responsibilities of Minister of Defence, he was able to lobby defence budget cuts with administration. Consequently, it was agreed that the MoD will receive up to €1 billion per year in additional funds to manage the costs of downsizing.[162]

After all, in 2012 German defense budget has increased by 320 million. And spending on personnel corresponded to 49.9 percent of the defence budget in 2012, down from 52.5 percent in the previous year. Meanwhile, spending on defense investment, particularly on equipment procurement plus research and development increased slightly in number of 0.4 percent in 2012. The five year planning for the federal budget provides an indication of the medium term outlook for defense spending. Defence budget cuts in absolute terms have been scheduled to begin in 2014, with the budget for 2015 and 2016 fixed at €31.5 billion in each year.[163] However, as the German Cabinet has adopted the federal budget for 2017 and the financial plan to 2020, the defence budget has de-facto been raised by almost to €36.61 billion. The funds for military acquisitions will climb by approximately €1 billion, from €10.16 billion in 2016 to €11.1 billion in 2017.[164]

6.3. ARMED FORCES STRUCTURAL REFORMS AND PUBLIC DEFENCE PROCUREMENT

In the light of the budgetary crisis, the procurement of defence equipment has been a subject to major changes. The process of downsizing and/or suspending certain defence acquisition projects has been a sensitive issue to the national defence indusrty and the MoD. As

[161] Sophie-Charlotte Brune and Christian Molling. The Impact of the Financial Crisis on European Defence, European Parliament, Directorate General for External Policies, 2011, pp.5-6.
[162] Patrick Keller. "German hard power: Is there a there there?" *AEI Outlook Series*, October 2013
[163] Ibid.
[164] The 2017 Federal German budget

such, the actual scope of reform in this area should be determined by a constructive agreement between two institutions, as a cancellation of procurement contracts would incur penalties for the MoD that might make cancellation economically unsound.

As a part of the Bundeswehr reform, series of equipment cuts should comprises both reduction of in-service equipment and cancelation of procurement projects in the future (see the table below). For instance, in the Army the stock of the Leopard II main battle tank will shrink from 350 to 225 and the numbers of the new Infantry Fighting Vehicle Puma will be downsized from 410 to 350.

The Air Force will only receive 80 NH90 Light Transport Helicopters (instead of 122 initially ordered). Furthermore, there will be only one Tiger attack helicopter regiment equipped by 40 Tiger Combat Support Helicopters (instead of 80 initially ordered), 140 Typhoon Multirole Combat Aircraft (instead of 177 initially ordered) and 40 A400M Transport Aircraft (instead of 60 initially ordered). Additionally, the Air Force will retire 20 of the C-160 Transall Transport Aircraft and reduce flight hours. The government has also indicated that it is likely to cancel its order of tranche 3B Eurofighter jets (37 aircraft), which would leave Germany with a total of 140 Eurofighters in its inventory.

The Navy has already taken its six 206A submarines out of service. The biggest reductions will be seen with the eight F122 frigates put out of service and only six instead of eight Multirole Combat Ships 180 will be procured. The fleet of more modern 212A Class submarines will grow by 2 units as well as number of K130 Corvettes to replace F122 frigates. In addition, the number of Marine Helicopters will be reduced from 43 to 30.[165] (See Table 8)

Table 8: Structural change in German Defence Procurement

Project/System	Current or originally planned number	New ceiling
Combat tank Leopard II	350	225
Armored personnel carriers Puma/Marder	410/70	350/0
Armored howitzer 2000	148	89
Multiporporse helicopter NH-90	122	80
Support helicopter Tiger	80	40
Eurofighter Typhoon	177	140

[165] Henrik Heidenkamp.“ Financial Imperatives for Germany's Security and Defence Policy”, *RUSI*, November 2011.

Combat aircraft Tornado	185	85
Transport aircraft C-160/A400M	80/60	60/40
Multiporpose warship (MKS 180)	8	6
Naval mine countermeasures unit	20	10

Source: Federal Ministry of Defence, 'Ressortbericht zum Stand der Neausrichtung der Bundeswehr." May 2013 p.24

However, the streamlining of the procurement of defence capabilities was highly problematic and did not go as smooth as military personnel cuts. Particularly, in February 2014, the new German Defence Minister Ursula von der Leyen dismissed her secretary of state, Stephane Beemelmans, who was responsible for defence procurement along the director of the procurement department. Such decision was justified by numerous troubles the MoD has been facing with its major defence procurement projects. These problems can be charatcterised by a mix of interdependent tendencies of rising costs, delivery delays, failures to meet technical requirements within ineffective management in overall. Apparently, the German arms industry and the Ministry of Defence were not able to reach an agreement which will be beneficial for both entities.[166]

The main problems within defence procurement emerged due to the larger costs than it was initially estimated; frequent failures to deliver in time; supplies of defected materiel or the one which does not meet the technical requirements set by the administration. This applies to almost all the important German defence procurement projects.(see Table 9).

Table 9: German major defence procurement projects (selected)

Project	Manufacturer	Contract for serial production (year)	Delivery of serial copies	Amount
Eurofighter multi-role fighter	Eurofighter Jagdflugzeug	1998	2004-2015 (tranche 1,33) 2009-2015 (trance 2,31) 2015-2018 (tranche 3a, 37) (planned since 2002)	143 (reduced from 177)
A400M	Airbus	2003	2014 - …	40 (reduced

[166] Justyna Gotkowska. "Defence Procurement - A Minefield for Germany's New Defence Minister?" *Centre for Eastern Studies*, February 2014

transport aircraft	Military		(planned since 2011)	from 60)
Tiger combat support helicopter	Airbus Helicopters	1998	2010 - … (planned since 2004)	46 (reduced from 80)
NH90 medium transport helicopter	NH Industries	2000	2013 - … (planned since 2004)	82 (reduced from 122)
Puma infantry fighting vehicle	KMW and Rheinmetall Defence	2004	2010 - … (not yet in service because adjustments still necessary; planned since 2009)	342 (reduced from 410)
Type 125 frigate	ThyssenKrupp MS and Lurssen	2007	2017 - … (planned from 2016)	4
212A submarine	Thyssen Trupp MS	1994	2005-2011 (first 4) 2015 - … (remaining 2) (planned since 2004 and 2014)	6
K130 missile corvette	ThyssenKrupp MS and Lurssen	2001	2008 (first 2) 2012 (remaining 3) (planned in 2007 and 2008)	5

Source: BERICHT ZUM STAND DER Neuausrichtung der Bundeswehr, 2013

6.4. DEFENCE INDUSTRY: SUPPLY SIDE

Due to constantly changing external and internal circumstances, the German defence industry has been facing certain challenges. Domestic arms sales market in Germany is contractual. In the light of the budgetary crisis and decrease in numbers of defence acquisitions the orders from the Bundeswehr are slowing down significantly. Additionally, major EU customers of German arms manufacturers have been going through serious budget cuts including defence-related costs. This, in turn, negatively affected the scope of their orders for new armament and military equipment. Therefore, German arm industry has to re-orginised itself and to look for new sales market opportunities outside Trans-Atlantic partnership.

The German arms industry is highly diverse. Several German manufacturers are part of the largest international arms-producing companies manufacturing complete systems, such as Airbus

Group (including Airbus, Airbus Defence & Space, and Airbus Helicopters) and MBDA (MBDA Deutschland). However, as it was outlined above, most defence constructors in Germany are private companies that are exclusively German-owned. There are many relatively large companies, which hold well-established position and are known mainly for manufacturing and exporting systems for land and naval forces. For instance, ThyssenKrupp Industrial Solutions (TKIS with the ThyssenKrupp Marine Systems/TKMS industry cluster) and Lürssen Defence manufacture boats and warships for the navy. Rheinmetall Defence and Krauss-Maffei Wegmann specialized in production of tanks, infantry fighting vehicles, artillery and armoured carriers for land troops.

Moreover, the military industry includes small and medium-sized companies. Such firms include OHB-System (design, construction and installation of satellites), Diehl Defence (guided missles and air defence systems), Carl Zeiss (optical systems), Rohde-Schwarz (electronic test equipment, broadcasting equipment, detection systems), Plath (radiolocation, radio reconnaissance), ESG (information, communication and navigation systems), Atlas Elektronik (maritime systems and electronics).

German arms companies have established a large network of connections with various foreign companies inside and outside of Europe. For instance, there are German subsidiaries of Airbus Group, which cooperate with Airbus subsidiaries in other EU countries on such joint projects as: the Eurofighter, the A400M transport aircraft, the NH90 medium-size transport helicopter, and the Tiger combat support helicopter. Likewise, several German companies successfully established cooperation with foreign firms in the U.S., Israel, etc. on specific projects. In the same time, small and medium-sized firms have been supplying subsystems for foreign companies, in Europe and beyond (such companies as MTU Aero Engines and MTU Friedrichshafen).[167] Importantly, German arms companies are private, with the exception of Airbus Group (formerly EADS), in which the German government holds a 12% stake.

The Bundeswehr remains the most important customer of the military equipment produced by domestic companies. In 2011, just 17% of the defence industry's products were exported. Moreover, the quantity of imported goods was very low (3%), thus, German arm-producing companies have been able to satisfy demands of the Bundeswehr and of federal security agencies. Additionally, the Bundeswehr has financed large-scale research and development

[167] Rheinmetall Defence is cooperatin with Israel's IAI in the manufacture of Heron 1 UAVs, leased by the Bundeswehr; Diehl Defence has many foreign partners in the production of missiles: IRIS-T (with companies in Greece, Italy, Norway, Sweden and Spain), RBS15 Mk3 (with Sweden's SAAB Dynamics), Spike LR (with Israel's Rafael), and the AIM-9L Sidewinder (with the US Raytheon).

projects which allow arm-producing companies to develop advanced military equipment. In turn, this implies that the level of financial support provided to German arms manufacturers is primarily influenced by the future needs of the Bundeswehr. Therefore, it is possible to argue that German MoD favors domestic arm-producing companies over foreign ones due to different political and economic reasons.[168]

It is worth to notice that Germany is the third among the world biggest weapons suppliers, behind only of Russia and the U.S and in front of France and U.K. According to federal government figures, since 2005 German's arms export grow of about 1.5 billion euros a year, with the unprecedented sales in 2010 due to 2.1 billion euros contract on submarine sales to Portugal and Greece. However, the actual value of German arms exports is difficult to determine as the data published by the federal government is incomplete and doesn't correspond to the one published by SIPRI.

Importantly, it is possible to distinguish certain shift in the destination of German arms exports. Until recently, about three quarters of export was oriented towards counties within NATO and EU. However, in 2011, the ratio reversed – with just 32% of arms sales in NATO, EU and equivalent markets, and as much as 68% being purchased by third countries. This trend was observed to continue in 2012 with export ration of 41% and 59%, respectively, this, in turn, indicated a new turn in export strategy of German arms manufacturers.

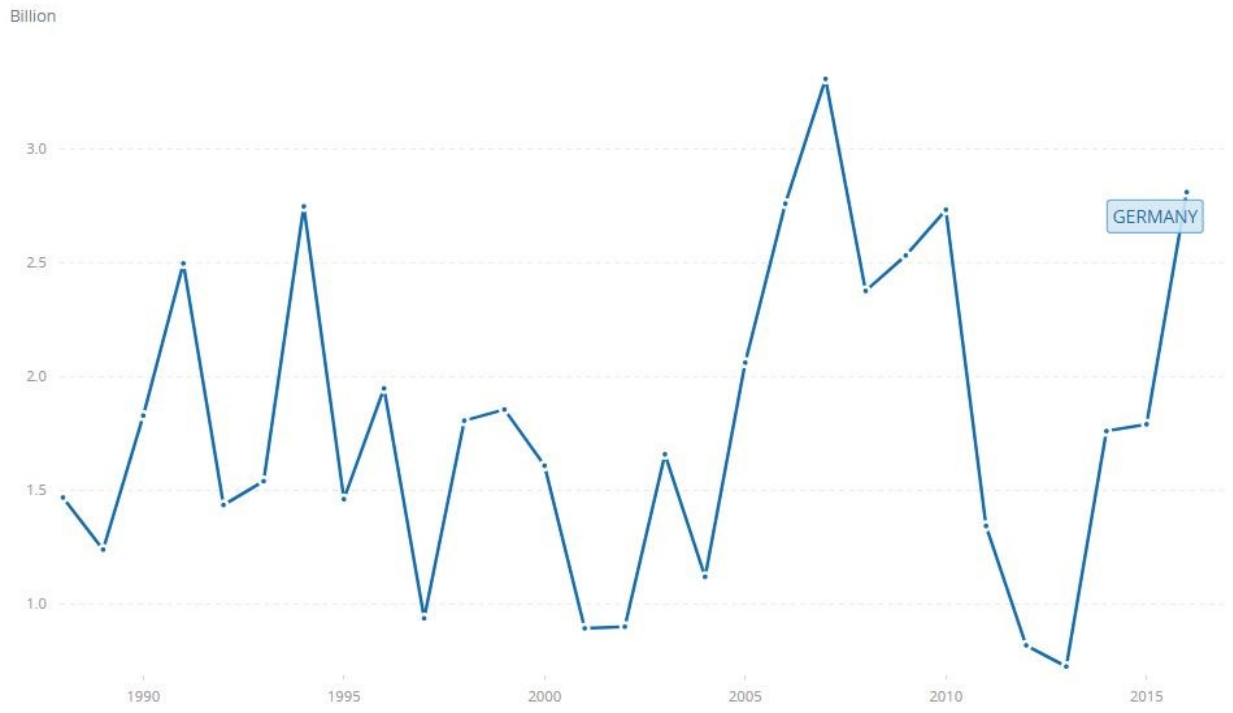
Indeed there is a growing shift in export destinations of the German defence companies towards third countries. In the first four months of 2014, Germany authorized arms exports worth 1.2 billion euros, with a slight fall from the previous year, according to the Economy Ministry. Meanwhile, the number of German arms exports for that period to non-EU or non-NATO states increased by 130 million euros.[169]

Furthermore, the German arms sales have increased dramatically since 2014, nearly doubling in size in 2015 and estimate to double in 2016. Thus, Germany has become the third-largest arms exporter in the world in 2015 with the arms sales total of 4.8 bilion USD, ranking below the United States and Russia, as it stated in annual defence industry report compiled by British publishing company IHS Jane's.[170] It is possible to argue, that the massive increase in arms sales is linked to the revival of German militarism and it desire to lead more often and more decisively on the global arena. This not only requires more Bundeswehr missions abroad, but also the direct

[168] Justina Gotkowska. "New market conditions and "exit strategies" for the German arms industry." *Centre for Eastern Studies* 130, 2014, pp.3-4
[169] Thomas Peter. "German economy minister pledges to restrict arms exports." *Reuters*, May 18 2014.
[170] Ben Moores. *Balance of Trade: Global Defence Trade Report 2015*, IHS Jane's, April 2015.

arming of warring parties. Thereof, a large ammount of the small arms trade in 2015 went to the Kurdish Peshmerga in Irag and to the development of a German-European defence industry.[171] As IHS Janes's report indicates, nearly a third (29 per cent) of German arms exports went to the Middle East and North Africa, with Saudi Arabia, Algeria, Egypt and Qatar are the main recipients. With the estimated continuous growth in arms sales in 2016, Germany continues to develop an export-oriented defence policy.[172] (See figure 9)

Figure 9: German arms exports as the percentage of GDP in billion EUR, 1988-2015



Source: SIPRI

6.5. DEFENCE COOPERATION AND POOLING AND SHARING OPTIONS

The MoD had been assessing opportunities for German defence to benefit from military cooperation, especially under framework of CSDP. It notices that pooling and sharing of military capabilities is a potential way to achieve budget savings and to enhance rationality of the member states' defence capabilities. Therefore, the German government supports the long-term goal of fully capable European Forces and shares an aspiration to develop further common

[171] Johannes Stern , "German arms exports almost doubled in 2015" , WSWS, *International Committee of the Fourth International*, July 8, 2016
[172] Moores, Ben. *Balance of Trade: Global Defence Trade Report 2015*, IHS Jane's, April 2015.

functions (such as air security) among member states. Additionally, the MoD highlights that the greater savings could be achieved through strong European procurement cooperation. Yet until recently, and as it was outlined earlier, the German policy in promoting European defense integration contradicts rather protectionist defense industrial policy.

Nevertheless, currently German participates in various pooling and sharing initiatives. Particularly, Germany and Sweden introduced the Ghent Initiative in 2010, which is generally recognized as the starting point for Pooling and Sharing within EU. The main goals of the initiative are to maintain and enhance military capabilities of the participants, to solve duplication in national militaries assets, as well as to improve interoperability, military efficiency, sustainability and reduce unnecessary spendings. Following the initiative, the EDA was chosen to provide framework for P&S projects. In other words, the main objective of the Initiative is to support European capability development by collectively addressing existing capability gaps.[173]

Furthermore, in April 2010, the Weimar initiative was proposed by France, Germany and Poland. The states proposed to strengthen CSDP capabilities through increased multilateralization and pooling of forces. Particularly, this could be achieved through reforming the EU Battle Groups, setting up an EU headquarters and jointly develop military capabilities and assets on EU level.[174] The initiative has been welcomed by the High Representative and EU member states expect U.K., and has been pushed towards the EU/EAD level and joined by Italy and Spain later. In 2012 the five countries of Weimar Plus signed a Declaration on European Defence to support further cooperation in security and defence matters on EU level. The main issues addressed in the Declaration are to facilitate cooperation on high added-values capacities, reinforce the EDTIB and strengthen cooperation in R&T activities. (Wiemar Plus Group, 2012)[175] Nevertheless, there was a little success in pushing forward the implementation of the Initiative; the establishment of the EU Operation Centre in 2012 is probably the greatest accomplishment so far.

On the bilateral level Franco-German defence cooperation established more than 50 years ago have been successful to a very little extent. The most significant achievements are numerous personnel exchange programmes, creation of the Franco-German Brigade (FGB) and the 2010

[173] Claudia Major, Christian Mölling, Alicia von Voß. "The State of Defence Cooperation in Europe." German Institute for Internationa and Security Affairs, Working Paper, FG 03-WP No 3, December 2013

[174] Major, Claudia and Florian Wassenberg. "Warsaw'a Ambitious CSDP Agenda." German Institute for Internationa and Security Affairs, September 2011.

[175] The Foreign Affairs Ministers and Ministers of Defence of France, Germany, Italy, Poland and Spain. "Paris declaration of the Wiemar Plus Group", Paris, 15 November 2012

European Air Transport Command (EATC). Besides these achievements the cooperation between the states' defence industries seems to be very weak. It can be explained through to substantially different perceptions of the state's role in defence industry, different political opinions on planning, launching and implementing of military operations. Such differences might also explain the reason that vast friendship structures do not deliver proportionally to the effort put into them: over the last years, the two states have not been very successful in developing substantial cooperation projects. The multilateral relationship appears to be stuck at between the rhetorical level of well-intentioned statements and the administrative level of well-organised processes. Although the recent establishment of "Franco-German Agenda 2020" within which the states formulated objectives in operational, political, and defence industry cooperation, there has been little improvement so far. Germany and France have been straggling to produce significant results.[176]

6.6. APPROACH TO CSDP

Germany sees itself as one of the driving forces behind European cooperation. Especially, in the area of security and defence cooperation Germany took a leading role in the setting out of the CSDP and its further promotion. Importantly, from a German perspective, the comprehensive nature of CSDP, that comprises civilian and military means, prevails over other multinational engagements, particularly NATO, which lacks sizeable civilian instruments. Nevertheless, NATO remains the preferred framework for any robust military engagement that Germany might decide to engage. In other words, German doesn't see the CSDP as an alternative to NATO, but rather as complementary to it, with the ability to deploy the whole range of soft power tools along military ones. Important to mention, German also views the CSDP as a tool for achieving further cooperation and integration among EU member states. In fact, this perception of the CSDP's role appears to be more important for Germany rather than developing the CSDP to achieve the EU's military capabilities independence from NATO.[177]

Particularly, Germany's decision whether engages or not in different missions usually based on perception of the framework and objectives of a given mission. For instance, when robust military means are required, Germany prefers NATO due to its military structure and capabilities. However, in case a mission's mandate needs not only military means to achieve stated goals, from German perspective the involvement under CSDP framework might provide

[176] Claudia Major. "France, Germany and European defence: more pragmatism and less pathos, please." Comité d'études des relations franco-allemandes, January 2013, pp. 6-9

[177] Cristian Wurzer. "A German vision of CSDP: "It's taking part that counts" in National Vision of EU Defence Policy: Common Denominators and Misunderstandings, ed. by Federico Santopinto and Megan Price, Centre for European Policy Studies 2013, pp.27-29.

more advantages with its broader toolbox of political, diplomatic and economic means. Meanwhile, a UN mission might be preferential when international legitimacy is required. Therefore, it is possible to argue that German priorities for whichever multilateral framework a mission to be carried out are decided on a case-by-case basis, depending on the mission's needs, with no preference for the EU or NATO.

Talking about Germany's strategic interests, it seems that the Germany's core priorities lie within regional security and stability in Europe and its Neighborhood as well as economic concerns. This accounts to a common perception among German's politicians that conventional threats present no current danger for German territorial integrity or for the democratic foundation of the state. Alongside, due to historical reasons, constitutional restriction and overall skepticism in domestic political cycles, Germany has a clear preference for using the variety of non-military means. The decisions on military engagements are driving by the principle of using force as a last resort under multinational framework and only in case with high probability of success.[178]

Important to notice, that one of the guiding principles of German policy in regards to CSDP is a high level of participation in the mission. Particularly, Germany has had contribute to every launched operations under the CSDP framework, with exception of the withdrawal from EUFOR Althea in 2012. This tendency corresponds to German's perception of the CSDP as a civilian, preventive and multilateral crisis management entity, as none of the 27 launched operations under CSDP framework was a robust combat mission.

Nevertheless, it appears that beyond European integration and a safe environment to facilitate global trade, Germany lacks a long-term strategic vision. Ultimately, this also translated into a lack of strategic vision for Europe or the further development of the CSDP, beyond the rather empty rhetoric of 'more Europe' and deeper integration.

6.7. CONCLUSION

In the course of economic and budgetary crisis, German Defence sector was subject to major budget cuts and has been in the throes of a significant effort to transform its force structure to more advance and expeditionary force. Thus, Germany is officially committed to preserving full-spectrum capabilities, meanwhile moving to a medium force structure, which should be more deployable and sustainable. Therefore, it is possible to argue that Germany seeks to adjust its armed forces to reality of the current security threats, and maintain its positions as economically and military advanced actor within EU. In the conventional military balance

[178] Ibid.pp.29-35.

among Europe's big powers, Germany is slowly catching up mainly because of the severe defense budget cuts in both France and the United Kingdom.[179]

Alongside, Germany has been one of the greatest supporters for the development of the defence cooperation within EU. Germany favors defence integration under the CSDP framework as it directly correlates and provides to its primarily strategic interest in establishment of European regional security and stability. Nevertheless, NATO remains preferred framework for any robust military engagement that Germany might participate in.

Taking into account neorealist insights of state behavior patterns, it is possible to argue that Germany seeks to maximize its military and economic power through cooperation on EU and international level. Moreover, German's approach to multilateral cooperation is primarily driven by its own national interests and by more pragmatic and instrumental considerations. In the context of balanced multipolarity within EU, Germany recognizes the benefits of regional economic and defence cooperation as a means of competing with the USA and Japan; for milieu-shaping in European Neighborhood; and for the collective pursuit of shared second-order ethical concerns.[180] From the other hand, if German interests competing with other EU member states' interests, it tends to act independently in the sake of own benefits. For example, Germany opposed the UN Secretary-General's request for the deployment of a CSDP military crisis management operation in eastern DRC in 2008 given, due to the risk-averse political culture coupled with concerns about the feasibility and objectives of the request due to the EU's limited military capabilities.[181]

The last but not least, due to the tight budgetary constraints of the Bundeswehr, the German MoD seeks to advanced gains and minimize losses through comprehensive Pooling and Sharing approach. Nevertheless, the P&S arrangements are making little progress these days due a multitude of challenges, such as German's perception of the CSDP as a primarily 'soft power' instrument that contradicts other states' vision of the role of the CSDP. Furthermore, despite various EU initiatives in facilitating defence cooperation and harmonizing procurement process, Germany retains its protectionist approach within the defence policy. As well as recent failures

[179] In 2013, Germany's defense budget is at €33 billion; the United Kingdom and France have €37 billion and €32 billion, respectively. By 2015, Germany plans to reduce spending to €30 billion, the United Kingdom to €35 billion, and France to €30 billion. See chapters on France and the U.K and/or Christopher Chantrill, "Public Spending Details for 2010,"www.ukpublicspending.co.uk/year_spending_2010UKbn_12bc1n_30.

[180] Adrian Hyde-Price, *European Security in the Twenty-First Century: The Challenge of Multipolarity*, London, Routledge, 2007, pp. 125-17.

[181] Roy H. Ginsberg. "Measuring and Evaluating CSDP Impact: The Case of EU-NATO Relations" (paper presented at the Twelfth Biennial International Conference of the European Union Studies Association Boston, Massachusetts, March 3-5, 2011).

of some P&S projects, such as producing of the German-Italian-America missile defence program (MEADS) or failure to use the Franco-German combat brigade in Afghanistan undermined German's willingness to launch or engage in the following initiatives.

7. THE UNITED KINGDOM

7.1. POSITIONING OF THE STATE IN DEFENCE INDUSTRY

From early 1980s the government of the U.K. has been executing liberal policy towards the national market. This has led to the major privatization of defence companies. The national authorities assumed that offering greater autonomy to defence contractors would lead to their restructuring in response to shrinking public resources and rising production costs.[182] The so-called Levene Reforms (after Peter Levene, the Chief of Defence Procurement un that time) transitioned the national defence industry into open and increasingly competitive model. Although, this policy has forced U.K. defence contractors to rationalize, they found it challenging to develop extremely expensive weapon systems and invest in R&D as the fixed price contracts have harden the calculation of the potential project costs in the end of the production. The tremendous completion led to inadequate costs overruns and neglect of the quality of final products, the MoD was unsatisfied.[183] Therefore, in December 2001, the U.K. revised defence acquisition model that would establish a better relationship between the state and the industry, as well as it would provide more investment into early project phases.[184] (See table 10)

Table 10: The U.K. State Positioning in defence industry

Socio-economic environment	- Deindustrialization followed by financialization - Liberalization and privatization
Political context	- Importance and wellness of force in external operations - Liberalization and privatizaton
State position as customer	- Best value for money: public-private partnership - Low involvement and outsourcing
Consequences for DTIB	- Focus on transatlantic businesses with strong EU

[182] Masson, H, La reorganisation de l'industrie de dйfense britannique, *Recherche et documents de la Fondation pour la recherche stratйgique*. 2008

[183] Davis, Jan and Robin Dodd. "US 'Prompt Global Strike' Capability: A New Destabilising Sub-State Deterrent in the Making?", *British American Security Information Council*, occasional paper, 2006

[184] UK MoD Policy Papers No. 4, Defense Acquisition, Dec. 2001

	presence - Core of large companies specialized in defence - High proportion of diverse institutional investors

Source: Lember 2014

Another consequence of the U.K. policy of defence market liberalization in the 1990s was defence industrial consolidation. Notably, the defence industry consolidation has been taken further than in other European states and the industrial structure is now relatively stable.[185] The most significant consolidation was the acquisition of GEC Marconi by British Aerospace that led to the creation of BAE Systems in 1999. From then on, the BAE System has become a major prime contractor developing wide range of products, from fast jet combat aircrafts to nuclear submarines.[186] TO summer up, in the response to the state's market liberalization policy, under the competition pressure the SMEs were forced to restructure and larger companies to specialize within the field of excellence. Apart from such cases as Rolls Royce, the majority of British defence contractors remain very specialized, probably to the national trend to divest from industrial activities in favor of the financial marketplace.[187]

7.2. DEFENCE SPENDING TRENDS

The economic and financial crisis struck Britain's national budget particularly hard, increasing public debt from 51.9 percent in 2008 to over 90 percent in 2013 of GDP. The British Ministry of Defence was already struggling to cope with significant funding cuts while sustaining operations in Afghanistan, Kosovo and Iraq along with overcommitted defence procurement projects. With the objective to reduce deficit budget by 8 percent until 2014, the United Kingdom's coalition government launched the Strategic Defence and Security Review (SDSR) in October 2010.[188]

In order to cope with fiscal deficit and prolonged period of austerity in public expenditure, the SDSR has imposed reduction of defence spending with the MoD facing cuts in the core defence budget of 8 percent in real terms between 2010/11 and 2013/14. The departmental limit for defence was set out at £33.8bn in 2011-12, £34.4bn in 2012-13, £34.1bn in 2013-14 and £33.5bn

[185] DIS, op. cit., p. 26.
[186] A. James and P. Hall, "Industry structure, procurement and innovation in the UK defence sector" 2009
[187] Matelly, Sylvie and Marcos Lima. "The influence of the State on the strategic choices of Defence Companies: the cases of Germany, France and the EU after the Cold War", *Journal of Innovation Economics and Management* 2016/2 (n°20),p.70
[188] HM Government. *Securing Britain in an Age of Uncertainty: The Strategic Defence and Security Revie.* London, October 2010.

in 2014-15.[189] The Review aimed to provide the resources needed to defend the UK and its interests, and to fulfill the Government's objectives addressed one day earlier in the National Security Strategy (NSS).[190]While the NSS addresses a large list of core threats, such as international terrorism, cyber-warfare and natural hazards, the SDSR is concentrated on the military and material dimension of the state's security and defence. Furthermore, the SDSR stresses that U.K. remains a distinctive military power on international scene with ability to operate across the spectrum from high-intensity intervention to enduring stabilization activity. However, it is assumed that besides certain scale of selected operations, the U.K. is likely to be engaged in either type of warfare only within an international coalition framework, usually led by the US. The potential scenarios for engagement vary from robust inter-state warfare to fighting small-scale intra-state conflicts.

Taking into account proposed austerity measures which negatively impact all branches of British army; it is arguable whether the SDSR is actually able to deliver an effectively balanced force structure to meet U.K. strategic objectives. As the Defence Select Committee stated in its report: "the 2010 SDSR and the 2010 NSS were governed by the overriding strategic objective of reducing the UK's budget deficit … we have found it difficult to divine any other genuinely strategic vision in either document".[191] It is possible to conclude that there were four main concerns in regard to the SDSR 2010: the feasibility of the Future Force 2020 plan, existing capability gaps, and various inconsistencies in the national strategic planning framework, and unresolved concerns about the relationship between society, armed forces and government in the UK.[192]

The U.K. has addressed some of the shortfalls of the SDSR 2010 in publishing new SDSR and NSS in 2015. It has announced that it will be spent £178 billion over the next decade on arms equipment and related costs.[193] This added extra £12 billion to the MOD's defence equipment plan published in October 2015, which set a budget of £166 billion for defence equipment for the following ten years.[194] This allows the U.K. to meet NATO's guideline to spend 2 per cent of GDP on defence in 2016. According to SIPRI database, the U.K. military expenditure has been

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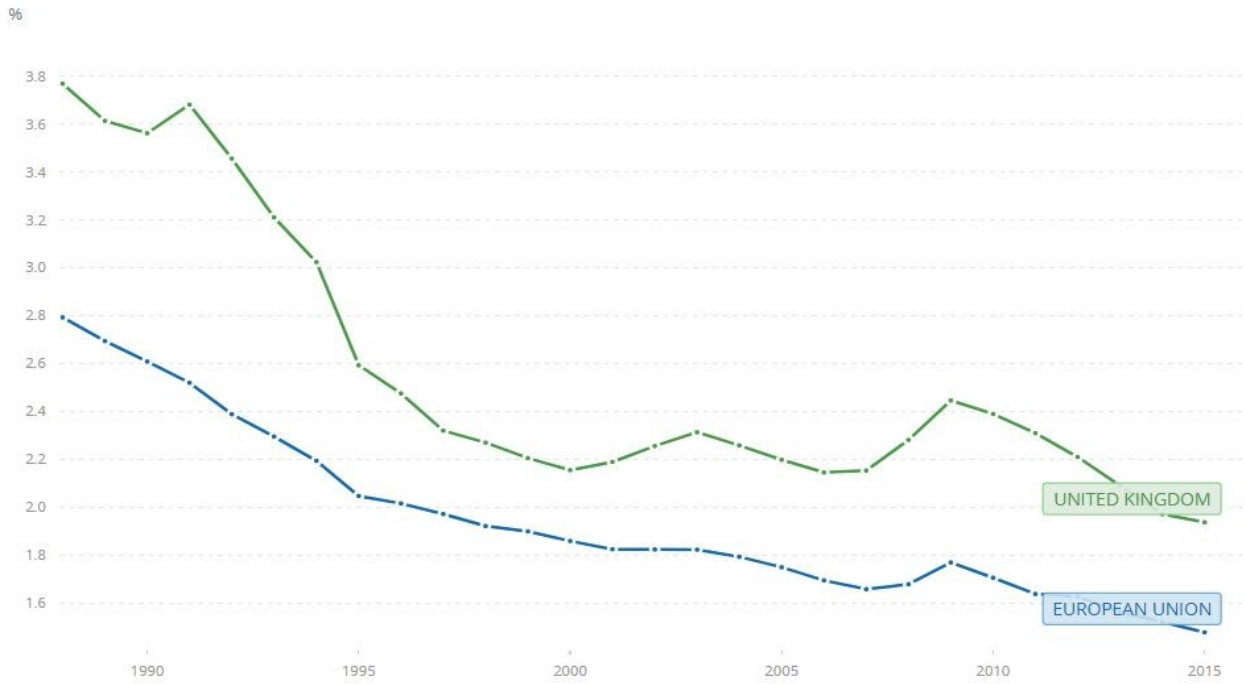
[189] HM Treasury. *Budget 2011: Return to an order of the House of Commons.* London, March 2011, p. 48.
[190] U.K. Cabinet Office. *A Strong Britain in an Age of Uncertainty: The National Security Strategy (NSS*). October 2010.
[191] The Defence Committee. Seventh Report of Session 2013–14: Towards the next Defence and Security Review. Part One , Paragraph 12, January 7, 2014.
[192] Paul Cornish and Andrew M. Dorman, "Fifty shades of purple? A risk-sharing approach to the 2015 Strategic Defence and Security Review". *International Affairs*, Vol. 89 (5), September 2013.
[193] HM Government, National Security Strategy and Strategic Defence and Security Review 2015, November 2015, Cm 9161, p 27.
[194] Ministry of Defence, The Defence Equipment Plan 2015, October 2015, p 4.

slightly falling in 2010-2014 following the budget cuts introduced in the SDSR 2010. Thus,in 2015/16, defence expenditure was £39.0 billion, the equivalent of 2.1 percent of GDP.[195] (See figure 10)

Figure 10: U.K. military expenditure as percent of GDP, 1988-2015



Source: SIPRI database

7.3. ARMED FORCES STRUCTURAL REFORMS AND DEFENCE PROCUREMENT

In the SDSR 2010 the government coalition introduced budget cuts in two time-frames. An initial short time-frame is concentrated on maintaining British troops in Afghanistan as part of NATO-led ISAF by the time of planned withdrawal in 2014. The long-term layout was set out in relations to Britain's defense capabilities in post-Afghanistan period and economic austerity with a focus on 2020 – with an assumption that the state would not engage in military operations in the meantime except in case of emergency. This allowed U.K. government to justify essential cuts to the armed forces with hopes to regenerate some of them by 2020.

[195] Joint Committee on the National Security Strategy, National Security Strategy and Strategic Defence and Security Review 2015: Government Response, 27 October 2016, HL Paper 56

In response to the SDSR provisions, on 5 July 2012, the Ministry of Defence announced a major re-structuring of the British Army – the so-called 'Army 2020' plan[196] - with objective to deliver a smaller but more adaptable military force. Therefore, the Army is cutting the number of regulars from 102,000 in 2010 to 82,000 by 2017, but seeking to increase the number of reserve forces to 30,000.[197] Following the "Army 2020" plan, the SDSR 2015 commits to maintain an Army of 82,000 and plans to increase the Reserves to 35,000.[198]

To reduce the growing gap in Britain's fixed wing carrier capability, U.K. decided to buy the variant of the Joint Strike Fighter aircraft (JSF) the F-35B which is capable of short take-off and vertical landing (STOVL) and eventually to be flying from new carrier HMS Queen Elizabeth. In January 2014 U.K. government finally agreed to order the 14 aircraft expected to form the first operational squadron in 2018 and be ready to deploy on the UK's new aircraft carriers in 2019.[199]Meanwhile, the current carrier capability to be reduced to one ship with the other either sold, held in reserve, or used as a replacement for the helicopter carrier. This ship is HMS Ocean and it due to leave service by 2020. It is worthy to mention that U.K. remains committed to the contract on acquirement of two HMS Queen Elizabeth, with first vessels to gain full operational capability by 2020. The SDSR 2015 confirms that two new Queen Elizabeth class aircraft carriers will enter service from 2018.[200]

7.3.1. THE ROYAL NAVY

The Royal Navy's surface fleet has been reduced from 22 to 19 destroyers and frigates. In turn, this has raised serious concerns whether the Navy is capable of sustaining existing commitments. Likewise, the amphibious capability has been reduced to only one HMS Albion remaining in service, and other one put in reserve. Thus, the Navy will now only be able to deploy an amphibious force built around a Royal Marine Commando (battalion equivalent) rather than a full brigade.[201]

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[196] Louisa Brooke-Holland and Tom Rutherford. *Army 2020.* House of Commons Library, London, United Kingdom, July 2012.

[197] U.K. Cabinet Office. *Securing Britain in an Age of Uncertainty: The Strategic Defence and Security Review.* Part 2 (Cm 7048). London, October 2010.

[198] HM Government, National Security Strategy and Strategic Defence and Security Review 2015, November 2015, Cm 9161, p 33

[199] Mark Urban. "UK to spend £2.5bn on F-35 fighters." *BBC*, February 11, 2014.

[200] HM Government, National Security Strategy and Strategic Defence and Security Review 2015, November 2015

[201] Clara M. O'Donnel C. (Ed). "The Implications of Military Spending Cuts for NATO's Largest Members". Brookings Analysis Paper. 2012

Furthermore, the government has ordered seven new Astute class nuclear submarines (SSNs), which should replace the Trafalgar class.[202] As by May 2014 only three SSNs were put into service, there is the risk that in the next decade the Navy will not have sufficient SSNs to cover its operational commitments as the Trafalgar class submarines to be retire by 2022.[203]

Problems with the development of the Nimrod MRA4 aircraft led to nine of them being scrapped, leaving U.K. without a maritime patrol aircraft capability. The project was ditched by the government in October's Strategic Defence and Security Review (SDSR) and would save the MoD an estimated £2bn over the next 10 years. However, a replacement might be introduced in the future.[204] Along with planned changes in the Royal Navy capabilities, the SDSR recommended further restructuring measures. (See Table 11)

Table 11: National Defence Cuts in regards to the British Royal Navy

Type of cut	**Cut description**	**Time frame**
equipment	Decommission HMS Ark Royal immediately.	immediatly
equipment	Decommission either the helicopter landing ship HMS Ocean or HMS Illustrious following a short study of which would provide the most effective helicopter platform capability, and place one landing and command ship at extended readiness.	By 2020
equipment	Decommission four frigates and a Bay-class amphibious support ship.	
equipment	Rationalise the Royal Navy estate.	

Source: U.K. Cabinet Office, Securing Britain in an Age of Uncertainty: The Strategic Defence and Security Review (SDSR), Part 2 (Cm 7048), October 2010.

7.3.2. THE BRITISH ARMY

According to the SDSR and following reports on 'Army 2020', the manpower of land forces to be significantly reduced. The regular Army is set to fall from 104,000 to 90,000 by

[202] UK National Audit Office, *Ministry of Defence: The Major Projects Report 2011*. London, 2011.
[203] Willett, Lee. "BAE Systems launches UK Royal Navy's third Astute-class SSN." *HIS Jane's*, London, May 19, 2014. http://www.janes.com/article/38179/bae-systems-launches-uk-royal-navy-s-third-astute-class-ssn (accessed on May 25, 2014)
[204] *BBC News*. "Nimrod aircraft scrapped at Stockport BAE factory." January 26, 2011. http://www.bbc.co.uk/news/uk-england-12292390

2015, and 82-84,000 by 2020. From the other hand, in order to compensate such loses in personnel, the Territorial Army will increase to 36-38,000, giving a combined strength of 120,000. Over the 2010-20 timeframe, the Army is also scheduled to withdraw its peacetime garrison from Germany. As the MoD announced in 2013, 11,000 soldiers will leave Germany by 2016, and the remaining 4,500 will come return to the U.K. in 2019. This will save to British Army of about £240m annually.[205]

Additionally, the numbers of defence equipment to be cut significantly, particularly in Challenger main battle tanks and AS90 self-propelled guns. Apparently, there will be no funding provided for acquisition of a new family of armored vehicles (FRES), that the Army had been exploring for a decade.[206] The scale of cuts introduced within the SDSR 2010 is summarized in the Table 12.

Table 12: Initially planned National Defence Cuts in regards to the British Army

Type of cut	**Cut description**	**Time frame**
personnel	An assumed reduction of 1,000 personnel (from a total of 95,000 to 94,000 personnel). (revised in 'Army 2020' report)	by 2020
personnel	Reduce by one the number of deployable brigades, so five functioning multi-role brigades.	
equipment	Reduce holdings of Challenger 2 tanks by around 40%	
equipment	Reduce holdings of heavy artillery by around 35%.	
equipment	Significantly reduce our non-deployable regional administrative structure.	
equipment	Rationalise the deployable headquarters by reducing the communications and logistics support to Headquarters ARRC and convert the second of our operational divisional headquarters to a force preparation role.	

Source: U.K. Cabinet Office, Securing Britain in an Age of Uncertainty: The Strategic Defence and Security Review (SDSR), Part 2 (Cm 7048), October 2010.

[205] BBC News. "Nimrod aircraft scrapped at Stockport BAE factory." January 26, 2011. http://www.bbc.co.uk/news/uk-england-12292390 (accessed on May 29, 2014)
[206] U.K. National Audit Office. *The Cost-effective Delivery of an Armoured Vehicle Capability*. London, 2011.

7.3.3. THE ROYAL AIR FORCE

The significant reduction of the number of platforms has been taking place in order to accumulate necessary savings. The SDSR determined that the Royal Air Force by the 2020s will be based around a fleet of two of the most capable fighter jets in the world: a modernised Typhoon fleet fully capable of air-to-air and air-to-ground missions; and the Joint Strike Fighter, the world's most advanced multi-role combat jet. The fast jet fleet will be complemented by a growing fleet of Unmanned Air Vehicles. Consequently, the Tornado F3 and Harriers ground attack aircraft have been taken out of service.[207]

The Tornado GR4 force has been reduced by two units in 2011 to five frontline squadrons. The delivery of Eurofighter Typhoons has been troubled by delays in manufacture and by the diversion of aircraft to Saudi Arabia. Moreover, the initially planned numbers of Eurofighters and JSFs, which should form the core of the Air Force's fast jet fleet, have been reduced. The UK has now ordered a total of 160 of the aircraft - well short of the 232 originally planned when the project was first unveiled in the 1998 SDSR. According to the Eurofighter Typoon conglomerate, the RAF is the biggest Eurofighter Typhoon customer with the 100th aircraft delivered to No 1 (Fighter) Squadron at RAF Leuchars in January 2013.[208]

Moreover, the final capacity of the RAF was projected with consideration that some 53 Eurofighter Tranche 1s are scheduled to leave service between 2015 and 2018. Furthermore, the acquisition programme for JSFs, which originally comprised 150 aircraft for the Navy and Air Force, has been reduced to 138. Furthermore, instead of planned acquisition of 25, the U.K. committed to 22 A400M transport aircraft to replace the C-130 Hercules fleet, with the first is scheduled to enter operational service in late 2014.[209]

The C-17 fleet will continue to grow with the acquisition of an eighth aircraft, and possibly two more in order to facilitate the force withdrawal from Afghanistan. However, the support helicopter force has been set for cuts. It will receive 14 new Chinooks as initially planned, but only after the Afghanistan drawn down. Additionally, the number of Air Force's fleet of Pumas helicopter to be upgrades was reduced to 24 instead of 28 originally planned. In 2013 around seven of the Puma Mk2s, which are being upgraded by Eurocopter under the £260m life

[207] U.K. Cabinet Office. *Securing Britain in an Age of Uncertainty: The Strategic Defence and Security Review (SDSR*). Part 2 (Cm 7048). October 2010.
[208] Eyrofighter Typoon: Customers. http://www.eurofighter.com/ (axxessed on 25 May 2014)
[209] Royal Air Force database, available at http://www.raf.mod.uk/ (accessed on 25 May 2014)

extension programme contract, have been delivered to RAF Benson.[210] The Air Force's intelligence and surveillance capabilities are also being scaled back.[211] Along with mentioned the main provisions within the SDSR in regards to the RAF are summarized in the Table 13.

Table 13: National Defence Cuts in regards to the British Royal Air Force

Type of cut	**Cut description**	**Time frame**
equipment	Withdraw the C-130 Hercules transport fleet ten years earlier than planned as we transition to the more capable and larger A400M.	2020
equipment	Withdraw the Sentinel surveillance aircraft once it is no longer required to support operations in Afghanistan.	
equipment	Rationalise the RAF estate.	
equipment	Retain Tornados, which will continue to operate in Afghanistan.	
Equipment	Remove Harrier from service in the transition to a future fast jet force of Typhoon and JSF. This will mean a gap for carrier fast jet operations. JSF, like Harrier, will be operated jointly by RAF and Royal Navy pilots.	
equipment	Not bring into service the Nimrod MRA4.	
equipment	Withdraw VC-10 and the three variants of Tristar aircraft as transition is towards the more capable A330 future strategic transport and tanker aircraft.	from 2013

Source: U.K. Cabinet Office, Securing Britain in an Age of Uncertainty: The Strategic Defence and Security Review (SDSR), Part 2 (Cm 7048), October 2010.

Despite the cuts on equipment, the SDSR2015 announced that Ministry of Defence would build eight of the new Type 26 Global Combat Ships (which are replacing the current Type 23 frigates), rather than the 13 originally planned, and instead it is planned to develop and build a new class of lighter general purpose frigate.[212]

Through analysing the on-going process of Britain's armed forces restructuration, it is possible to argue that introduced defence budget cuts have a significant impact on U.K. ability to project

[210] *Airforce Technology*. "Royal Air Force starts upgraded Puma MK2 training flights." 27 November 2013. http://www.airforce-technology.com/news/newsroyal-air-force-starts-upgraded-puma-mk2-training-flights

[211] Clara M. O'Donnel (Ed.). "The Implications of Military Spending Cuts for NATO's Largest Members." *Brookings Analysis Paper*, 2012, pp.10-15

[212] HM Government, National Security Strategy and Strategic Defence and Security Review 2015—First Annual Report 2016, 7 December 2016

and sustain military power, which reflected the lowering of the level of ambition. As a result, Britain will still be able to launch independent operations as it did in Sierra Leone in 2000 or contribute to various multinational operations such as the deployment to Libya. But unless the UK has air, land and maritime forces within required range, it will be problematic for Britain to engage in high-intensity operations against a sophisticated opponent until the new equipment is available.

With consideration of the analysis of U.K. armed forces and major procurement projects provided above, it is worthy to note that U.K. has been looking to change the way it procure and support the military due to never-ending delivery delays and cost overruns to major equipment programs. The procurement and support of the equipment used by the Armed Forces and the supply of logistics to them is undertaken by the Defence Equipment and Support organisation (DE&S), which is an integral part of the MoD. Importantly, the DE&S appeared to be insufficient within aligning the UK's defence acquisition system with the available financial resources and the armed forces' operational requirements, as well as it certainly lacks commercial skills to deliver expected outcomes. The numerous initiatives have been undertaking in attempt to reform defence procurement/acquisition, including Smart Procurement, Smart Acquisition, the Defence Acquisition Change Programme and the Defence Acquisition Reform Programme. However, they had only moderate success as there still exist major cost and time overruns in defence acquisition, with the average being a 40 per cent increase in the projected cost and an 80 per cent increase in the time taken to enter into service.[213]

7.4. DEFENCE INDUSTRY

The British defense industry is by far the most competitive European player on the international arms market, thus, it is less dependent on European arrangements or state support. The policy of detachment is more feasible within the UK DTIB than, for example, in France. Moreover, British defence industry has been restructuring itself substantially in order to lower spendings. It has been pursuing various diversification strategies. The defence industry operates within the expanding security sector where dual use civilian and military technologies can be reengineered for specific usages. Another approach to diversification has been to concentrate on service provision through ‘through-life’ approach, which implies readiness and sustainment

[213] U.K. Ministry of Defence. Better Defence Acquisition: Improving how we procure and support Defence equipment. June 2013. Accessed on 26 May 2014 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/206032/20130610_WP_Better_Def_Acquisition_screen_final.pdf

model. This model provides longer-term maintenance and servicing contracts to UK industry for existing platforms.[214]

Despite budgetary pressures, the UK Government remains a major customer, retaining a defence budget that is the fourth largest in the world, spending around £166bn over the next ten years on equipment and support.[215] Additionally, the part of the Government's wider agenda for export-led growth, it is to support appropriate defence exports by exploring how the capability needs of both the UK and overseas customers can be meet. Consequently, Britain accelerate its arms export over past years, it rose up in arm export ranking by three points from 2010 and fall one point in 2016. The U.K. is among five biggest arms sellers in the world. According to HIS Janes repost, U.K. arms export worth $4,380 million in 2016.[216]

The prime manufacturer BAE System, a British global defence, aerospace and security company, has already assured that it is less reliant on its UK customer base. BAE's business segments include Electronic Systems, Cyber & Intelligence and Platforms & Services. It supports major defence projects such as the F-35 Lightning II, Eurofighter Typhoon, Astute-class submarines and the Queen Elizabeth-Class aircraft carriers .BAE System reported revenues of £18,180m for the 2013 with operational profit of £806m.[217] Additionally, the company is less reliant on the national customer as it has already developed greater diversity in its market structure. It pursues the strategy of its 'home markets' through inward industrial investment and military sales to the six countries: the United States, the UK, Saudi Arabia, South Africa, Australia and Sweden. This provides BAE Systems with additional financial resources and diversity. Moreover, as the U.K. chose to open up the capital of defence contractors for the investments, the British defence companies' shares by multiple private investors. (See table 14)

Table 14: Capital Structure of defence companies in the U.K.

	Public	Private	Number of shareholders	Majority investor	Shares owned
Babcock International		100%	-	The Capital Group Companies	6.05%

[214] Brune, Sophie-Charlotte, and Christian Molling. *The Impact of the Financial Crisis on European Defence*. European Parliament, Directorate General for External Policies, 2011.
[215] Ministry of Defence, The Defence Equipment Plan 2015, October 2015, p 4.
[216] Moores, Ben. Balance of Trade: Global Defence Trade Report 2015, IHS Jane's, April 2015.
[217] BAE Systems, *Annual Report 2013,* London, 2014. Available at: http://bae-systems-investor-relations-v2.production.investis.com/~/media/Files/B/BAE-Systems-Investor-Relations-V2/Annual%20Reports/BAE-annual-report-2013.pdf

BAE Systems		100%	-	Invesco Asset Management	13%
Cobham		100%	-	Shroders	5.22%
Meggit		100%	-	Capital Research and Management Cies	11.67%
QinetiQ		100%	-	Ruane Cunif	9.7%
Smith Group		100%	-	Harris Associates	5.3%
Rolls-Royce		100%	-	Invesco Asset Managment	4.58%

Source: Matelly et all (2016)

However, British approach towards promoting arms export to the non-EU and non-NATO states has been highly critised by international community lately. In 2013 the British Government has issued more than 3,000 export licenses for military and intelligence equipment worth a total of £12.3bn to countries which are on its own official list for human rights abuse. Frankly, only two states of 27 on the Foreign Office's human rights list – North Korea and South Sudan –haven't been mentioned in arms export report. Among the others, Saudi Arabia has 417 licenses with a value of £1.8bn; Pakistan 219 worth almost £50m; Sri Lanka 49 at £8m and Zimbabwe 46, worth just under £3m.[218] Therefore, it is expected U.K. to reconsider its export policy in upcoming years.

7.5. DEFENCE COOPERATION AND POOLING AND SHARING OPTIONS

NSS and SDSR acknowledge the need for more international cooperation, due to the cuts in resources and capabilities. However, U.K. frustration with CSDP is probably the strongest among EU's major powers. Even before Libya, most British politicians and military generals had concluded that many EU member states would never become credible military partners and that CSDP was therefore not worth their time. Amongst other things, the UK stressed out that the EDA is insufficient and money wasteful. Consequently, Britain had also significantly cut back its contributions to many CSDP military and civilian deployments. Currently, preferred partners are the US and France and to a lesser extent Denmark, Estonia, Norway, Turkey and the

[218] Kim Sengupta. "Blood money: UK's £12.3bn arms sales to repressive states." *The Independent.* 17 July 2013. http://www.independent.co.uk/news/uk/politics/blood-money-uks-123bn-arms-sales-to-repressive-states-8711794.html

Netherlands. In addition, the UK has a strong preference for working with them bilaterally as large multinational initiatives are too expensive and problematic.[219]

Hence, the Franco-British defence accords signed in November 2010 are only a logical consequence of countries' growing frustration with EU member states reluctance to contribute resources and capabilities into CSDP missions. Among other factors that make the Franco-British defence cooperation possible is that both countries are major military powers within EU, both are willing to undertake pro-active actions overseas and have similar strategic interests in different parts of world. Besides above, the coalition government shows growing hostility towards EDA-led pooling and sharing initiatives and procurement policies. The Tory party leader and MP Cameron made clear that it will not invest in EU-based initiatives. It underlines its NATO- first policy.[220]

7.6. APPROACH TO CSDP

The U.K. has been a leading player in European Defence. The British Government has supported EU defence integration project from the 1998 St. Malo Agreement through to the negotiation of the Helsinki goals and the multiple initiatives and projects on capability building that followed, to promote effective and shared European defence capabilities. Britain's perception of the value of a militarily autonomous CSDP is one of the limited scope of crisis management operations, particularly those outlined in 'Petersberg tasks'.[221] Consistent with this vision, the CSDP main role is seen within soft power dimensions of security, such as conflict prevention, stabilization and civil-military tasks which required a comprehensive approach.[222] Therefore, UK is reluctant to develop common high-end capabilities, such as EU operational headquarters, as long as NATO provides necessary planning structures, procedures and resources for pro-active robust military operations.

The 2010 SDSR had not changed the approach to CSDP, it links the future role of CSDP to the promotion of stability, the engagement in conflict prevention tasks, the support to integrated missions and military tasks where NATO does not contribute and where action through the EU can provide good value for money (e.g. counter-piracy efforts in Somalia, Operation

[219] O'Donnel Clara M. (Ed.). "The Implications of Military Spending Cuts for NATO's Largest Members." *Brookings Analysis Paper*, 2012.
[220] Sophie-Charlotte, Brune and Christian Molling. *The Impact of the Financial Crisis on European Defence*. European Parliament, Directorate General for External Policies, 2011.
[221] The "Petersberg tasks", Article 42 TEU.
[222] The House of Commons. Defence Committee's Seventh Report of Session 2009-10 "The Comprehensive Approach: the point of war is not just to win but to make a better peace", London, 18 March 2010.

Atalanta).[223] Despite an ambiguous understanding of CDSP role addressed by the British government, the British path towards European defence has been backwards over last couple years. Britain has preferred bilateral cooperation with France (e.g. the Franco-British defence agreement) rather than multilateral initiatives within the EU framework, for instance regarding pooling and sharing or military engagements.

Britain's has a comprehensive strategic approach across every security matter, from home affairs and development aid to issues of military power projection and international trade. U.K. perceived itself as global hub or powerful actor in international relations, whose power, energy and ability to preserve its influence on the global stage, goes beyond the limits imposed by geography, population and means. These core elements of the nation's ambition to think and act globally relate to the imperial heritage and necessity to response to the pressures imposed by globalised international structure. In this regard, the U.K. core strategic interests lies within maintaining and development relations with NATO allies and particularly the U.S. The special relations with the U.S. have been fostered by the compatibility of the two armies, which have shared similar equipment, joint training programmes and intelligence.[224] Concerning the willingness to project hard power means in overseas engagements, Britain has been constantly involved in large-scale and intensity military and civil operations. However, as it was outlined earlier, due to the budgetary constraints and existing capability gaps from 2010 U.K. has been more selective in its future deployments as well as in multilateral defence cooperation projects. This means, the government coalition decision-making process is characterized by value-based vision towards pursuing its National Security Strategy, with preference given to bilateral agreements, such as Franco-British defence cooperation, rather ineffective and costly multilateral arrangements (e.g. A440M project).[225]

Despite growing negative perception of British politician on future developments within CSDP, the U.K. has been an active actor and contributor to the various military operations launched by EU. Between 2004 and 2010, the UK has been ranked fifth among the top ten contributors to military operations under the CSDP framework, with its contribution of 7.8 percent (of the total

[223] Ministry of Defence. *Building Stability Overseas Strategy*, UK Department for International Development, Foreign and Commonwealth Office, July 2011.
[224] Bialos, Jeffrey P., Christine E. Fisher, Stuart Koehl, and Christer Lennart Mossberg. 2009. *Fortresses and icebergs: the evolution of the transatlantic defense market and the implications for U.S. national security policy*. Washington, D.C.: Center for Transatlantic Relations, Paul H. Nitze School of Advanced International Studies, Johns Hopkins University
[225] O'Donnel Clara M. (Ed.). "The Implications of Military Spending Cuts for NATO's Largest Members." *Brookings Analysis Paper*, 2012

EU), only below France and Germany.[226] However, growing disappointment with EU missions' implementation and outcomes (especially after Libya and Mali), lack of fundings, insufficiency in EU decision-making system as well as controversial strategic cultures of the member states, all these along with rising budgetary crisis in U.K. make the coalition government to question the rationale behind further empowerment of the CSDP.

The growing prostrations and concerns over EU cooperation in defence and security were reflected in the outcome of the referendum in June 2016, when the U.K. favored to leave the EU. As under CSDP institutional framework, the member states contribute to the military operations on case-by-case basis, rather than EU holds its own military assets, it is possible to argue that the U.K. leaving the EU will have greater impact on European military capabilities rather than on British ones. The House of Common Library noted:

"In terms of military power and projection, therefore, the UK's withdrawal is more likely to place the EU at a disadvantage, with fewer assets and capabilities at its disposal. This is particularly true of certain strategic assets such as tactical airlift and intelligence, surveillance and reconnaissance assets. From the UK's standpoint, its ability to project military power would be largely unaffected, and any military shortfalls could be compensated for through bilateral arrangements with countries such as France and Germany."[227]

7.7. CONCLUSION

The reduction of the armed forces has a significant impact on Britain's ability to project and sustain military power across the globe. The SDSR 2010 and later the SDSR 2015 has lowered the level of ambition for the armed forces significantly. While preserving what might be described as a competent in form of its armored brigades, the army ultimately is reduced to missions that require, at most, a brigade with some additional service and a greater support from the allies.

The British Army is in the bad shape, while being a subject to increasing budget cuts it was struggling to sustain operations in Afghanistan. In a sense, the British military as a whole mortgaged its future to pay for the military engagements overseas. Consequently, the British MoD has decided that the best possible way to meet future exigencies in spite of greatly reduced

[226] Kristen Soder, "EU military crisis management: an assessment of member states' contributions and positions", draft for the meeting of the COST Action IS0805 on New Challenges of Peacekeeping and the European Union's Role in Multilateral Crisis Management. May 2010, p. 7.
[227] House of Commons Library, *Brexit: Impact Across Policy Areas*, 26 August 2016, p 169

numbers of military personnel is to divide the army in consideration of armed forces' specialization and tiered readiness with a greater reliance on reserves. The UK is gambling not to have enough trained armed forces to mount large-scale military operations independently. Moreover, U.K. has intended to maintain as much of the spectrum of capabilities as possible.

While it has been reconsidering major defence acquisition projects U.K. has been able to provides fund for modernization of its medium-weight vehicles. However, the analysis of British public procurement reveals that the Royal navy and air force has been a subject to drastic budgetary cuts, which left U.K. without advanced aircraft carriers for a decade. Particularly, to date British armed forces doesn't have any aircrafts capable of short take-off and vertical landing, as well as it has no operation aircraft carrier to deliver these planes to the point of final destination. Therefore, it is questionable whether U.K. armed force will be able to cope with ambitious tasks set out in the National Security Strategy.

However, the decrease in domestic procurement orders hasn't affected the defense industry as tremendously as it did in other EU states. As the U.K. defence industry has been widely open for the international market and largely privatized, it has been able to overcome national budget pressers by raising its exports or partnering up with U.S. counterparts.

8. CHALLENGES TO EUROPEAN DEFENCE COOPERATION. CONCLUSIVE REMARKS

The austerity measures and structural changes imposed by the governments have forced Europe's three largest and most capable militaries to struggle in finding ways to maintain their commitment to the full spectrum of responsibilities while compromising on size and sustainability. Maintaining the defence industry delivering full spectrum of capabilities has arguably become more of an aspiration than a reality. British, French, and German armed forces have been obliged to make certain compromises based on their assessment of competing priorities and risk analysis.

The underlined policies of the British, German and French governments in response to changing security environments have multiple implications for the European Defence. As Germany, France and U.K. are major military powers, contributors and guarantors to the European security, the state and capacity of their DTIBs directly affect the whole EU capability to position itself as credible global player, which is able to cope with various threats to international peace and security. Although the ways the British, French and German MoDs undergone defence industry structural changes not necessary reflect military developments within other EU member states, however, it is possible to argue that at least to a certain extent they determines the features of the national and European DTIBs patterns in times of austerity.

Not only Germany, France and U.K. have been going through major budget cuts recently but every EU member state has been facing similar challenge to a certain extent. EU countries have been forced to reassess and reduce their defence spending. With the public debt and economic growth projected to stagnate, the pressure on national government has increased. So far, following the common pattern every EU member state has undertaken an effort to reconsider layoffs and termination of contracts, programmes and operations, risking credibility of its forces.

National DTIBs have been affected by the austerity measures imposed by the governments in numerous European countries likewise U.K., Germany and France, which have been coping with the luck of resources. Initially many governments attempt to accumulate savings through elimination of some of their outdated military equipment. France, Germany, Italy, the Netherlands and the United Kingdom has planned scaling back major procurement and modernization programs, such as the A400M aircraft, NH90 helicopters and Typhoon fighter jets. However, many of these plans have been revised when governments started to face the large financial penalties from the supply side on canceling programs. As a result, many of the

introduced equipment cuts have not been driven solely by operational needs or by proper cost-benefit calculation.

Nearly every national project on acquisition of equipment is delayed. Denmark has notably postponed the decision on how to replace its F-16 fighter aircraft. Many countries are scaling down their initial orders. Most large countries and several medium sized ones are retiring their assets earlier – including Austria, France, Germany, the Netherlands, Portugal and the U.K. And few countries has been trying to re-sell their equipment to other countries, the good example is Germany's intention to re-sell the tranche of the Eurofighter jet. Several states, with prominent example of the UK and Germany policy in regards of arms export, have preferred to keep building equipment and then export it to the non-EU and non-NATO s rather than trigger job losses within their industrial sector.

8.1. NATIONAL POLICY CONSIDERATIONS

Although many governments have acknowledged the advantages of closer defence cooperation that could at least partially offset the impact of recent drastic budget cuts, the little progress has been made over last decade if any at all. The member states have been struggling to push forward defence cooperation under CSDP framework. In the course of economic crisis member states reconsidered and recalculated its defence expenditure, however they did so along the national lines. Despite growing budgetary pressures on national armies, majority of defence funds was spent by individual governments on building national forces and equipping them, mostly with weapons manufactured within the state. It appears that the ministries have little consideration for their neighbors' acquisition projects, which could be complementing to national military needs. As well as there is very little concern among the states over the shortfalls other EU militaries might struggle with or opportunities for future collaboration. In overall, the stance of European defence is characterized by wasteful way to build and maintain national armed forces which suffer from chronic lack of cooperation and consequently, capability gaps, waste of fundings, duplication of equipment and assets. This especially makes the case in light of budgetary crisis as EU countries with 28 different governments managing, equipping and commanding 28 armies cannot benefit from shared costs programmes. They spend too much on the multiple offices and commands, and they waste money subsidising too many unfeasible national arms companies.[228]

[228] Tomas Walasek. "Surviving Austerity: The case for a new approach to EU military collaboration." Centre for European Reform, 2011.

Despite sign of hope among EU decision-makers, the financial pressure on national public budgets has not led to fundamental reconsideration of the current state of the defence integration in the EU. Even recent developments in sharing and pooling capabilities and bilateral defence cooperation, such as Franco-German and Franco-British agreements, cannot sustain the illusion of a common security and defence policy. All these initiatives are oriented towards fulfillment of capability gap, saving money and rationalizing of national DTIBs, however, they all lack a guiding European perspective. Altogether nearly ever initiative on defence cooperation proved to be dysfunctional due to the same reasons the CDSP is.

8.2. THE SOVEREIGNTY PROBLEM WITHIN EUROPEAN DEFENCE

Along with economic crisis there is evolving crisis in the European Institutions. Both of them are driven by the same dilemma: common instruments tend to fail if common responsibility is no assumed. Thus, the traditional concept of national sovereignty arises. The governments are highly reluctant to share the authority over military matters due to the lack of trust, uncertainty on partners' intentions and commitments, different strategic interests and cultures, as well as fears of entrapment and/or abandonment. Through analysing institutional framework and legal underpinning of the European defence integration, it is possible to argue that efforts that have been made towards enhancing defence cooperation are rather symbolic and they barely interfere with the core of national defence policy sovereignty. Indeed, member states constantly fail to 'pull their weight' in military affairs best manifested in effort to promote European defence integration and cooperation.

Since 2008, the EU has been decreasing its involvement overseas. No EU Battle Group has ever been deployed. As it was demonstrated during the operations in Libya, European forces remain not only heavily dependent on U.S. air assets but also tend to act unilaterally in order to pursue its strategic interests. Moreover, the inability of the CSDP to respond comprehensively to conflict in Libya and its underwhelming performance in Mali, all these question EU's effort to become a credible foreign policy actor capable to perform full spectrum of military tasks. The fact that these two crises were in Europe's neighborhood with humanitarian and strategic components at stake, and the U.S. had stated it preference for Europeans to undertake crisis-management operations, makes the CSDP's shortcomings even more explicit. The case of Libya in particular, where both the UN and the Arab League had demanded an intervention, revealed European community incompetence to undertake necessary actions in a scenario that met all the

criteria that are ideally required to trigger CSDP action.[229] Moreover, due to the budgetary cuts some member states found it hard to continue supporting the ongoing missions, so that the EU struggled to sustain its peacekeeping mission in Bosnia and anti-piracy patrols. Although similar issues to those underlined above has existed within the CSDP prior current budgetary crisis, the economic austerity only deepen already existing crisis of lack of political will and commitment to develop defence cooperation.

Consequently, the CSDP's poor performance in military engagements, failure of major multinational procurement projects, the fiasco in merging EADS/BAE, all these increased further political frictions at the heart of Europe. EU major military powers have been growing increasingly disillusioned with EU efforts to sustain necessary capabilities to cope with stated objectives. Probably, the most vocal example is U.K., which first significantly reduced its contributions to the CSDP and its instruments and later left the EU all together.

The debt crisis widened the differences among member countries and weakened the EU's cohesion. So the CSDP becoming more like a 'self-help' system where member states are highly reluctant to cooperate in military and industrial matters. Moreover, the way they cope with budgetary constraints while maintaining military capacity is primarily base on consideration of national interests, industry and resources. Moreover, the states often chose to act unilaterally putting national strategic interests over European ones.

8.3. THEORETICAL APPLICATION

Through the analysis of EU member states' defence policies and spending trends in light of economic stagnation, it is possible to argue that area of defence cooperation remains highly intergovernmental. Moreover, the examination of legal limitations of the CSDP in the third chapter of the thesis, provide evidence that there is the lack of political will among member states. To date, they have failed to generate concrete cooperative initiatives that will initiate a transition from 'defence policy' to 'defence'. Therefore, the author argues that Constructivist assumptions on development of European defence cooperation, its triggers and its future implications are disputable. The empirical analysis highlights that EU member states not just reluctant to cooperate in military matters but strongly oppose any cooperative initiatives, which implies any loss of sovereignty over national military affairs. Moreover, the author points out that during last decade EU member states have not allocated any authority to the EU in the field of defence. The CSDP has not evolved into a 'supranational' institution but quite the opposite.

[229] Sven Biscop, 'Mediterranean mayhem: lessons for European crisis management', Egmont Security Policy Brief, 19/IV/2011, 2011.

The case studies of Germany, France and U.K. highlighted set of challenges the national MoD has been going through in order to cope with budgetary and structural constraints. Their response to economic crisis has been done in similar manner with prime focus on national military needs and strategic interests. The states has been restructuring the armed forces with afford to maximise and rationalize their military capacity while reducing costs. Moreover, numerous failures of pooling and sharing initiatives and common defence procurement projects, inability of EU to respond collectively to the crises overseas, fundamental differences between strategic cultures of certain states have led to total disillusion within CSDP. Consequently the first steps of disintegration from defence cooperation projects appeared.

The author argues, that dynamics of interrelations among Germany, France and U.K. themselves and in regards to the defence integration can be best understood through prism of Neorealist theory. The Neorealist concept of 'alliance security dilemma' provides convenient explanation of reasons pooling and sharing initiatives have so little success. As the states fear the abandonment and/or entrapment by the possible partners, they tend to rely on themselves. For example, Germany and France have been trapped in 'alliance security dilemma' as their defence cooperation failed to deliver positive outcomes. The different strategic cultures and perception on the role of the CSDP make any pooling and sharing projects nearly impossible. One of the factors that limits possibility of the military cooperation between the states is that French government is afraid to lose control over military assets as it is uncertain whether Germany will fulfill its contractual obligation, as well as it fears that it will not be possible to use common assets when they are needed. From the other side, Germany struggle with similar dilemmas that also include fear of entrapment: that if the state merges a portion of its armed forces with France, it will be pressured to join a mission because France wishes to take part. Among others the Libya experience that was mentioned before, has highlighted crucial differences of the states' opinions in military matters. In the words of François Heisbourg: "[f]rom the eurozone crisis to intervention in Libya and Mali, and the failed merger of EADS and BAE Systems, the differences and tensions between Paris and Berlin are palpable".[230]

As Neorealist approach is systematic, it argues states defence policy is better explained through power distribution in international system, so every unit act in consideration of type of power formation. For instance, due to the severe restructuring, the size of British military has been significantly cut with loss of aircraft lift at least till the end of decade. Therefore, the British government has stressed its willingness to intensify military cooperation with France, as they both have relatively similar strategic interests, military power and degree of willingness to use

[230] Luis Simón, 'A spider in Europe's web? French grand strategy from Iraq to Libya', *Geopolitics,* 3/I/2013

that power. Therefore, from the Neorealist point of view, the bilateral cooperation became possible as both states have believed that it will maximise states' security and military powers.

Another prominent verification for the Neorealist thought is the U.K.'s decision to exit the European Union. The British disintegration is in direct accordance with a realist assumption, that international institutions and the EU itself are very fragile. So other various forces, such as desire of autonomy or national sovereignty are extremely influential in state affairs. Unlike liberal theories, that manifest the role of institutions in ensuring the cooperation between states through mixture of shared values, norms and rules, thus changing states' behavioral patterns, Realists emphasize the role of national states. Realist argue that the international institutions are very limited in their competence, possessed no real coercive power over member states. So the state, in this case the U.K., chooses to act as it wishes in entering and/or leavening international projects. As the U.K. has grown greatly prostrated and distant with the EU 'common' policies, especially in regards to defence policy, it was not a surprise to realists it chose to disintegrate rather a prominent prove that integration is limited to states desires to rise their relative and/or absolute power.[231]

Moreover, the analysis of national defence policies and capabilities suggest that European major military powers have been favoring NATO defence cooperation framework rather than CSDP. Therefore it is possible to conclude that to date, the EU still relies on national DTIBs and NATO with regard on capability delivering and force generation initiatives. With the absence of any significant improvements within the defence integration under the European framework and due to the military capability cuts on national level, it is possible to argue that the member states within EU continues bandwagoning on U.S. power, as it was described by the Neorealism. The presence of the alliance security dilemma, coupled with defence retrenchment and differentiation in the balance of threat among European major military powers, will make it very difficult for pooling and sharing initiatives to develop through CSDP. European defence cooperation is therefore most likely to remain bilateral and sub-regional and limited in scope and depth. Consequently these all will have negative implication on Europe's power and influence in the international system.

[231] Felicia Woron. "For Realists, Brexit Was No Surprise", *The Gate,* July 2016. Available at http://uchicagogate.com/2016/08/08/for-realists-brexit-was-no-surprise/

9. DISSERTATION'S CONCLUSION

Since the end of the Cold War, the architecture of European Defence has undergone significant transformation. Under the dilemma of increasing production costs and decreasing budgetary assets, European Defence Industrial Base was forced to restructure and consolidate. In order to maintain competitive national defence industries, European states have been developing various policies in regard to public procurement, defence market and R&D. While legally it has been a prerogative of national states to regulate restructuring and consolidation of European defence industry, it is impossible to separate involvement and influence of other defence actors, such as international institutions and non-state actors like the defence firms, on the process.

Despite geopolitical, technological, economic and financial pressures that pushed national defence industries to the path of integration and globalization, in many terms defence remained a national state matter. As national governments have always played a crucial role in defence industry, acting as a customer, regulator and financier, the process of EDTIB development have been guided primarily by them. Although states have chosen various direction in developing state-industry relationship, the main objective to every was to develop self-sufficient defence industrial base that is able to survive and advance in extremely competitive defence market.

Although during the Cold War, the major military powers of the EU (namely, France, Germany and the U.K.) had very similar positions and structure of DTIBs, where states were largely involved in the organization of the defence sector as the client who determined the way military programmes were developed and financed, in aftermath of the Cold War it changed notably. [232] Each of these three states have chosen different path in developing state-industry relationship: the U.K. adopted the liberal model favoring open and competitive market; Germany decided to distance itself from its defence industry; France chose to preserve its military autonomy despite budgetary pressures.[233] Although, these led to different defence industry configurations within the EU, the national defence policy still shares similar pattern.

For instance, under the budgetary pressures Germany, France and the U.K. have encouraged export-oriented defence policy while favoring national contractors in public defence procurement projects. Moreover, despite recent financial and economic crisis in the EU, the states have been focused on streamlining national defence sector and armed forces along its

[232] Dupuy, R." L'industrie europienne de defense : changements institutionnels et strategies de cooptition des firmes, dans le dossier Fondements economiques et industriels de la defense", *Innovations*, 42(3), 2013

[233] Matelly, Sylvie and Marcos Lima. "The influence of the State on the strategic choices of Defence Companies: the cases of Germany, France and the EU after the Cold War", *Journal of Innovation Economics and Management* 2016/2 (n°20), 2016

national lines rather than relay on international partners. The study discovered, that despite governments' acknowledge of possible advantages of closer defence cooperation, that could at least partially offset the impact of decreasing budgets, the little progress has been made within the European framework over last decade if any at all. The member states have been struggling to push forward defence cooperation under CSDP framework. Despite growing budgetary pressures on national armies, majority of defence funds were spent by individual governments on building national forces and equipping them, mostly with weapons manufactured within the state. [234]

The analysis of institutional and legal instruments for the European defence cooperation suggest that states are growingly reluctant to transfer their power in high policy matters into hands of supranational entities. The nature of instruments is self-explanatory in its limitation: there are no really coercive powers to any international defence institution, as well as established norms and procedures are non-binding.

Thereof, the analysis of European defense industry configuration and dynamics in aftermath of the Cold War and with regards to economic and financial crisis in the EU delivers two main conclusions. First, budget constrains have downgraded nearly all European defense capabilities. Second, the member states are far away from a common defence approach that will cut costs and increase effectiveness. Many solutions and tools, which were proposed in order to facilitate defence cooperation, such as the Ghent Initiative to the Weimar Triangle, have been neglected. In practice, every country tend to plan and act for itself. While, there are numerous national defense initiatives and reforms in Europe, there is none of truly European reform. The states are trapped in the 'Alliance Security Dilemma', which posits that the scope and depth of cooperation within alliances and other forms of cross-national defence collaboration is limited by the fear of abandonment or entrapment by other participants.[235] Meanwhile, the US' shift from Europe to Pacafic calls into question Washington's security commitment to Europe and the EU's ability to pursue its strategic interests on its own.[236] Thus, unless a greater degree of cooperation and common planning develops among at least the major European powers, the national militaries are doomed to suffer.

[234] Tomas Walasek. "Surviving Austerity: The case for a new approach to EU military collaboration." Centre for European Reform, 2011.
[235] Glenn Snyder, 'The Security Dilemma in Alliance Politics', World Politics Vol.36, No.4 (1984), p.461.
[236] Panetta, L. "The US Rebalance Towards the Asia-Pacific", speech given at the 11th IISS Asia Security Summit on 2 June 2012, Singapore. 2012.

EUROPEAN DEFENCE INDUSTRY IN TIMES OF AUSTERITY

ABSTRACT

The end of the Cold War has marked the shift in bipolar world order. Changing geopolitical, economic and social environments, as well as rapid technological progress, have led to deep restructure of defence entities in Europe. The process of gradual national defence industries restructure and consolidation has been spreading across European borders, affecting every defence industrial sector. Thereof, this thesis aims to analyse the process of European Defence Industry's restructuring and integration process. It scrutinizes the process in terms of the European Defence Industrial Base on the one side and international integration efforts on the other. It investigates drivers of change for the defence industry, particularly: decreasing budgets, changing relationship between state and defence industry, advancement of technological innovations, importance of civil sector and internationalization of national defence companies. Regarding the restructuring process, the thesis examines National Defence Policies of Germany, France and the United Kingdom towards their respective National Defence Technology Industrial Bases along with the applications of these policies on the defence integration process within the EU.

Key words: Defence industry, European Defence Industrial Base, Defence Integration, Restructuring, Germany, France, the United Kingdom.

Evropský obranný průmysl v době úspor

ABSTRAKT

Konec studené války znamenal posun v bipolárním uspořádání světa. Změny geopolitického, hospodářského a sociálního prostředí a rychlý technologický pokrok vedly k hluboké restrukturalizaci obraných struktur v Evropě. Proces restrukturalizace a konsolidace národního obranného průmyslu se rozšiřuje napříč Evropou a ovlivňuje každý sektor obranného průmyslu. Cílem dizertační práce je analyzovat proces restrukturalizace a integrace evropského obranného průmyslu. Práce nahlíží na proces z hlediska evropské obranné průmyslové základny na straně jedné a úsilí o mezinárodní integraci na straně druhé. Zkoumá hnací síly změn v obranném průmyslu, zejména: klesající rozpočty, měnící se vztahy mezi státem a obranným průmyslem, rozvoj technologických inovací, význam civilního sektoru a internacionalizace národních obranných společností. S ohledem na proces restrukturalizace dizertace zkoumá národní obranné politiky Německa, Francie a Spojeného království ve vztahu k jejich národní obranné technologické a průmyslové základně spolu s aplikací těchto politik na obranný integrační proces v rámci EU.

Klíčová slova: obranný průmysl, evropská obranná průmyslová základna, obranná integrace, restrukturalizace, Německo, Francie, Velká Británie

BIBLIOGRAPHY

BOOKS:

Bialos, Jeffrey P., Christine E. Fisher, Stuart Koehl, and Christer Lennart Mossberg. *Fortresses and icebergs: the evolution of the transatlantic defense market and the implications for U.S. national security policy*. Washington, D.C.: Center for Transatlantic Relations, Paul H. Nitze School of Advanced International Studies, Johns Hopkins University, 2009

Jauhiainen,Jussi S., Luc Mampaey. *Post-cold war conversion in Europe: defence restructuring in the 1990s and the regional dimension*, LES RAPPORTS DU GRIP : 1999

Haas, Ernst B. 1958. *The uniting of Europe: political, social, and economic forces, 1950-1957*. Stanford, Calif: Stanford University Press

Hartley, Keith. "The Arms Industry, Procurement and Industrial Policies", Chapter 33 in *Handbook of Defense Economics*, Volume 2, edited by Sandler and Hartley, 2007

Hebert, J. La transformation du systиme franзais de production d'armement : une vue d'ensemble, in Hebert, J., Pascallon, P. (eds), *La politique industrielle d'armement et de dŭfense de la Vume Rŭpublique. Evolution, bilan et perspectives*, Paris, L'Harmattan. 2010

Howorth, Joulon. *Security and Defence Policy in the European Union*. London & New York: Palgrave, 2007

Hyde-Price, Adrian, *European Security in the Twenty-First Century: The Challenge of Multipolarity*. London: Routledge, 2007

Lember, M. Introduction, in Lember *et al.* (eds), *Public Procurement, Innovation and Policy*, Berlin, Springer-Verlag., 2014

Mayer, Hartmut and Henri Vogt (Ed.) *A Responsible Europe?* . Palgrave Macmillan, August 2004.

Mearsheimer, Jon J. *The Tragedy of Great Power Politics*. New York: W.W. Norton, 2001

Minuz, Manuel. "France: The Frustrated Leader" in *National Vision of EU Defence Policy: Common Denominators and Misunderstandings*, edited by Federico Santopinto and Megan Price, 6-26. Centre for European Policy Studies, 2013

Morgenthau, Hans. *Politics Among Nations. The Struggle for Power and Peace*. brief edition, revised by Kenneth Thompson, New York: McGraw-Hill, 1993

Porter, M. E. *The Competitive Advantage of Nations.* New York: Free Press, 1990.

Waltz, Kenneth. *Theory of International Politics*. Addison-Wesley, 1979

Whitman, Richard G. and Manners, I. *The Foreign Policies of European Union Member States.* Manchester University Press, Manchester, 2000.

Wurzer, Christian. "A German vision of CSDP: "It's taking part that counts" in *National Vision of EU Defence Policy: Common Denominators and Misunderstandings*, edited by Federico Santopinto and Megan Price, 27-47. Centre for European Policy Studies, 2013

ARTICLES AND ANALYSIS PAPERS:

Belin, J., Guille , M. "R&D et innovation en France: Quel financement pour les entreprises de la defense", *Innovations*, 28, 2008,

Bickerton, C., Irondelle, B. and Menon, A. "Security Co-operation Beyond the Nation-State: The EU's Common Security and Defence Policy", *Journal for Common Market Studies*, vol. 49, no. 1, 2011.

Biscop, Sven. "Mediterranean mayhem: lessons for European crisis management*", Egmont Security Policy Brief*, 19/IV/2011, 2011.

Carmona, Robert. "Un budget de transition pour la Défense en 2013" [A Transition Budget for Defense in 2013], *La Tribune No. 313*, March 2013.

Chantrill, Christopher. "Public Spending Details for 2010." 2010. Available at www.ukpublicspending.co.uk/year_spending_2010UKbn_12bc1n_30

Cooper, I. 'The euro crisis as the revenge of neo-functionalism' *EU Observer*, 2011.

Cornish, Paul and Geoffrey Edwards. "Beyond the EU/NATO dichotomy: the beginnings of a European strategic culture". *International Affairs* ,Volume 77, Issue 3, pages 587–603, July 2001.

Cornish, Paul and Andrew M. Dorman, "Fifty shades of purple? A risk-sharing approach to the 2015 Strategic Defence and Security Review." *International Affairs*, Vol. 89 (5), September 2013.

Cugny,Emmanuel. "Budget Defense 2014–2019: Les longs soupirs de la Grande mette" [Defense Budget 2014–19, The Army's Big Sigh], November 26, 2013.

Davis, Jan and Robin Dodd. "US 'Prompt Global Strike' Capability: A New Destabilising Sub-State Deterrent in the Making?", *British American Security Information Council,* occasional paper, 2006.

De La Brosse, Guillaume. "Deploying financial tools in support of European Defence Cooperation", *Armament Industry European Research Group*, March 2017. Available at http://www.iris-france.org/wp-content/uploads/2017/03/ARES-Group-Comment-G-DelaBrosse-f%C3%A9v-17.pdf

Dupuy, R." L'industrie europienne de defense : changements institutionnels et strategies de cooptition des firmes, dans le dossier Fondements economiques et industriels de la defense", *Innovations*, 42(3), 2013

Drent, Margriet and Dick Zandee ."European defence: action and commitment". *EU Strategy to Defence Series*, March 2017. Available at https://www.clingendael.nl/sites/default/files/PB_European_Defence_action_and_commitment_0.pdf

Dyson, Tom and Theodore Konstadinides. "Understanding the Limitations of the EU's Common Security and Defence Policy." *Routledge,* 2013

Edwards, Jay. "The EU Defence and Security Procurement Directive: A Step towards Affordability?" *Chatham House,* 2011.

Fiott, Daniel. “The Geopolitical Implications of the Eurozone Crisis: The Case of the Common Security and Defence Policy.” *UACES,* 3 September 2012.

Fontanel, J., Hebert, J. , The End of the “French Grandeur Policy”, *Defence and Peace Economics*, 8(1), 1997

Foucault, Martial. “The Defence Budget in France: Between Denial and Decline”, *IFRI*, December 2012.

Giegerich, Bastian, Alexander Nicoll. “The Struggle for Value in European Defence”, *Survival* 54: 1, 2012.

Giji Gya. ‘The ESS Scorecard’. *European Security Review* , No 42, ISIS Europe, December 2008.

Gotkowska, Justyna. “Defence Procurement - A Minefield for Germany's New Defence Minister?” *Centre for Eastern Studies*, February 2014. Available at http://www.isn.ethz.ch/Digital-Library/Articles/Detail/?lng=en&id=177470

Gotkowska, Justina. “New market conditions and “exit strategies” for the German arms industry.” *Centre for Eastern Studies* 130, 2014. Available at http://www.osw.waw.pl/sites/default/files/commentary_130.pdf

Greco Ettoro, N. Pirozzi, Stefano Silvestri (eds). “EU Crisis Management: Institutions and Capabilities in the Making.” *IAI*, Rome, November 2010.

Jones, Chris. “United we stand, divided we fall: Supply chain consolidation and the rise of risk-sharing partners”. *MRO*, June 2015.

Heidenkamp, Henrik. “ Financial Imperatives for Germany's Security and Defence Policy”, *RUSI*, November 2011. Available at https://www.rusi.org/go.php?structureID=commentary&ref=C4EB8157BCED94#.U5nyVPl_uSo

Heuninckx, Baudouin. “The European Defence Agency Capability Development Plan and the European Armaments Cooperation Strategy: Two Steps in the Right Direction.” *Public Procurement Law Review*, Volume 18, Issue 4, Sweet & Maxwell, 2009. Available at http://www.nottingham.ac.uk/pprg/documentsarchive/fulltextarticles/heuninckxeuropeandefenceagency.pdf

Keller, Patric. ”German Hard Power: Is There a There There?”, *AEI Outlook Series*, October 2013.

Koutrakos, Panos. “The Role of Law in Common Security and Defence Policy: Functions, Limitations and Perceptions.” 2011.

Krahmann, Elke. "Conceptualising Security and Governance." *Cooperation and Conflict* 38(1), 2003.

Liberti, Fabio “Defence spending in Europe: Can we do better without spending more?”, *Institut Jacques Delors*, June 2011.

Luis Simón, “A spider in Europe’s web? French grand strategy from Iraq to Libya.” *Geopolitics*, 3/I/2013

Major, Claudia, Mölling, Christian and Alicia von Voß. “The State of Defence Cooperation in Europe.” *German Institute for Internationa and Security Affairs*, Working Paper, FG 03-WP No 3, December 2013.

Major, Claudia and Florian Wassenberg. “Warsaw’a Ambitious CSDP Agenda.” *German Institute for Internationa and Security Affairs*, September 2011. Available at http://www.swp-berlin.org/fileadmin/contents/products/comments/2011C25_mjr_wsb_ks.pdf

Major, Claudia. “France, Germany and European defence: more pragmatism and less pathos, please.” *Comité d’études des relations franco-allemandes,* January 2013.

Masson, H, La reorganisation de l’industrie de dŭfense britannique, *Recherche et documents de la Fondation pour la recherche stratŭgique*. 2008

Masson, H., Industrie de defence et soutien public a la R&D en Europe, *Recherche et documents de la Fondation pour la recherche stratŭgique*. 2010

Matelly, Sylvie and Marcos Lima. “The influence of the State on the strategic choices of Defence Companies: the cases of Germany, France and the EU after the Cold War”, *Journal of Innovation Economics and Management,* 2016/2 (n°20), p. 61-88.

Molthof, Mieke. “France: The Disillusioned Leader of l’Europe de la Défense.” November 2013. Available at http://studentthinktank.eu/blogs/france-the-disillusioned-leader-of-leurope-de-la-defense/

O’Donnel Clara M. (Ed.). “The Implications of Military Spending Cuts for NATO’s Largest Members.” *Brookings Analysis Paper*, 2012. Available at http://www.brookings.edu/~/media/research/files/papers/2012/7/military%20spending%20nato%20odonnell/military%20spending%20nato%20odonnell%20pdf.pdf

Oakeshott, Michael. “The Moral Life in the Writings of Thomas Hobbes”, *Rationalism in Politics and Other Essays*, 1960.

Oakeshott, Michael . ‘On Being Conservative’, *Rationalism in Politics and Other Essays*, 1991.

Olsen, J. P. “The Many Faces of Europeanization.” Oslo, *ARENA*, Centre for European Studies Working Papers No.1. 2002.

Pinar, Elmanand and Marcin Terlikowski. “Balancing Austerity with Ambitions: The (Close) Future of French Defence Policy.” *The Polish Institute of International* Affairs, January 2013.

Posen, Barry. “ESDP and the Structure of World Power.” *The International Spectator*, vol. 39, no. 1, 2004

Rynning,Sten. “Return of the Jedi: Realism and the Study of the European Union”, *Politique européenne*, no. 17, Autumn 2005.

Savkovic. Marco. “Europe's Defence in Times of Austerity: Spending Cuts as a One-Way Street?” *BCSP*, October 2012.

Schweller,Randall L. “Bandwagoning for Profit: Bringing the Revisionist State Back In.” *International Security 19:1*, 1994.

Shurkin, Michael *“*Setting Priorities in the Age of Austerity: British, French, and German Experiences*.” RAND Corporation, RR-222*, 2013.

Taylor, Trevor and Heidenkamp, Henrik et al. “The Defence Industrial Triptych : Government as Customer, Sponsor and Regulator” *Routledge Journals*, 2013

Snyder, Glenn. “The Security Dilemma in Alliance Politics”, *World Politics* Vol.36, No.4, 1984.

Valasek, Tomas. "Surviving austerity: The case for a new approach to EU military collaboration", *Centre for European Reform*, 2011

Violakis, Petros. "Europeanisation of the EU defence and security policy after the end of the Cold-War", *University of Exeter*, 2016

Walasek, Tomas. "Surviving Austerity: The case for a new approach to EU military collaboration." *Centre for European Reform*, 2011. Available at http://www.rand.org/content/dam/rand/pubs/research_reports/RR200/RR222/RAND_RR222.pdf

Waltz, Kenneth. "The Emerging Structure of International Politics." *International Security*, vol. 18, no. 2, Fall 1993.

Webber, Mark,Stuart Croft, Terry Terriff and Elke Krahman, "The Governance of European Security." *Review of International Studies*, vol. 30, no. 1, January 2004.

Wohlforth, William. "The Russian-Soviet Empire: A Test of Neorealism." *Review of International Studies*, vol. 27, December 2001.

OFFICIAL REPORTS:

BAE Systems, *Annual Report 2013*, London, 2014. Available at: http://bae-systems-investor-relations-v2.production.investis.com/~/media/Files/B/BAE-Systems-Investor-Relations-V2/Annual%20Reports/BAE-annual-report-2013.pdf

Bekkers, F. et al. *Development of a European Defence Technological and Industrial Base.* Main report. TNO, 2009.

Ballester, Blanca. *Cost of Non-Europe Report: European Common Security and Defence Policy.* EPRS CoNE 4/2013, Brussels, 2013.

Brooke-Holland, Louisa and Tom Rutherford. *Army 2020.* House of Commons Library. London, United Kingdom, July 2012.

Briani, Valerio and Marrone, Alessandro, et al. *The Development of a European Defence Technological and Industrial Base (EDTIB).* Directorate-General for External Policies of the Union, June 2013

Brune, Sophie-Charlotte, and Christian Molling. *The Impact of the Financial Crisis on European Defence*. European Parliament, Directorate General for External Policies, 2011. http://www.europarl.europa.eu/document/activities/cont/201106/20110623ATT22406/20110623ATT22406EN.pdf

Council of European Union. *Presidency Progress Report to the Helsinki European Council on Strengthening the Common European Policy on Security and Defence*. Annex I to Annex IV, Helsinki, 10-11 December 1999.

Council of the European Union. *Report from the Commission to the European Parliament and the Council on transposition of directive 2009/81/EC on Defence and Security Procurement.* 2009.

The Defence Committee. *Seventh Report of Session 2013–14: Towards the next Defence and Security Review.* Part One , Paragraph 12, January 7, 2014.

European Defence Agency. *Defence Data 2012*. Brussels, 2013. Available at: http://www.eda.europa.eu/docs/default-source/eda-publications/defence-data-booklet-2012-web

European Commission. *European Defence Action Plan: Towards a European Defence Fund*. Brussels, November 30, 2016.

European Commission -press release, *A new deal for European Defence: towards a more competitive and efficient defence and security sector*.Brussels, 2013

French Senate, *Rapport D'Information N°680*. [Information Report No. 680], July 18, 2012.

French Senate. *Rapport general commission des finance No. 107*. 2012.

Government of France. *LOI no 96-589 du 2 juillet 1996 relative à la programmation militaire pour les années 1997 à 2002*" [Law No. 96-589 of July 2, 1996, Related to the the Military Programming Law for the Years 1997 to 2002]. July 2, 1996.

House of Commons Library, *Brexit: Impact Across Policy Areas*, 26 August 2016, p 169

Moores, Ben. *Balance of Trade: Global Defence Trade Report 2015,* IHS Jane's, April 2015.

Rolls Royce Holding Plc., *Annual Report 2016*, London, 2016. Available at https://www.rolls-royce.com/~/media/Files/R/Rolls-Royce/documents/annual-report/rr-2016-full-annual-report.pdf

SIPRI. *Trends in International Arms Transfers, 2016*. Stockholm, February 2017

U.K. Ministry of Defence. *Better Defence Acquisition: Improving how we procure and support Defence equipment.* June 2013. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/206032/20130610_WP_Better_Def_Acquisition_screen_final.pdf

U.K. Ministry of Defence. S*tatistical Series 2 – Personnel Bulletin 2.03 – Service & Civilian Personnel 2013.* 26 September 2013. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/280155/2013.pdf

UK National Audit Office. *Ministry of Defence: The Major Projects Report 2011*. London, 2011.

U.K. National Audit Office. *The Cost-effective Delivery of an Armoured Vehicle Capability*. London, 2011.

OFFICIAL DOCUMENTS AND POLICY PAPERS:

Adam, Patricia. *LArmée de Terre ne Dispose Plus Totalement des Ressources Nécessaires à Une Préparation Opérationnelle de Qualité*, in Ract-Madoux's Audition to Parliament, available at http://www.assemblee-nationale.fr/14/cr-cdef/11-12/c1112007.asp#P6_477

Bekker, Sonja, and Ton Wilthagen. *Europe's pathways to flexicurity: Lessons presented from and to the Netherlands*. 2008.

British Ministry of Defence. *Building Stability Overseas Strategy*, UK Department for International Development, Foreign and Commonwealth Office, July 2011.

British Ministry of Defence, *Statistical Series 2 – Personnel Bulletin 2.03 – Service & Civilian Personnel 2013*, 26 September 2013.

Council of the European Union. *A secure Europe in a better world - European security strategy*. Brussels, 12 December 2003

Council of the European Union. *European Security and Defence Policy : Development of European Military Capabilities*. 2008.

Council of the European Union. *Declaration on Strengthening Capabilities*. 11 December 2008.

Council of the European Union. *Council Joint Action 2004/551/CFSP.* OJL 245/17, 2004.

European Commission. *Communication towards a more competitive and efficient defence and security sector.* SWD, 2013.

European Commission. *Report on transposition of Directive 2009/43/EC simplifying terms and conditions for transfer of defence-related products within the EU*. COM/2012/0359 final, 2012.

European Council declaration on strengthening the Common European Policy on Security and Defence, Cologne European Council, 1999.

The European Council. *Helsinki Headline Goal 2010.* 17 and 18 June 2004.

European Defence Agency. *An Initial Long-Term Vision for European Defence Capability and Capacity Needs.* October 2006.

European Parliament and Council. *Directive 2009/43/EC: simplifying terms and conditions of transfers of defence-related products within the Community*. 6 May 2009

European Union, *Treaty on European Union (Maastricht text*), July 29, 1992, O.J. C 191/1.

European Union. *Treaty on European Union (Consolidated Version).* Treaty of Amsterdam, 2 October 1997.

European Union, *Treaty of Lisbon Amending the Treaty on European Union and the Treaty Establishing the European Community*, 13 December 2007.

Federal Ministry of Defence, *Ressortbericht zum Stand der Neuausrichtung der Bundeswehr,* [Interagency Report on the State of the Reorientation of the Bundeswehr], Bundesministerium der Verteidigung, May 8, 2013.

Federal Ministry of Defence, *Bundesministerium für Wirtschaft und Technologie, Rüstungsexportbericht 2005–2012*, [Ministry for Economy and Technology, arms-exports-report 2005-2012], 2013.

Federal Ministry of Defence, *Konzentration und Verantwortung: Die Prozessorientierte Neuausrichtung der Bundeswehr,* [Concentration and responsibility : The process-oriented realignement of the Bundeswehr]. 2011.

French Ministry of Defence. *The French White Paper on Defence and National Security 2008*, Odile Jacob Publishing Corporation, New York, 2008.

French Ministry of Defence. *Programme Loi de Programmation Militaire*, [military planning law 2014-2019]. May 2013.

French Ministry of Defence, *Projet de loi relatif à la programmation militaire pour les années 2009 à 2014 et portant diverses dispositions concernant la défense* [Draft military planning law 2009–2014 and diverse defence measures], 2008.

French Ministry of Defence*, Ministry of Defense budget guidelines for 2011-2013*, Paris, July 7, 2010. http://ambafrance-us.org/spip.php?article1751

French Ministry of Defence. *White Paper on Defence and National Security,* April 2013.

French Ministry of Defence. *Programme Loi de Programmation Militaire*, [military planning law 2014-2019]. May 2013.

The French Navy, *Projet de LPM: Un moindre mal*, [MPL Project: A Lesser Evil], Mer et Marine, August 5, 2013.

The Foreign Affairs Ministers and Ministers of Defence of France, Germany, Italy, Poland and Spain. "Paris declaration of the Wiemar Plus Group", Paris, 15 November 2012. http://www.diplomatie.gouv.fr/en/IMG/pdf/121114_Outcome_proposal_Final.pdf .

HM Treasury. *Budget 2011: Return to an order of the House of Commons.* London, March 2011

The House of Commons. Defence Committee's Seventh Report of Session 2009-10 "The Comprehensive Approach: the point of war is not just to win but to make a better peace", London, 18 March 2010.

Thessaloniki European Council, *Presidency Conclusions*, 19-20 June 2003, no. 56.

U.K. Cabinet Office. *Securing Britain in an Age of Uncertainty: The Strategic Defence and Security Review (SDSR*). October 2010. Available at http://www.direct.gov.uk/prod_consum_dg/groups/dg_digitalassets/@dg/@en/documents/digitalasset/dg_191634.pdf

U.K. Cabinet Office. *A Strong Britain in an Age of Uncertainty: The National Security Strategy (NSS).* October 2010

U.K. Ministry of Defence. *Better Defence Acquisition: Improving how we procure and support Defence equipment.* June 2013. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/206032/20130610_WP_Better_Def_Acquisition_screen_final.pdf

PAPERS PRESENTED AT MEETING OR CONFERENCE:

Ginsberg, Roy H. "Measuring and Evaluating CSDP Impact: The Case of EU-NATO Relations" paper presented at the Twelfth Biennial International Conference of the European Union Studies Association, Boston, Massachusetts, March 3-5, 2011.

Kelly, Eanna. “Why the EU needs to start spending on defence R&D” paper presented at the European Defence Procurement Conference, September 22, 2016. Available at http://www.eudefenceprocurement.com/single-post/2016/10/13/Why-the-EU-needs-to-start-spending-on-defence-RD

Miotti, L. and Sachwald, F. Patterns of R&D Cooperation by European Firms: Cost-Economizing vs. Technology-Seeking, DRAFT for discussion, *AITEG Workshop Madrid*, May 25-26 2001.

Norheim-Martinsen, Per M. “Beyond Intergovernmentalism: the Governance Approach to the European Security and Defence Policy.” Paper presented at the Fourth Pan-European Conference on EU Politics, ECPR Standing Group on the European Union, University of Latvia, Riga, 25-27 September 2008.

Soder, Kristen. “EU military crisis management: an assessment of member states’ contributions and positions”, draft for the meeting of the COST Action IS0805 on New Challenges of Peacekeeping and the European Union's Role in Multilateral Crisis Management. May 2010

Panetta, L. “The US Rebalance Towards the Asia-Pacific”, speech given at the 11th IISS Asia Security Summit on 2 June 2012, Singapore. 2012.

NEWSPAPER AND MAGAZINE ARTICLES:

Airforce Technology. “Royal Air Force starts upgraded Puma MK2 training flights.” 27 November 2013. http://www.airforce-technology.com/news/newsroyal-air-force-starts-upgraded-puma-mk2-training-flights

BBC News. “Nimrod aircraft scrapped at Stockport BAE factory.” January 26, 2011. http://www.bbc.co.uk/news/uk-england-12292390

Charillon, Frederic. “France and its new military budget: rethinking power.” *RUSI Newsbrief*, Vol. 33, No. 6, November 2013. Available at http://fredericcharillon.blogspot.cz/2013/12/france-and-its-new-military-budget.html

EDA Press Center. “Aggregated defence data 2014 and 2015 (estimated)”. *European Defence Agency*, June 07, 2016. Available at https://www.eda.europa.eu/info-hub/press-centre/latest-news/2016/06/07/aggregated-defence-data-2014-and-2015-(estimated)

EUROSTAT. “Government expenditure on defence”, March 2017. Available at http://ec.europa.eu/eurostat/statistics-explained/index.php/Government_expenditure_on_defence

Fouchaux, Dorothée. “French hard power: Living on the strategic edge.” *American Enterprise Institute,* February 04, 2014. Available at: http://www.aei.org/outlook/foreign-and-defense-policy/defense/nato/french-hard-power-living-on-the-strategic-edge

Gautier, Louis. ‘Budget de la defense: tour d’écrou et escamotage,’[Defence Budget: Round of retraction], L*es Echos*, 1 December 2010.

Guillermard, Véronique and Cécile Crouzel. “Budget de la Défense: la recherché preserve.” [Defence Budget: to preserve desired], *Le Figaro,* 8 January 2011.

Hopkings, Nick. “UK to withdraw 11,000 troops from Germany by 2016.” *The Guardian*. 5 March 2013. http://www.theguardian.com/uk/2013/mar/05/uk-withdraw-troops-germany-2016

Le Monde, "Qui participe à l'opération Serval au Mali?" [Who Is Participating in the Operation Serval in Mali?], January 21, 2013.

Melvin, Joshua. "French arms industry enjoys boom in trade." The Local, 30 January 2014. Available at: http://www.thelocal.fr/20140130/arms-france-sold-a-lot-of-weapons-in-2013

Tanguy, Jean-Marc. "Le Livre blanc lave plus blanc que blanc" [The White Paper Washes Whiter than White], Le mamouth blog, April 30, 2013, http://lemamouth.blogspot.com/2013/04/le-livre-blanc-lave-plus-blanc-que-blanc.html

Sengupta, Kim. "Blood money: UK's £12.3bn arms sales to repressive states." *The Independent.* 17 July 2013. http://www.independent.co.uk/news/uk/politics/blood-money-uks-123bn-arms-sales-to-repressive-states-8711794.html

Stern , Johannes. "German arms exports almost doubled in 2015" , WSWS, *International Committee of the Fourth International*, July 8, 2016.

Urban, Mark. "UK to spend £2.5bn on F-35 fighters." *BBC*, February 11, 2014. http://www.bbc.com/news/uk-26124894

Willett, Lee. "BAE Systems launches UK Royal Navy's third Astute-class SSN." HIS Jane's, London, May 19, 2014. http://www.janes.com/article/38179/bae-systems-launches-uk-royal-navy-s-third-astute-class-ssn

Withington, Thomas. "French defence industrial base: looking beyond the budget." *Indian Defence Review*, Vol. 28.1, March 2013. Available at: http://www.indiandefencereview.com/spotlights/french-defence-industrial-base-looking-beyond-the-budget/

Woron, Felicia. "For Realists, Brexit Was No Surprise", *The Gate,* July 2016. Available at http://uchicagogate.com/2016/08/08/for-realists-brexit-was-no-surprise/

OFFICIAL WEB PAGES:

The Bundeswehr (the unified armed forces of the Federal Republic of German), http://www.bundeswehr.de/portal/a/bwde/!ut/p/c4/04_SB8K8xLLM9MSSzPy8xBz9CP3I5EyrpHK9pPKUVP2CbEdFACboydc!/

EU Public Procurement portal. http://export.gov/europeanunion/defenseprocurement/

Eurofighter Typhoom. http://www.eurofighter.com/

French Ministry of Defence. http://www.defense.gouv.fr/english/portail-defense

U.K. Ministry of Defence. https://www.gov.uk/government/organisations/ministry-of-defence

Royal Air Force database. http://www.raf.mod.uk/

SIPRI Arms Transfers Database. http://www.sipri.org/databases/copy_of_armstransfers