

Review NO 09

EN

European Defence



EUROPEAN
COURT
OF AUDITORS

2019

Contents

	Paragraph
Executive summary	I-XII
Introduction	01-08
Background	01-03
This review	04-08
1. Defence: the key role of the Member States	09-73
1.1 Defence: a unique domain in the EU legal and institutional framework	09-36
Specific defence provisions in the Treaties	09-19
Key stakeholders and governance arrangements	20-27
CSDP operations and missions	28
Defence cooperation in Europe and beyond	29-36
1.2 Recent developments at EU level: a new level of ambition	37-54
The EU Global Strategy and the European Defence Action Plan	37-40
Defence spending in the EU	41-54
1.3 Risks associated with the EU's new defence ambition	55-73
An ambition for EU defence policy	56-68
Coherence with NATO	69-73
2. EU Member States' defence capabilities and industries: a global position challenged	74-141
2.1 Strengths and weaknesses of Member States' capabilities	75-91
Measuring military capabilities	75-78
Quantitative indicators	79-81
Qualitative analysis	82-88
The impact of Brexit	89-91
2.2 Key features of the European defence industry	92-113
The defence sector	92-94
Key trends	95-97

The European defence industrial landscape	98-100
The demand side: the Member States	101-106
The supply side: industry	107-113
2.3 Enhancing cooperation at EU level	114-127
Capability Development Plan	115-116
CARD	117-119
PESCO	120-123
The European Defence Fund	124-127
2.4 Performance risks associated with EU defence programmes	128-141
An effective EU planning process	129-132
The Member States' participation	133-135
The impact on real capability needs	136-137
The governance and accountability framework	138-141
Concluding remarks	142-144
Annex I — Timeline	
Annex II — The European defence institutional framework: a complex and multi-player domain	
Annex III — Capability priorities identified in key EU documents, 2013-2019	
Annex IV — Key features of EU defence industry subsectors (Aerospace, Land, Naval) 1/2	
Annex IV — Key features of EU defence industry subsectors (Aerospace, Land, Naval) 2/2	
Annex V — SWOT analysis – EDTIB	
Annex VI — Main audit arrangements in the field of EU Defence	
Acronyms and abbreviations	

Executive summary

I Defence is a specific domain, at the heart of Member States' national sovereignty. For the majority of EU Member States, European defence mainly consists of two important layers: Member States' own self-defence capability and the collective defence offered by NATO. The Treaty on EU highlights the Common Security and Defence Policy (CSDP)'s unique nature, enshrining the Member States' leading role and containing several limitations on the EU's action in this area.

II Until recently, there had been limited action in the area of defence at EU level and a European Defence Union does not exist. However, in response to a challenging new global environment, the EU has launched new initiatives to enhance cooperation between Member States. For 2021-2027, the Commission has proposed to increase spending on R&D projects related to defence from €590 million to €13 billion. This represents a 22-fold increase compared to the present seven-year cycle.

III This has placed defence clearly on the ECA's radar, as such a significant and rapid increase in funding entails performance risks. Defence involves creating real military capabilities, with a clear potential to deter possible threats and implies readiness to act when required.

IV The ECA has therefore prepared this review, which is an analytical review based on publicly available information. It specifically focuses on (i) the legal, institutional and financial framework in the area of defence and (ii) the state of play as regards Member States' defence capabilities and industries. It aims to highlight some of the main risks associated with the EU's new level of ambition and the proposed increase in funding.

V The EU defence-related initiatives represent attempts in an area where the EU has had little experience in the past. As of today, there is a risk that adequate goals may not have been set and proper systems may not be in place to accommodate such an increase in EU spending and the new level of ambition set in the EU Global Strategy.

VI There are clear strategic differences between EU Member States. In particular, they do not share a common perception of threats nor a common vision of the EU's role. They have different rules of engagement and a wide range of views on the use of military force. In such a context, some concepts, such as "strategic autonomy" or "a European army", are broad and vague.

VII The coherence of EU initiatives and synergies with other frameworks, in particular NATO, is essential. The EU and NATO share common security challenges and thus common defence interests. For 22 Member States, NATO remains the primary framework when it comes to collective defence. EU Member States have a single set of forces; therefore, in order to avoid inefficient use of the taxpayer's money, a critical point and a key priority for the near future is whether the EU is able to complement NATO and so avoid duplication and overlapping functions with it.

VIII However, significant and uncoordinated cuts in Member States' defence budgets, together with underinvestment, have affected their military capabilities. Currently, the EU Member States are far from having the military capabilities they need to match the EU military level of ambition. Brexit will aggravate this situation, as the UK accounts for about a quarter of EU Member States' total defence spending.

IX Though the EU's defence spending is due to increase in the near future, it is minor (on average about €3 billion annually) compared to the Member States' overall military spending. It is estimated that several hundred billion euros would be needed to overcome the capabilities gap if Europe had to defend itself without outside assistance. Merely to meet the 2 % GDP guideline, EU Members of NATO would need to invest an additional €90 billion annually, i.e. about a 45 % increase compared to their 2017 level of spending.

X As for the impact of the new EU initiatives and the associated rapid increase in spending, several key conditions are not yet in place or are unknown, in particular:

- an effective EU planning process;
- the Member States' participation;
- the impact on real capability needs;
- the governance and accountability framework.

XI The case for greater EU cooperation on security and defence has been supported by economic and industrial considerations. Previous EU attempts to support the establishment of an open and competitive European defence equipment market were unsuccessful. Limited cooperation between Member States has led to inefficiencies in the EU defence sector, thus threatening the industry's global competitiveness and its capacity to develop the military capabilities needed. However, the significant increase in funding to support defence-oriented R&D activities also runs a risk of becoming an exercise with no real impact on the competitiveness of the European defence industry.

XII Contributing to better defence capacity in Europe means going beyond words and requires effective implementation of real initiatives, with the aim of supporting a competitive European defence industry and enhancing Member States' military capabilities in full complementarity with NATO. Ultimately, the EU's success and future in the field of defence is fully dependent on the Member States' political will, as they play the central role in Europe's defence architecture.

Introduction

Background

01 Recent international developments have led European leaders to reconsider defence as a key policy area, in line with European citizens' growing security expectations¹. In recent years, Russia's annexation of Crimea, the evolving transatlantic relationship, the intensification and diversification of security threats, and the return of Great Power competition, have given EU defence cooperation new momentum.

02 The case for greater EU cooperation on security and defence has also been supported by economic considerations. The fact is that defence has a strong economic and industrial dimension. Limited cooperation between Member States, together with cuts in their defence budgets since 2005, have led to inefficiencies in the EU defence sector, thus threatening the industry's global competitiveness and its capacity to develop the military capabilities needed².

03 In this context, the 2016 EU Global Strategy and its Implementation Plan on Security and Defence set a higher level of ambition for the EU and its Member States, with the objective of promoting a stronger Europe. Building on this new level of ambition, several defence-related initiatives and mechanisms have been developed in recent years (see [Annex I](#)). The aim of this review is to look at the current landscape of EU defence cooperation in order to provide an overview of nascent EU defence policy and the specific environment in which it is delivered.

This review

04 This review is an analytical review based on publicly available information. It does not aim to provide a historical description of the framing of EU defence policy, but focuses on the current situation and the prospects for the new Multiannual Financial Framework (MFF).

¹ [Eurobarometer](#), No 90, November 2018.

² Commission staff working document, Impact Assessment accompanying the document "Proposal for a Regulation of the European Parliament and of the Council establishing the European Defence Fund", SWD(2018) 345 final, 13.6.2018.

05 This review aims to contribute to strategic reflection, thereby providing an input for co-legislators and increasing awareness among the public and other stakeholders. It also allows the ECA to acquire knowledge and develop internal skills with a view to future audit work in this area.

06 In the first part, we present an overview of the legal, institutional and financial framework associated with EU defence policy. In the second part, we focus on EU defence, from both a capability and an industrial point of view, with the aim of presenting some of the recent initiatives taken at EU level. Throughout the document, we highlight challenges for effective policy delivery and the main risks involved in the latest EU ambitions and initiatives, and the proposed increase in defence funding at EU level.

07 The facts presented in this review derive from:

- a documentary review, including EU documents and publications from other sources (think tanks, research institutes, experts, etc.);
- interviews with staff from EU institutions and bodies, and other institutions and organisations (e.g. NATO and think tanks).

08 The review takes account of developments in EU defence policy up to 17 June 2019. The European Commission, the European External Action Service and the European Defence Agency were given the opportunity to comment on this paper in draft form. The opinions expressed in this review do not necessarily reflect those of the aforementioned institutions and bodies.

1. Defence: the key role of the Member States

1.1 Defence: a unique domain in the EU legal and institutional framework

Specific defence provisions in the Treaties

The Common Security and Defence Policy

09 The Common Security and Defence Policy (CSDP) is an integral part of the Common Foreign and Security Policy (CFSP). The CSDP is framed by the Treaty on European Union (TEU) and aims to provide the EU with “an operational capacity drawing on civilian and military assets. The Union may use them on missions outside the Union for peace-keeping, conflict prevention and strengthening international security in accordance with the principles of the United Nations Charter”³. In addition, Member States have an obligation of mutual aid and assistance if a Member State is “the victim of armed aggression on its territory”⁴.

10 One fundamental aspect of the CFSP, including the CSDP, is its intergovernmental nature, with the leading role played by the Member States. Foreign and defence policies are perceived as largely executive powers and as strong and essential symbols of national sovereignty⁵. The TEU highlights the CSDP’s unique nature, which is subject to specific rules and procedures.

11 In particular, the EU institutions’ role in the CSDP differs from other EU policies being implemented within the institutional framework of the Treaty on the Functioning of the European Union (TFEU) (see paragraph [19](#)). The Commission has no

³ Article 42(1) Consolidated version of the Treaty on European Union (TEU) OJ C 326, 26.10.2012.

⁴ France used the mutual assistance clause (Article 42(7) TEU) for the first time following terrorist attacks in Paris in 2016.

⁵ European Parliamentary Research Service, Unlocking the potential of the EU Treaties - An article-by-article analysis of the scope for action, January 2019.

right of initiative⁶ and the European Parliament has no legislative power. In addition, with limited exceptions⁷, the Court of Justice of the European Union has no jurisdiction over the CSDP⁸.

12 The Treaty on European Union contains several limitations on the EU's CSDP action. The first important limit is respect for the "obligations of certain Member States⁹, which see their common defence realised in NATO"¹⁰. The CSDP provisions shall not prejudice the specific nature of the Member States' security and defence policy, for example as regards neutrality.

13 Secondly, specific arrangements allow Member States to opt out of defence cooperation. This possibility has been used by Denmark, which has an opt-out¹¹ and does not participate in the CSDP.

14 Thirdly, the TEU restricts the use of the EU budget for defence. In particular, the EU budget cannot fund "expenditure arising from operations having military or defence implications"¹². This applies, for example, to expenditure on military operations which is borne by participating Member States (see paragraph 49). In addition, Member States make civilian and military capabilities available to the EU for the purpose of implementing the CSDP, but the EU cannot own military assets.

⁶ Pursuant to Article 42(4) TEU, CSDP decisions shall be adopted "on a proposal from the High Representative of the Union for Foreign Affairs and Security Policy or an initiative from a Member State."

⁷ In particular, when reviewing the legality of restrictive measures taken by the Council against individuals and legal persons, or when monitoring the implementation of the CFSP by the EU institutions which "shall not affect the application of the procedures and the extent of the powers of the institutions laid down by the Treaties for the exercise of the Union competences".

⁸ Article 24(1) TEU.

⁹ 22 EU Member States are NATO allies.

¹⁰ Article 42(2)(2) TEU.

¹¹ Protocol 22 on the Position of Denmark annexed to the TEU.

¹² Article 41(2) TEU.

15 Fourthly, given the precedence of national sovereignty, unanimity is usually required to adopt a CSDP Council decision¹³. Member States therefore have the power of veto and can thus block or limit decisions taken at EU level.

16 Fifthly, the Treaty explicitly limits the scope of the CSDP to “missions outside the Union”¹⁴. The CSDP’s operational focus is therefore on external crises and conflicts, rather than on the territorial defence of Europe, which, for most Member States, is NATO’s responsibility.

17 The CSDP provisions in the TEU provide the legal basis for a “progressive framing of a common Union defence policy”, the objective being to “lead to a common defence”¹⁵. This depends on Member States deciding unanimously to increase cooperation in defence matters within the EU framework.

18 The TEU also present opportunities that have not been used so far¹⁶, such as speeding up CSDP financing and setting up CSDP missions¹⁷. For civilian missions, the Council can establish “specific procedures for guaranteeing rapid access to appropriations in the Union budget [...] in particular for preparatory activities”. For the preparation of military operations, Member States can set up a collective “start-up fund”. So far, however, the Council has not activated either instrument.

Defence-related EU policies under the Treaty on the Functioning of the European Union

19 EU action in defence can also include an industrial dimension where the EU’s objective is to support the development of a strong and competitive European Defence Technological and Industrial Base (EDTIB). In this respect, legal acts relating to EU policies, e.g. for the internal market, research and industry, are governed by the TFEU.

¹³ Article 42(4) TEU, with exceptions for the European Defence Agency and the launch of PESCO.

¹⁴ Article 42(1) TEU.

¹⁵ Article 42(2) TEU.

¹⁶ For a detailed analysis, see “Unlocking the potential of the EU Treaties - An article-by-article analysis of the scope for action”, European Parliamentary Research Service, January 2019.

¹⁷ Article 41(3) TEU.

Key stakeholders and governance arrangements

20 The institutional framework and governance arrangements associated with European defence are complex, and involve an extensive network of both EU and non-EU stakeholders. The intergovernmental nature of the CSDP is illustrated by the key role played by the Member States, and thus the European Council and the Council of the EU in this area (see [Annex II](#)).

21 The European Council, as the highest EU body, sets general political directions and priorities. It also appoints the High Representative to implement the Common Foreign and Security Policy, which includes the CSDP. In December 2013, the European Council held a thematic debate on defence for the first time¹⁸. Since then, European defence cooperation has been a rolling item on its agenda¹⁹.

22 The Council of the EU is responsible for taking CSDP decisions. In most cases, the Council acts unanimously. There is no specific Defence Council, but defence ministers meet in a special configuration of the Foreign Affairs Council, and rely on advice from several preparatory bodies²⁰.

23 The High Representative for Foreign Affairs and Security Policy (HR/VP) is responsible for making proposals and implementing CSDP decisions. To do so, the HR/VP is assisted by relevant EEAS departments and bodies, namely the European Union Military Staff (EUMS), the Crisis Management and Planning Directorate, the Civilian Planning and Conduct Capability (CPCC), and the Military and Planning and Conduct Capability (MPCC)²¹. The HR/VP is also Vice-President of the European Commission and as such, coordinates and ensures consistency in EU foreign policy. At the Commission, the Foreign Policy Instruments (FPI) Service finances civilian missions

¹⁸ European Council conclusions of 19-20.12.2013, EUCO 217/13.

¹⁹ “The European Council’s ‘rolling agenda’ on European defence cooperation”, *EPRS briefing*, June 2018.

²⁰ I.e. the Political and Security Committee (PSC), the European Union Military Committee (EUMC), the Politico-Military Group (PMG), and the Committee for Civilian Aspects of Crisis Management (CIVCOM).

²¹ The MPCC is a permanent operational headquarters established in 2017. It is responsible at the strategic level for the operational planning and conduct of the EU’s non-executive military missions. There are currently three EU training missions: in the Central African Republic, Mali and Somalia. On 19 November 2018, the Council agreed to enlarge the MPCC’s scope to be able to conduct one executive military operation limited to EU battlegroup size (about 2 000 troops) by 2020.

under the CSDP. The FPI comes under the direct authority of the HR/VP, and works closely with the EEAS.

24 In parallel, a significant role of the Commission is to promote the competitiveness of the European defence industry (see paragraphs [46](#) and [124-127](#)). The Directorate-General for the Internal Market (DG GROW) is the lead DG and is also responsible for the single defence market.

25 Three agencies are involved in the CSDP: the EDA, the European Union Institute for Security Studies, and the European Union Satellite Centre. Among them, the EDA, which was created in 2004, plays a central role. It supports the Council and the Member States in their efforts to improve the Union's defence capabilities in the field of crisis management and sustains CSDP. The EDA is headed by the HR/VP and has three main roles²²:

- (1) "major intergovernmental prioritisation instrument at EU level in supporting capability development;
- (2) preferred cooperation forum and management support structure at EU level for participating Member States to engage in technology and capability development activities;
- (3) central operator with regard to EU funded defence-related activities."

26 The European Parliament's role in the CSDP is limited. It has a dedicated sub-committee on Security and Defence and is regularly consulted on the main aspects and basic choices of the CSDP. The European Parliament regularly assesses progress in the CSDP and may submit recommendations to the Council or the HR/VP. Outside the CSDP, the European Parliament, as a co-legislator, scrutinises defence capability and research programmes funded by the EU budget, such as the proposed European Defence Fund (see paragraph [124](#)). However, it has limited influence in the "earliest stages of the EU defence planning process"²³.

²² Council Decision (CFSP) No 2015/1835 of 12 October 2015 defines the statute, seat and operational rules of the European Defence Agency. In May 2017, Defence ministers endorsed the conclusions and recommendations of the EDA's long-term review, reinforcing the Agency's role.

²³ Daniel Fiott, *The Scrutiny of the European Defence Fund by the European Parliament and national parliaments*, a study requested by the SEDE Subcommittee, April 2019.

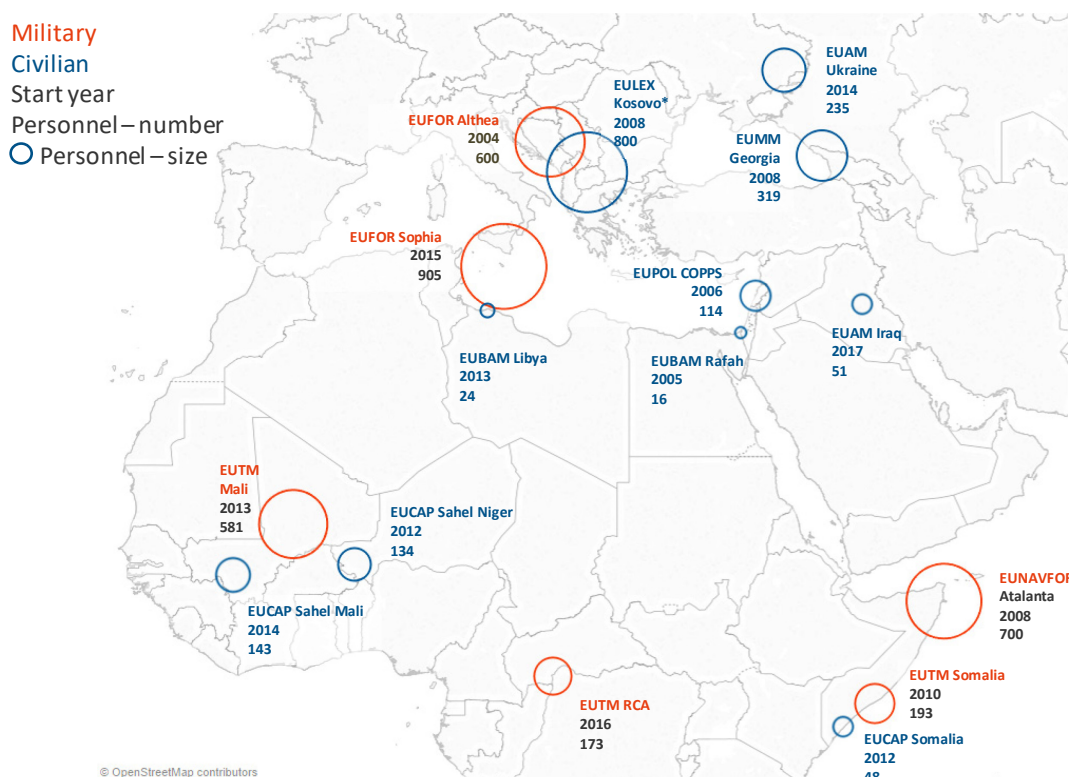
27 The European Court of Auditors’ (ECA) audit rights are mainly linked to the sources of funding of the CSDP’s various components. The ECA has no mandate to audit CSDP military operations. The same applies to the EDA, its funded projects and CSDP operational expenditure paid by Member States; these are audited by dedicated Colleges of Auditors. By contrast, defence related projects funded by the EU budget are subject to the ECA’s audit. This is also the case for civilian CSDP missions, which are funded from the EU’s general budget and on which the ECA has issued two special reports in recent years²⁴.

CSDP operations and missions

28 The operational component of the CSDP has taken the form of 35 civilian and military missions and operations deployed since 2003 all over the world. There are important differences in the objectives, conduct and financing of these two types of mission. Military missions and operations involve soldiers being seconded from EU Member States to end violence and restore peace. In 2017, the EU conducted six military missions with around 3 200 military staff. Civilian missions involve civilian personnel, mainly seconded by Member States, such as judges or police officers assisting with post-conflict reconstruction of a country’s institutions by providing training and advice to national authorities. In 2017, around 1 880 staff took part in 10 civilian missions (see [Figure 1](#)).

²⁴ Special Report No 15/2018 “Strengthening the capacity of the internal security forces in Niger and Mali: only limited and slow progress” and Special Report No 7/2015 “The EU police mission in Afghanistan: mixed results”.

Figure 1 – Location and size of CSDP missions and operations – December 2017



* This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence.

Source: ECA, based on EEAS, CSDP Missions and Operations Annual Report 2017 and EUISS Yearbook of European Security 2018.

Defence cooperation in Europe and beyond

29 The EU is one of several cooperation frameworks in the field of defence. The CSDP is part of a complex European security and defence architecture that is shaped by a multitude of frameworks or ‘clusters’ of cooperation, either at bilateral or multilateral levels, outside the EU institutional framework. In recent years, these clusters have developed both in quantitative and qualitative terms²⁵. These initiatives are of varying nature and size, and operate both in the field of (i) development and acquisition of capabilities and (ii) operations.

30 Two international organisations – NATO and the United Nations (UN) – play a crucial role in the area of peacekeeping and other civil and military operations.

²⁵ Dick Zandee, “Clusters: the drivers of European Defence”, *Nação e Defesa* No 150, 2018.

NATO

31 NATO is the most powerful military alliance in the world. Its core tasks are collective defence, crisis management and cooperative security²⁶. The principle of collective defence that entails mutual assistance between allies is enshrined in NATO's founding treaty²⁷.

32 Considering their overlapping membership²⁸, the EU and NATO share common security challenges and thus common defence interests. For the majority of EU Member States, European defence mainly consists of two important layers: Member States' own self-defence capability and the collective defence offered by NATO. In this context, EU-NATO cooperation "constitutes an integral pillar of the EU's work aimed at strengthening European security and defence"²⁹. As indicated in the EUGS³⁰, for most EU Member States, NATO remains the primary framework when it comes to collective defence. At the same time, the fact that certain EU Member States are not members of NATO means that "they have different European Defence Union obligations"³¹. This does not prevent cooperation with non-NATO EU Member States from being "an integral part of EU-NATO cooperation"³².

33 To fulfil its tasks of deterrence and collective defence, NATO aims to cover the entire capability spectrum, including nuclear, conventional and ballistic missile defence capabilities. It has a clear political-military chain of command supported by a command structure "composed of permanent multinational headquarters at the strategic, operational and component levels of command"³³ with a staff of around 6 800. In

²⁶ https://www.nato.int/cps/en/natohq/topics_133127.htm.

²⁷ Article 5 of the North Atlantic Treaty.

²⁸ 22 EU Member States are NATO allies, and six EU Member States (Austria, Cyprus, Finland, Ireland, Malta and Sweden) are not part of NATO, whereas several NATO members are not part of the EU (Albania, Canada, Iceland, Montenegro, Norway, Turkey and the United States).

²⁹ Third progress report on the implementation of the common set of proposals endorsed by EU and NATO Councils on 6.12.2016 and 5.12.2017, June 2018.

³⁰ "EU Global Strategy for Foreign and Security policy", June 2016.

³¹ European Parliament resolution of 13.6.2018 on EU-NATO relations, 2017/2276(INI).

³² Council conclusions on the third progress report on the implementation of the common set of proposals endorsed by the EU and NATO Councils, June 2018.

³³ "The NATO Command Structure", *NATO Factsheet*, February 2018.

addition, through the NATO Force Structure, NATO Member countries provide forces and headquarters on a permanent or temporary basis for the purpose of NATO's operations.

34 Relations between the EU and NATO were formalised in 2001 and have led to a strategic partnership being built up. Following the EU-NATO joint declaration in 2016³⁴, a set of 74 measures are currently being implemented in several areas earmarked for enhanced cooperation: hybrid threats, operational cooperation including maritime issues, cyber security and defence, defence capabilities, defence industry and research, exercises, defence and security capacity-building, and EU-NATO dialogue.

The UN

35 Since CSDP missions and operations began in 2003, the EU and the UN have operated as partners in the field of crisis management and civilian, police and military peacekeeping. Most CSDP missions and operations are actually deployed in the same geographical areas as UN missions, providing the ground for greater cooperation. In September 2018, the EU and the UN reinforced their strategic partnership on peace operations and crisis management for the 2019-2021 period.

36 Collectively, the EU and its Member States are the largest financial contributors to the UN system. The EU Member States funded more than 31 % of the budget for UN peacekeeping operations³⁵ in 2017. In 2019, almost 6 000 soldiers, police and experts came from the EU Member States, accounting for around 6.5 % of UN peacekeeping personnel³⁶. On occasion, such as in Bosnia and Herzegovina or in the Democratic Republic of Congo earlier on, EU missions took over from UN missions.

³⁴ <https://www.consilium.europa.eu/media/21481/nato-eu-declaration-8-july-en-final.pdf>. A second joint declaration was signed on 10.7.2018, https://www.consilium.europa.eu/media/36096/nato_eu_final_eng.pdf.

³⁵ The European Union at the United Nations, *Fact sheet*, 21.9.2018.

³⁶ In total, 89 480 served on UN peacekeeping operations in early 2019, including 5 965 from EU Member States. UN, Summary of Troop Contributing Countries by Ranking, 28.2.2019.

1.2 Recent developments at EU level: a new level of ambition

The EU Global Strategy and the European Defence Action Plan

37 The European Union Global Strategy³⁷ (EUGS) provides a strategic vision to underpin EU foreign policy³⁸. The EUGS is based on five priorities, including the security of the Union, and an integrated approach to conflicts and crises³⁹.

38 The EUGS cites strategic autonomy as an objective for the Union. Strategic autonomy is defined as the “ability to act and co-operate with international and regional partners wherever possible while being able to operate autonomously where and when necessary”⁴⁰.

39 Drawing on the EUGS and its subsequent Implementation Plan on Security and Defence (IPSD), the Council set the level of ambition for the EU in November 2016⁴¹ (see [Box 1](#)).

Box 1

EU level of ambition

The EU level of ambition has a political and military dimension⁴². It derives from successive texts drawn up between 1999 and 2016.

³⁷ “Shared vision, Common Action: A Stronger Europe, A Global Strategy for the European Union’s Foreign and Security Policy”, June 2016.

³⁸ In the continuity of a process initiated in December 2013, the European Council of June 2015 mandated the HR/VP to “continue the process of strategic reflection with a view to preparing an EU global strategy on foreign and security policy in close cooperation with Member States”. The European Council welcomed the EUGS in June 2016 and the Council adopted conclusions on implementing the EU global strategy in November 2016.

³⁹ The five priorities are: “The security of our Union; State and Societal Resilience to our East and South; An Integrated Approach to Conflicts and Crises; Cooperative Regional Orders; and Global Governance for the 21st Century”.

⁴⁰ “Implementation Plan on Security and Defence”, 14.11.2016.

⁴¹ Council conclusions on implementing the EU Global Strategy in the area of security and Defence, 14.11.2016.

⁴² “Protecting Europe: meeting the EU’s military level of ambition in the context of Brexit”, *IISS and DGAP*, November 2018.

Political dimension

From a political perspective, the latest EU level of ambition is set in the EUGS and its IPSP. The EUGS mentions three strategic priorities in the field of security and defence: (i) responding to external conflicts and crises; (ii) building up the capacities of partners; and (iii) protecting the Union and its citizens⁴³.

Military dimension

From a military perspective, these objectives require “full-spectrum defence capabilities”⁴⁴. However, the EUGS did not lead to a complete review of the types of operations the EU and its Member States should be able to carry out⁴⁵. The EU’s current military level of ambition still derives from (i) the TEU and (ii) the Headline Goals⁴⁶.

- Under the TEU⁴⁷, the EU and its Member States should be able to carry out the following operations: “joint disarmament operations, humanitarian and rescue tasks, military advice and assistance tasks, conflict prevention and peace-keeping tasks, tasks of combat forces in crisis management, including peace-making and post-conflict stabilisation”⁴⁸.
- The Headline Goals refer to the ability to deploy 50 000 to 60 000 personnel rapidly for the most demanding tasks within 60 days, and to sustain them for at least one year⁴⁹.

⁴³ The three strategic priorities were explained further in the Council Conclusions on implementing the EUGS in the area of Security and Defence dated 14.11.2016.

⁴⁴ “Shared vision, Common Action: A Stronger Europe, A Global Strategy for the European Union’s Foreign and Security Policy”, June 2016.

⁴⁵ “Protecting Europe: meeting the EU’s military level of ambition in the context of Brexit”, *IISS and DGAP*, November 2018.

⁴⁶ Headline Goals expresses the political goal of the EU with regard to crisis management tasks, including the military level of ambition. The latest formulation refers to the targets set for 2010.

⁴⁷ Article 43(1) TEU.

⁴⁸ The Annex to the Council Conclusions on implementing the EUGS in the area of Security and Defence dated 14.11.2016 further illustrates the types of possible CSDP civilian missions and military operations that derived from the EU level of ambition.

⁴⁹ Based on the ambition agreed by the European Council in December 2008, the EU should be able to undertake a number of civilian and military missions and operations simultaneously, based on different scenarios.

40 The Commission presented a European Defence Action Plan⁵⁰ in November 2016, dealing with industrial aspects of defence. The plan entails:

- o setting up a European Defence Fund⁵¹ to support a competitive and innovative defence industry in Europe;
- o promoting investment in small and medium-sized enterprises (SMEs) and mid-caps along the defence supply chain, through EU funds and financial support from the European Investment Bank⁵² for dual-use technologies;
- o reinforcing the Defence Single Market through effective implementation of the Defence Procurement Directive⁵³ and the Defence Transfers Directive⁵⁴.

Defence spending in the EU

41 Defence-related expenditure in the EU falls into three categories:

- (1) national expenditure by EU Member States;
- (2) spending from the EU budget;
- (3) mechanisms that are part of the EU framework but funded by Member States outside the EU budget (mostly intergovernmental arrangements)⁵⁵.

⁵⁰ European Defence Action Plan, Communication from the Commission, COM(2016) 950 final, November 2016.

⁵¹ European Commission, Proposal for a Regulation of the European Parliament and of the Council establishing the European Defence Fund”, COM(2018) 476 final, 13.6.2018.

⁵² Under the European Security Initiative, the European Investment Bank will provide €6 billion of funding for dual-use R&D, cybersecurity civilian security between 2018-2020. “The EIB Group Operating Framework and Operational Plan 2018”, 12.12.2017.

⁵³ Directive 2009/81/EC of the European Parliament and of the Council of 13 July 2009 on the coordination of procedures for the award of certain works contracts, supply contracts and service contracts by contracting authorities or entities in the fields of defence and security.

⁵⁴ Directive 2009/43/EC of the European Parliament and of the Council of 6 May 2009 simplifying terms and conditions of transfers of defence-related products within the Community.

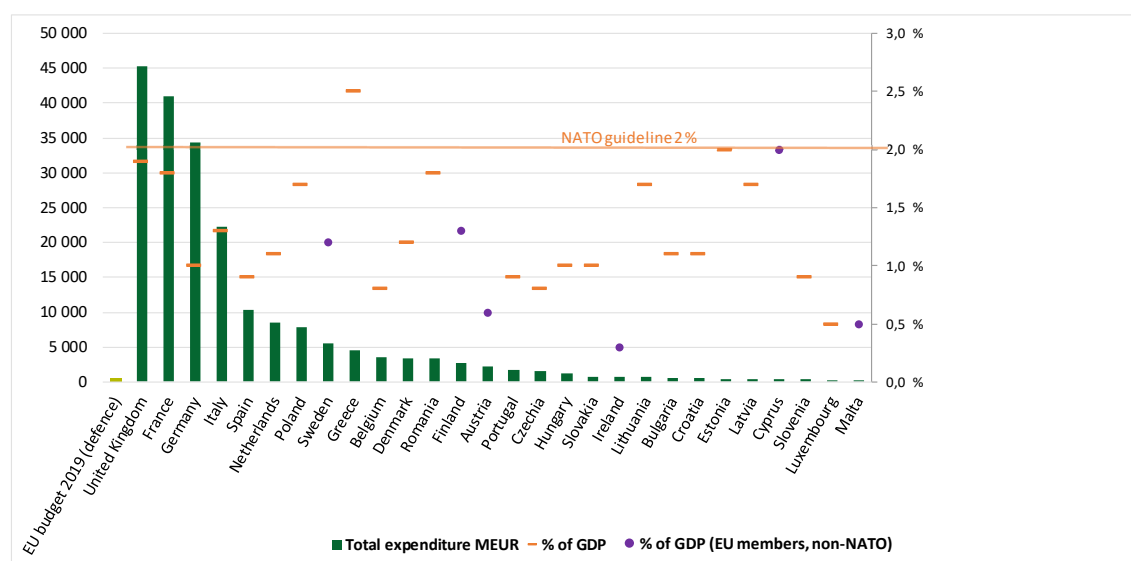
⁵⁵ Expenditure included under this heading is actually part of the national expenditure of EU Member States (1). It is presented separately for the sake of clarity.

42 The EU's higher level of ambition is reflected in a significant increase in the amount earmarked for defence in the EU budget, in particular for the next MFF (see paragraph 52). Though the EU's defence spending is due to increase in the near future, it is minor (on average about €3 billion annually), and accounts for less than 2 % of the Member States' overall military spending. In fact, defence spending mainly occurs at national level.

National budgets of EU Member States

43 In 2017 alone, the EU's 28 Member States earmarked over €200 billion of public expenditure for 'defence'. National defence budgets are much larger than the EU defence budget: in total, they represent about 75 times the EU's defence spending under the current MFF. *Figure 2* shows overall defence spending per EU Member State in 2017.

Figure 2 – Defence expenditure in the EU – National budgets in 2017⁵⁶



Source: ECA, based on Eurostat data.

EU budget

44 The use of the EU budget for defence is limited in nature (by Treaty, see paragraph 14) and amount. The main funding programme for this purpose is the CFSP budget chapter (see *Table 1*).

⁵⁶ For comparison purposes, defence funding in the EU budget for 2019 is included.

Table 1 – Main operational budget lines related to CFSP actions and security/defence expenditures, current 2014-2020 MFF

Budget line	Heading	2019 budget (million euros)	2014-2020 (million euros)
Common Foreign and Security Policy			
19 03 01	CFSP: support for preservation of stability through common foreign and security policy (CFSP) missions and European Union Special Representatives	314	2 066
19 03 02	CSFP: Support for non-proliferation and disarmament	20	
Instrument contributing to Stability and Peace			
19 02 01	Capacity building in support of security and development	30	100
19 02 02			
21 05 01			
Competitiveness and innovation capacity in the defence industry			
02 04 77	Preparatory action on defence research (PADR)	25	90
02 07 01	European Defence Industrial Development Programme (EDIDP)	245	500
TOTAL		634	2 756

Source: ECA.

45 The EU budget finances only civilian CSDP missions. Military operations are financed by the Member States (see paragraph 49). In addition, based on the provisions of the TFEU, the EU budget is used to support defence-oriented R&D activities.

46 Indeed, the establishment of two pilot programmes (the PADR and the EDIDP) illustrates the scaling-up of EU defence funding. Starting in 2017 for the research strand, the PADR allows research projects for military purposes to be funded directly through the EU budget for the first time (see paragraph 124 to 127).

47 In addition to the funding dedicated to R&D projects with a defence application, the EU budget also supports dual-use technologies. Depending on their objectives, European defence companies can access a variety of funding programmes, in particular funds to make enterprises and SMEs more competitive (COSME), and satellite systems for navigation and earth observation (Galileo and Copernicus)⁵⁷.

⁵⁷ For a full list of EU funds supporting civilian and dual-use projects, see the [EDA's Funding Gateway](#). Companies established in Europe can also receive support from the European

EU mechanisms financed by Member States outside the EU budget

48 Several European-level mechanisms, e.g. the European Defence Agency, are funded directly by EU Member States. The Member States' contributions fund the Agency's general budget⁵⁸. In addition, EU Member States can decide whether to participate in Agency projects according to national needs using an ad hoc approach.

49 On the operational side, CSDP military missions are financed by the participating Member States through two channels: (i) provision of personnel, services and assets, nationally financed, according to the 'costs lie where they fall principle, and (ii) a pooling mechanism known as "Athena".

50 Athena is an off-budget instrument which pools funds from Member States⁵⁹. It finances the common costs⁶⁰ of EU military operations, but assumes only a limited share of the total costs (5 %-15 %); the vast majority of costs⁶¹ are borne directly by the Member States on an individual basis. Six active EU military operations currently receive Athena funding, representing an annual budget of around €78 million. *Figure 3* illustrates the sources of funding according to the nature of costs and types of CSDP missions.

Network of Defence-related Regions www.endr.eu, whose objective is to increase the number of defence-related projects accessing EU funding.

⁵⁸ In 2018, the EDA's general budget was €33 million and its total budget was about €94 million.

⁵⁹ Member States contribute according to a Gross National Income scale. Non-EU countries participating in CSDP missions contribute on an ad-hoc basis.

⁶⁰ Such as running costs of headquarters, infrastructure, medical services, etc.

⁶¹ Costs related to military staff, equipment, etc.

Figure 3 – Funding of CSDP missions

		Source of Funding		
		EU general budget	Member States (except Denmark)	
			Athena mechanism (collective funding)	National funding
CSDP missions	Civilian	Administrative* and operational costs		
	Military	Administrative costs*	Common operational costs	Individual operational costs

* The EU budget can cover administrative costs only for the EU institutions (Article 41(1) TEU).

Source: ECA.

51 Also outside the EU budget, the European Development Fund supports the African Union's efforts in the area of peace and security – including military training or equipment for Africa-led operations – through the African Peace Facility (APF)⁶².

Proposals for the future

52 The Commission's proposal for the 2021-2027 MFF reflects the ambition to have defence play a more prominent role in the future. With about €22.5 billion allocated to defence in the EU budget⁶³, this represents a major increase compared to the €2.8 billion for the 2014-2020 period. **Figure 4** shows the main changes between the current MFF and the proposals for the next one.

53 Off-budget instruments are expected to play a significant role in the future funding of operational actions under the Common Foreign and Security Policy (CFSP) that have military or defence implications⁶⁴, as illustrated by the proposal to set up a European Peace Facility (EPF) outside the MFF.

54 The EPF, which is expected to be worth €10.5 billion over the 2021-2027 period, builds on and merges existing mechanisms⁶⁵ into a single Fund with the objective of

⁶² For an overview of the African Peace Facility, see Special Report No 20/2018 "The African Peace and Security Architecture: need to refocus EU support".

⁶³ €13 billion proposed for the European Defence Fund, €6.5 billion allocated to military mobility and €3 billion proposed for the CFSP.

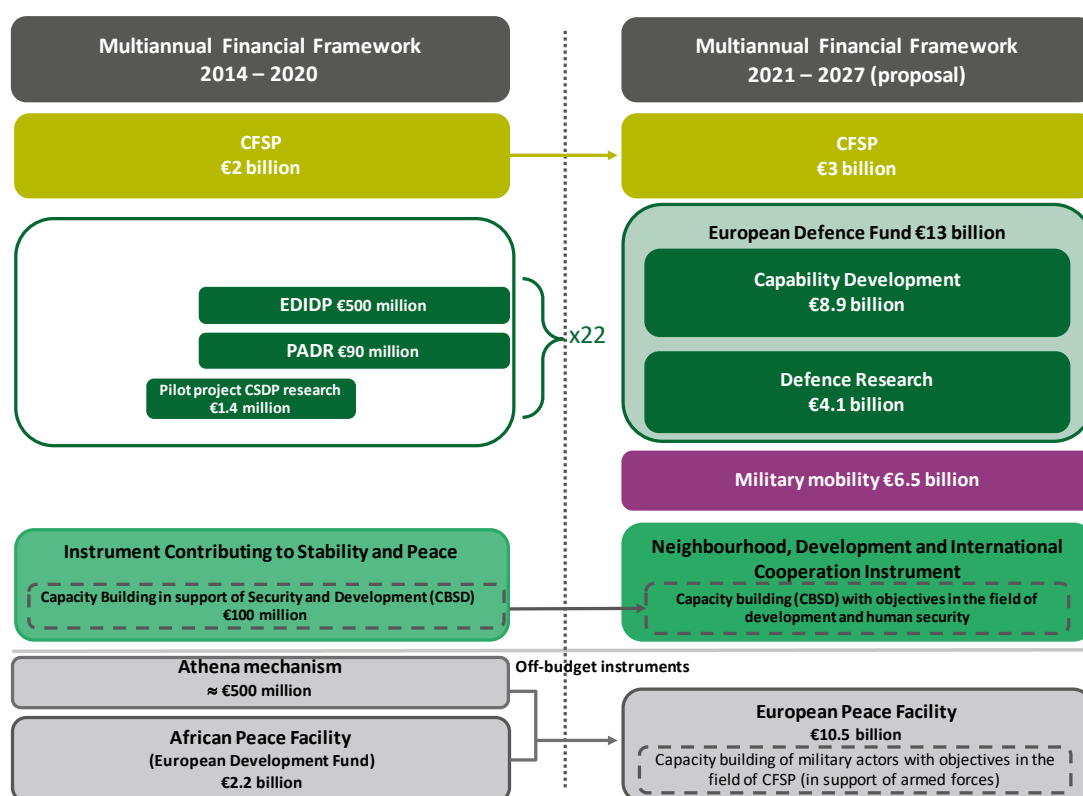
⁶⁴ "European Peace Facility: An EU off-budget fund to build peace and strengthen international security", *EEAS factsheet*, June 2018.

⁶⁵ The APF and the Athena mechanism.

overcoming their existing gaps and limitations and “enhanc[ing] the Union’s ability to preserve peace, prevent conflicts and strengthen international security”⁶⁶. The proposal focuses on three main areas:

- (1) facilitating EU military operations by providing a permanent fund with an enhanced scope of common costs compared to the Athena mechanism⁶⁷;
- (2) expanding the EU’s scope for financing peace support operations to third states and international organisations on a global scale⁶⁸;
- (3) broadening EU support for the capability-building activities of armed forces in partner countries.

Figure 4 – Proposed changes in EU defence funding



Source: ECA.

⁶⁶ Proposal of 13.6.2018 of the High Representative of the Union for Foreign Affairs and Security Policy, with the support of the Commission, to the Council for a Council Decision establishing a European Peace Facility (HR(2018) 94).

⁶⁷ As a result, the common costs of a military operation are expected to reach 35 %-45 % of overall mission costs compared to 5 %-15 % under the current Athena mechanism.

⁶⁸ Through the APF, this support is currently limited to Africa and the African Union.

1.3 Risks associated with the EU's new defence ambition

55 The EU's defence-related initiatives represent attempts in an area where the EU has had little experience in the past. Political statements associated with the new initiatives may have raised expectations that the EU may not be able to meet⁶⁹. As things stand, there is a risk that adequate goals may not have been set and proper systems may not be in place to accommodate such an increase in EU spending and the new level of ambition set in the EUGS.

An ambition for EU defence policy

56 Defence is a specific domain which lies at the heart of national sovereignty. EU defence decisions are therefore the result of a political process entailing compromise between multiple rationales and interests.

57 In this context, there are clear strategic differences between EU Member States⁷⁰:

- o they do not share a common perception of threats;
- o they have different institutional frameworks with different rules of engagement and a wide range of views on the use of military force;
- o ultimately, they do not share a common vision on the role of the EU.

58 For instance, some Member States tend to focus on territorial defence against the military threats posed by Russia, while others are more oriented towards security challenges originating in North Africa and the Middle East⁷¹. Some Member States have a tradition of neutrality, while others are willing to participate in high-spectrum operations.

59 In such a context, some concepts, such as "strategic autonomy" or "a European army", are broad and vague. Such terms can be perceived as counter-productive to

⁶⁹ S. Blockmans, "The EU's modular approach to defence integration: An inclusive, ambitious and legally binding PESCO?", 2018.

⁷⁰ J-D. Giuliani, "Defence: Europe's awakening", *European issues* 474, Fondation Robert Schuman, May 2018.

⁷¹ "In Defence of Europe: Defence integration as a response to Europe's strategic movement", EPSC Strategic note, June 2015.

relations and cooperation with NATO, an area which is crucial for the majority of EU Member States.

Strategic autonomy and level of ambition

60 Europe's strategic autonomy is one of the key concepts in the EUGS (see paragraphs 37 to 39)⁷². However, the fact that Member States do not share a common understanding of what such autonomy entails, means that the EUGS' political level of ambition was not fully translated in military terms⁷³. Both the concept of strategic autonomy and the level of ambition, including the reference to "full-spectrum defence capabilities" are vague about what they mean in terms of defence⁷⁴.

61 The EUGS, in particular its third strategic priority "the protection of Europe and European citizens" lacks a clear, complete and detailed military expression. Key questions remain unanswered, for instance: is the autonomous EU level of ambition limited to operations outside the EU? Or does it mean that Member States should also be capable of defending their own territory⁷⁵? Some experts therefore consider that there is confusion about the EU's defence objectives⁷⁶.

62 In addition, the EUGS' high level of ambition (see [Box 1](#)) contrasts with the Member States' available resources and relevant capabilities. Several EU countries have problems even meeting their contribution to NATO⁷⁷, which is the primary defence network for most Member States (see [Figure 2](#)). There is therefore a clear gap

⁷² The concept is regularly mentioned in EU official documents. For instance, the June 2019 Council stated that "By addressing Europe's current and future security and defence needs, the EU is enhancing its capacity to act as a security provider, its strategic autonomy and its ability to cooperate with partners".

⁷³ Jo Coelmont, European Strategic Autonomy: "Which Military Level of Ambition?", March 2019.

⁷⁴ Thierry Tardy, "The return of European Defence?", *European issues* 474, Fondation Robert Schuman, May 2018.

⁷⁵ Sven Biscop, "EU-NATO relations: a long-term perspective", *Nação e Defesa*, November 2018.

⁷⁶ Frédéric Mauro and Olivier Jehin, *Institut de Relations Internationales et Stratégiques* (IRIS) and Group for Research and Information on Peace and Security (GRIP), "A European Army to do what?", April 2019.

⁷⁷ At the 2014 Wales summit, NATO's member states committed to spending at least 2 % of their GDP on defence by 2024.

between what the Member States are expected to do and what they can agree on and deliver⁷⁸.

“European Army”

63 Although the concept of a European army is not mentioned in recent official EU documents, it has received renewed widespread attention in the public and political spheres and so merits further examination in this review. Indeed, the establishment of a European army, which had already been envisaged in the 1950s⁷⁹, is a recurring concept in the area of EU defence that has recently re-emerged. However, political declarations about the creation of a European army are ambiguous and unrealistic “in the foreseeable future”⁸⁰. Some former military officials have questioned the relevance of a European army, thus showing that the prerequisites for one are not in place⁸¹.

64 EU Member States do not all agree about the meaning of “European defence”. The lack of a common strategic culture or shared vision of the use of force, and a decision-making process that is based on unanimity, makes it unlikely that Member States could reach a consensus to deploy military forces for high-spectrum interventions⁸². Some experts consider that, if pushed too far, the concept of European Army could lead to deeper divisions between EU Member States⁸³.

65 This explains why previous deployments of force did not take place under the EU banner, but rather on national grounds or under ad-hoc coalitions. For instance, EU battlegroups have never been deployed, despite being operational since 2007. The 35 missions and operations implemented under the CSDP were mainly of a civilian nature

⁷⁸ Herbert Sailer, “EU Capability Development”, CSDP Handbook, May 2017.

⁷⁹ The treaty establishing the “European Defence Community” in 1952 provided for a common armed force, a common budget and common institutions.

⁸⁰ Sophia Besch, Centre for European Reform, “An EU Army? Four reasons it will not happen”, May 2016.

⁸¹ For instance, [General Charles-Henri Delcour](#), Belgium’s former Chief of Defence.

⁸² Dick Zandee, “Core groups: the way to real European Defence”, Egmont Royal Institute for International relations, February 2017.

⁸³ See for instance Vladimir Bilcik, “After the EU global strategy: Consulting the Experts”, 2016.

or were low-intensity military operations focused on crisis management⁸⁴. The EU did not participate in the most demanding military operations, such as those in Libya or Syria. Also, it has not been involved in “the defence and deterrence in the narrow sense of military protecting territories [and] populations”⁸⁵ in Europe.

66 Based on a review of publications on the topic⁸⁶, a real and credible army would require several key elements, including⁸⁷:

- a permanent standing force funded by a common budget;
- common defence planning to develop and acquire common capabilities;
- autonomous military capabilities, including fully-fledged command and control;
- an effective decision-making process with a unique chain of command and clear leadership with the authority and legitimacy to engage armed forces;
- civilian and democratic control over the military and the use of armed forces.

67 It is clear that such elements are unlikely to be present at EU level in the near future. Building a so-called EU army entails transferring national sovereign powers to the EU supranational level, which several Member States are opposed to⁸⁸.

68 In terms of capabilities, building an army requires a significant amount of time and money. To illustrate the amounts involved and without providing an estimate of the budget needed to build up an army, the EU’s NATO Members would need to invest

⁸⁴ Frédéric Mauro and Olivier Jehin, *Institut de Relations Internationales et Stratégiques* (IRIS) and Group for Research and Information on Peace and Security (GRIP), “A European Army to do what?”, April 2019.

⁸⁵ Claudia Major, Carnegie Europe, “Credible EU defence means rethinking sovereignty”, June 2017.

⁸⁶ E.g. Frédéric Mauro and Olivier Jehin, *Institut de Relations Internationales et Stratégiques* (IRIS) and Group for Research and Information on Peace and Security (GRIP), “A European Army in what form?”, April 2019.

Judy Dempsey and experts’ contributions, Carnegie Europe, “Does the EU need its own Army?”, March 2015.

⁸⁷ The elements are not a complete list of the requirements for setting up an army.

⁸⁸ Claire Mills, “EU Defence: Where is it heading”, May 2019.

an additional € 90 billion annually just to meet the 2 % GDP guideline, i.e. about a 45 % increase compared to their 2017 level of spending⁸⁹.

Coherence with NATO

69 The coherence of EU initiatives and their synergies with other frameworks, in particular NATO, is essential. As Member States participate in several cooperation frameworks (see paragraph 29), this may dilute the respective benefits and lead to competing practices and duplication of processes.

70 This is particularly true where NATO is concerned, as EU initiatives may lead to or be perceived as duplication. Though welcoming EU defence initiatives, NATO's Secretary-General has warned on several occasions that duplication and competition between the EU and NATO⁹⁰ may ultimately weaken the transatlantic link and thus the security of Europe. Similarly, in May 2019, the US administration also emphasised that new EU initiatives may “produce duplication, non-interoperable military systems, diversion of scarce defence resources and unnecessary competition between NATO and the EU”⁹¹.

71 EU-NATO complementarity is a key point that has been repeatedly stressed in EU official documents⁹². NATO is responsible for the collective defence of its members. EU Member States have a single set of forces; therefore, in order to avoid inefficient use of the taxpayer's money, a critical point and a key priority for the near future is whether the EU is able to complement NATO and so avoid duplication and overlapping functions with it. Efficiency means avoiding all forms of unnecessary duplication, be they of processes, structures such as operational command, or outputs.

⁸⁹ ECA calculation based on Eurostat data.

⁹⁰ For instance, https://www.nato.int/cps/en/natohq/opinions_160495.htm and https://www.nato.int/cps/en/natohq/opinions_160241.htm.

⁹¹ Guy Chazan and Michael Peel, *Financial Times*, “US warns against European joint military project”, 14.5.2019.

⁹² For instance, “EU Global Strategy for Foreign and Security policy”, June 2016, European Parliament resolution of 13.6.2018 on EU-NATO relations, 2017/2276(INI), Fourth progress report on the implementation of the common set of proposals endorsed by NATO and EU Councils on 6.12.2016 and 5.12.2017, 17.6.2019.

72 Recent steps were reported in EU-NATO cooperation⁹³. One good example of EU-NATO complementarity is military mobility, which illustrates potential synergies and complementarity between both organisations (see [Box 2](#)).

Box 2

Military mobility

Unlike civilian means of transport that can move freely within the Schengen zone, military personnel and equipment cannot simply cross borders⁹⁴.

This hinders EU Member States' capacity to respond to crises, both outside EU territory under the CSDP, or in other frameworks, such as NATO, so as to ensure the territorial defence of Europe. Military mobility has been identified as a priority area for EU-NATO cooperation.

The EC launched an Action Plan on military mobility in March 2018⁹⁵, with a proposed €6.5 billion allocation for the next MFF. The plan proposes operational measures for military requirements, transport infrastructure and procedural issues, taking account of inputs from NATO. It also aims to develop civilian-military synergies, notably through the dual use of the Trans-European Transport Network.

73 As shown throughout the first part of this review and despite recent developments in EU defence policy, Member States remain in the driving seat when it comes to European defence. Their leading role is supported by legal, institutional and financial considerations.

⁹³ "Fourth progress report on the implementation of the common set of proposals endorsed by NATO and EU Councils on 6 December 2016 and 5 December 2017", 17.6.2019.

⁹⁴ "Defending Europe: Improving military mobility in the European Union", *European Commission factsheet*, 2018.

⁹⁵ European Commission and HR/VP joint communication to the European Parliament and the Council on the Action Plan on Military Mobility, JOIN(2018) 5 final, March 2018.

2. EU Member States' defence capabilities and industries: a global position challenged

74 In the second part of this review, we look at European Defence from both capability and industry perspectives, with the aim of presenting the new EU initiatives developed in these areas and their underlying risks.

2.1 Strengths and weaknesses of Member States' capabilities

Measuring military capabilities

75 In military terms, capability is “a combination of means and ways to perform a set of tasks”⁹⁶. This broad definition includes equipment and personnel, as well as their operational readiness and ability to sustain operations over time. Military capabilities ultimately aim to provide a comparative military advantage in deterring or fighting against potential or actual enemies.

76 Measuring military capabilities and a country's military power are complex, and require both quantitative and qualitative data which are often not available to the public. In addition, for any given country, the strengths and weaknesses associated with military capabilities can only be assessed against: (i) the threats identified; (ii) the capabilities of potential enemies; and (iii) the capabilities of allies.

77 Given the above, this section aims to highlight some key considerations of the Member States' military capabilities on the basis of publicly available information. It does not constitute a comprehensive assessment of their military power.

⁹⁶ The EUMC Glossary of Acronyms and Definitions (2017) defines military capability as “A combination of means and ways to perform a set of tasks or achieve an effect to a standard under specified conditions. Military capability usually includes four major components: Force Structure – personnel, numbers, size and composition of the forces; Configuration – technical sophistication of forces and equipment; Readiness – ability to provide capabilities required by the combatant commanders to execute their assigned missions; Sustainability – ability to maintain the necessary level and duration of operational activity to achieve military objectives”.

78 The military capability landscape in the EU continues to reflect Member States' history, geography and national interests⁹⁷. For example, France and the UK aim to undertake full-spectrum – including high-end – operations, involving expeditionary forces to be deployed outside the EU. Germany, on the other hand, prioritises territorial defence with more heavy formations⁹⁸.

Quantitative indicators

79 A first global indicator generally associated with military capabilities is the defence budget. Without examining the efficient use of the resource, this indicator nevertheless provides a general idea of the size and power of the military in absolute and comparable terms. In this respect, the EU Member States are collectively the world's second largest spender on defence, after the United States (see [Figure 8](#)). However, significant and uncoordinated cuts in their defence budgets between 2005 and 2015, together with under-investment, have affected their military capabilities⁹⁹.

80 A second key indicator is the scale of military manpower. When national military personnel are counted together, the EU's Member States have the second largest army in the world¹⁰⁰. Over the last decade, the consolidated number of military personnel has decreased by 23 %. The total number of deployable and sustainable land forces has also fallen, but to a lesser extent ([Figure 5](#)).

⁹⁷ Dick Zandee, "Core Groups: The way to Real European Defence", Egmont – Royal Institute for International Relations, February 2017.

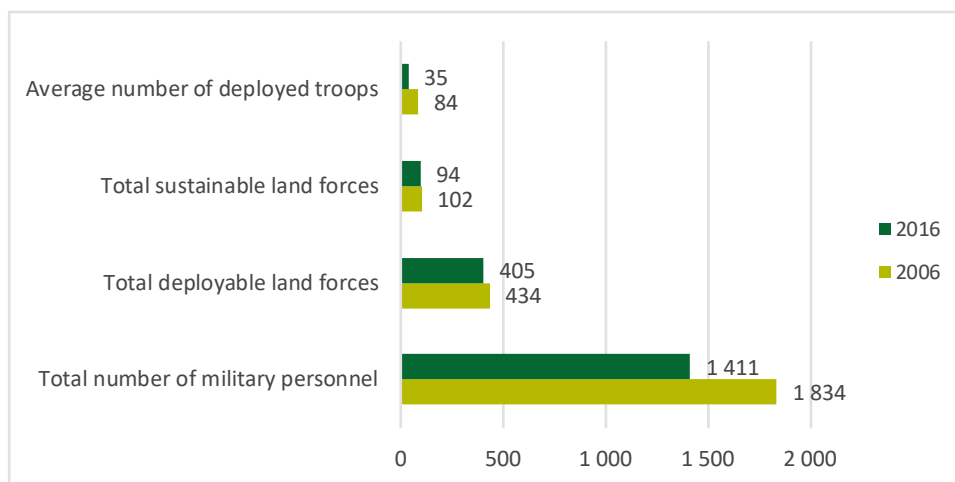
⁹⁸ Margriet Drent, Eric Wilms, Dick Zandee, "Making sense of European Defence", December 2017.

⁹⁹ European Commission, Proposal for a Regulation of the European Parliament and of the Council establishing the European Defence Fund", COM(2018) 476 final, 13.6.2018.

McKinsey, "More European, More Connected and More Capable: Building the European Armed Forces of the Future", 2017.

¹⁰⁰ After China, IISS military balance 2019 and European Political Strategy Centre, Strategic Note 4/2015, "In Defence of Europe", 15.6.2015, p. 3.

Figure 5 – Evolution of the military personnel of EDA Member States – 2006-2016 (thousands)



Source: ECA, based on EDA data.

81 In terms of consolidated capabilities and range, the EU Member States possess, after the United States, a significant share of military capabilities ([Table 2](#)), even though most of their available conventional equipment has been reduced since 2000 ([Figure 6](#)).

Table 2 – EU and other military powers – selected military equipment, 2018



* Data not available for Russia.

Source: ECA, based on International Institute for Strategic Studies (IISS) Military Balance 2019.

Figure 6 – Evolution of selected military equipment of EU28 – 2000-2018 (number of units)

	2000	2010	2018	2018/2000
Main battle tanks	15 868	7 131	4 324	-73 %
Armoured infantry fighting vehicles	8 644	7 379	6 571	-24 %
Tactical aircraft	2 949	2 296	1 863	-37 %
Tanker aircraft	77	66	47	-39 %
Attack helicopters	283	360	373	32 %
Principal surface combatants	172	146	121	-30 %
Submarines	86	66	62	-28 %
Unmanned aerial vehicles	22	127	230	945 %

Source: ECA, based on IISS Military Balance.

Qualitative analysis

82 Analysis of military capabilities goes further than a review of quantitative data. In particular, the quality and type of capabilities available are also of crucial importance in supporting the effectiveness of military forces. Cuts in national defence budgets, coupled with a greater number of more intense operations, have placed existing capabilities under serious strain. Less frequent renewals of equipment have led to ageing military capabilities¹⁰¹, with less readiness and usability in operational terms and greater maintenance and repair times and costs (see [Box 3](#)).

Box 3

Example of readiness issues - Germany¹⁰²

The recent annual reports of the German Parliamentary Commissioner for the Armed Forces have highlighted recurring materiel deficiencies across all army departments. The 2017 report mentioned “the actual readiness of the Bundeswehr’s major weapons system is dramatically low in many areas”¹⁰³.

For instance, only 39 % of Leopard 2 battle tanks were available for use due to a lack of spare parts. At times, none of the six submarines were available and less than half of the Eurofighters and Tornado combat aircraft were able to fly. In addition to the potential incapacity to deploy forces rapidly, this situation also occasionally prevented military staff from training adequately.

83 The Member States’ military capabilities are also characterised by a high level of duplication and fragmentation, meaning that European armed forces are less interoperable¹⁰⁴. In 2017, there were 178 different weapons systems in use in the EU, compared to 30 in the US¹⁰⁵. The wide variety of systems in operation – and thus the lack of common technical standards – is detrimental to the interoperability of the

¹⁰¹ For instance, around 80 % of the resources for sea control, frigates and corvettes are more than 15 years old (*source*: EDA, “Future capabilities, emerging trends and key priorities”, 2018).

¹⁰² 59th and 60th annual report of the [Parliamentary Commissioner for the Armed Forces](#), Dr Hans-Peter Bartels.

¹⁰³ 59th annual report of the Parliamentary Commissioner for the Armed Forces, Dr Hans-Peter Bartels, 20.2.2018, p. 41.

¹⁰⁴ “Joining Forces, the way towards the European Defence Union”, European Political Strategy Centre, 14.2.2019.

¹⁰⁵ “Defending Europe – The case for greater EU cooperation on security and defence”, *European Commission factsheet*, 2017.

various armed forces in Europe. In a context where collaborative missions and operations are the norm, an appropriate degree of interoperability is vital for effective (co-)operation.

84 The lessons learnt from operational interventions in Libya (2011) and Mali (2013-2014) led to the identification of critical capability shortages, as evidenced on the ground by heavy reliance on United States strategic capabilities¹⁰⁶. In particular, the lack of strategic enablers¹⁰⁷ such as precision-guided munitions, air-to-air refuelling, command and control, or intelligence surveillance and reconnaissance were reported by both the EU and its allies¹⁰⁸. The same applies to strategic deterrence (including nuclear defence)¹⁰⁹, where EU Member States depend heavily on the United States¹¹⁰.

85 At the same time, Russia, China and other major nations are currently investing large amounts in acquiring high-end capabilities and developing innovative technologies¹¹¹, such as hypersonic weapons. Rapid developments in technology offer new possibilities for armed forces and trigger new military capability needs. As the EUGS acknowledges, there is a need for EU Member States to invest in “digital capabilities to secure data, networks and critical infrastructure within the European digital space”¹¹². In 2017, a report presented at the Munich Security Conference estimated that USD30 to 50 billion in annual investments were needed to close the

¹⁰⁶ “NATO chief: [Mali shows holes in EU defence](#)”, EU Observer, 4.2.2013.

¹⁰⁷ Strategic enablers allow for the deployment, effectiveness and sustainability of military operations.

¹⁰⁸ [Press conference](#) by NATO Secretary-General Anders Fogh Rasmussen, following the Defence Ministers’ meeting, 5.10.2011; and [interview with General Mikhail Kostarakos](#), former Chairman of the European Union Military Committee (EUMC), European Defence Matters, issue 11/2016.

¹⁰⁹ Europe is in particular fully dependent on the US nuclear umbrella, Sven Biscop, *Egmont Paper* 103, Fighting for Europe: Europe strategic autonomy and the use of force, January 2019.

¹¹⁰ “European Strategic Autonomy - Actors, Issues, Conflicts of Interests”, *SWP research Paper*, Barbara Lippert, Nicolai von Ondarza and Volker Perthes (eds.), 2019.

¹¹¹ General report to the NATO Parliamentary Assembly, “Maintaining NATO’s technological edge: strategic adaptation and defence research and development”, October 2017.

¹¹² “EU Global Strategy for Foreign and Security policy”, June 2016.

“interconnectedness and digitisation gap of European Forces”¹¹³ in areas such as connecting platforms and command, control, communications, computers, intelligence, surveillance and reconnaissance.

86 Currently, EU Member States are far from having the required military capabilities they need to match the EU military level of ambition¹¹⁴ (see [Box 1](#)). A recent study by the International Institute for Strategic Studies (IISS) and the German Council on Foreign Relations (DGAP) assesses to what extent the EU is able to fulfil this level of ambition, based on the Member States’ current capabilities and those projected for 2030¹¹⁵. Assuming different contingencies derived from the EU level of ambition, the study concludes that “there are extensive capability gaps across all domains and often less than one-third of the force requirement would be met” and therefore “the European strategic autonomy is limited to the lower end of the operational spectrum”.

87 Moreover, if EU members of NATO had to defend themselves against military aggression without relying on military protection from the US, it is estimated that an investment of several hundred billion euros would be needed to overcome the current capabilities gap. Indeed, assuming a hypothetical scenario of a limited regional war in Europe against a third state, another IISS study “assesses that European NATO members would have to invest between USD288 billion and USD357 billion to fill the capability gaps generated by this scenario”¹¹⁶.

88 Identifying capability priorities is a dynamic exercise. As shown in [Annex III](#), defence capability needs evolve over time, based on the nature of identified threats

¹¹³ Assuming a five-to-seven-year upgrade cycle - “More European, More Connected and More Capable”, Munich Security Conference, McKinsey and Hertie school of governance, 2017.

¹¹⁴ “Coordinated Annual Review on Defence”, *EDA factsheet*, 26.11.2018: “The EU Military Committee’s contribution to the CARD Trial Run established that the EU does not have available all of the required military capabilities necessary for the implementation of the EU CSDP military Level of Ambition (LoA) derived from the EU Global Strategy”.

¹¹⁵ “Protecting Europe: meeting the EU’s military level of ambition in the context of Brexit”, IISS and DGAP, November 2018.

¹¹⁶ D. Barrie et al., “Defending Europe: scenario-based capability requirements for NATO’s European members”, The International Institute for Strategic Studies, April 2019.

and the EU level of ambition¹¹⁷. **Box 4** illustrates some key capability shortfalls, based on available information.

Box 4

Examples of capability shortfalls

Academic articles published between 2016-2019 most often identify examples of capability gaps in the EU Member States in the following areas:



Air – unmanned aerial vehicles (drones), air-to-air refuelling, strategic and tactical airlift, air command and control systems, precision munitions, ballistic missile defence capabilities, anti-access area-denial capabilities, suppression of enemy air defence capabilities;



Space – satellite communication and earth observation, autonomous access to space;



Information superiority – intelligence, surveillance and reconnaissance capabilities;



ICT technologies – cyber warfare, artificial intelligence;



Naval – maritime surveillance, amphibious ships, submarines, overseas deployment capacity;



Strategic enablers – military mobility, strategic transport, and medical evacuation;



Land – ground-based precision strike capabilities, modern armoured fighting vehicles.

The impact of Brexit

89 Without prejudging the outcome of Brexit, the UK's departure from the EU is likely to have consequences for EU defence. The UK has traditionally been Europe's

¹¹⁷ At EU level, the Progress Catalogue 18 (classified document) defines the level of fulfilment of the EU CSDP military level of ambition and presents prioritised EU military capability shortfalls, known as the High Impact Capability Goals. They represent the capability gaps to be addressed in the short (2026) and medium (2032) terms.

biggest spender on defence. In 2017, its defence budget accounted for about one quarter of the EU Member States' total defence spending¹¹⁸. Seen from a different perspective, the UK's departure from the EU means that 80 % of NATO's defence spending will take place in non-EU countries¹¹⁹. Also, British companies have a strong position in the European defence market¹²⁰.

90 In operational terms, the UK's contribution to both CSDP civilian and military missions and operations has been limited overall: it has accounted for about 2.3 % of the Member States' personnel contributions and has provided assets such as naval vessels, aircraft and troop reinforcements on standby¹²¹. On the other hand, the loss of strategic enablers in Air (air-to-air refuelling and intelligence, surveillance and reconnaissance capabilities) and special operation forces are an example of capability domains that would be greatly affected by Brexit.

91 Consequently, the EU27 will have considerably fewer resources to fill in the identified gaps in capabilities and military research. In both areas, shortages will most likely be aggravated by Brexit: even if not evenly distributed across the capabilities spectrum, Brexit would entail a material reduction in the EU's overall existing capabilities (*Figure 7*) and an investment gap in research and development¹²².

¹¹⁸ In 2017, the UK invested €45.3 billion in defence, i.e. 22.1 % of the €205.1 billion spent by the EU28. Eurostat figures, General government expenditure by function (COFOG), published on 22.3.2019.

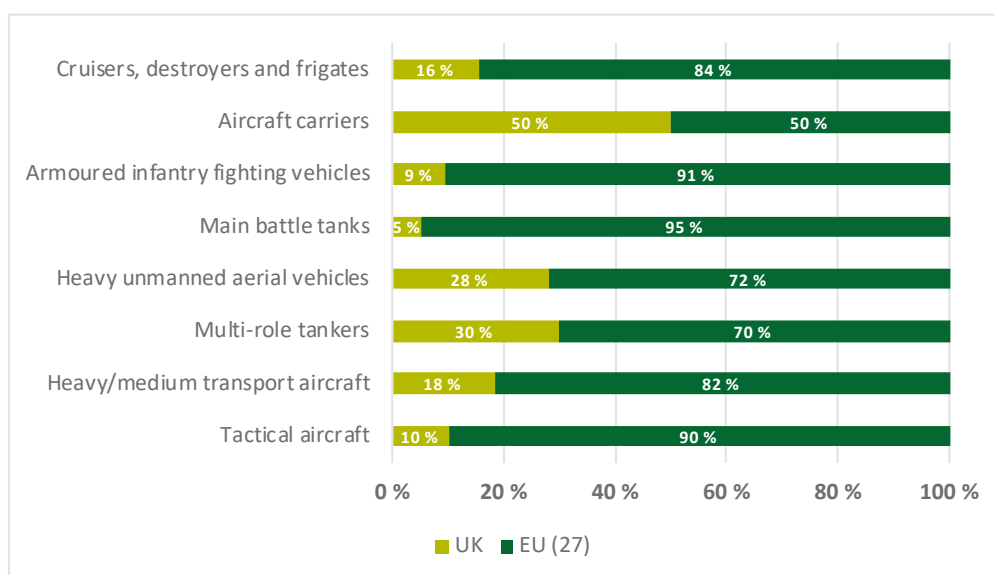
¹¹⁹ European Parliament resolution of 13.6.2018 on EU-NATO relations, 2017/2276(INI), point 19.

¹²⁰ Based on the SIPRI top-100 ranking, their share of defence-related turnover among European companies was 38 % in 2018.

¹²¹ "Brexit: Common Security and Defence Policy missions and Operations", House of Lords – European Union Committee, May 2018.

¹²² Defence R&D expenditure was €3.2 billion in the UK in 2017 (EDA data).

Figure 7 – UK share of total EU Member States’ selected military equipment, 2018



Source: ECA, based on IISS Military Balance 2019.

2.2 Key features of the European defence industry

The defence sector

92 The defence market is unique compared to traditional commercial markets. The main distinctive feature is the central role of governments. Indeed, the national defence market is often referred to as a monopsony: there is one buyer – the State – and several suppliers. As the only end-customers, governments initiate, specify, regulate and fund the development and procurement of defence equipment.

93 The defence sector is of strategic importance. The industry contributes to the state’s autonomy of action by producing the required capabilities and ensuring security of supply. The sector is therefore highly regulated at national level¹²³. In particular, defence products may be subject to restrictions on exploitation of intellectual property or export opportunities¹²⁴. In addition, access to the national defence market is often restricted by government procurement policy, on the grounds

¹²³ DG GROW website.

¹²⁴ “Financial instruments in support of a resilient and autonomous defence sector”, Expert Group on the Financial Toolbox, November 2018.

of protecting essential security interests and supporting the national industrial base¹²⁵. As a result, market entry and exit barriers are high.

94 The defence sector is research and development (R&D)-intensive¹²⁶. The development of defence capabilities requires innovative and high-end technology, the aim being to provide a comparative military advantage. This entails significant up-front investments and long capability-development cycles, with no ultimate guarantee of commercialisation for defence companies. In order to mitigate the technological and financial risks associated with developing capabilities, defence research is usually 100 % funded by governments.

Key trends

95 The defence industrial sector is characterised by new forms of dependency¹²⁷. First, it is becoming more globalised. Major defence companies are more dependent on export sales, and their supply chains are more complex, diverse and international.

96 In addition, the defence sector is increasingly dependent on innovation in the civilian sector¹²⁸. Major opportunities and challenges arise from dual-use R&D, as cutting-edge technologies – such as artificial intelligence, unmanned vehicles, big data or nanotechnologies – are mainly developed and produced in the civilian sector.

97 Another key structuring trend in the defence sector is the increasing cost of defence equipment and systems. In a context of technological competition, the intergenerational cost growth of defence equipment in recent decades has been disconnected from and considerably exceeded the growth of defence budgets. This has resulted in a “falling number of units that national budgets can afford, a reduction in

¹²⁵ “Europe’s Defence Industry: An Economic Perspective”, K. Hartley, 2013.

¹²⁶ Defence Sector Report, House of Commons, Exiting the European Union Committee, November 2017.

¹²⁷ “The development of a European Defence Technological and Industrial Base (EDTIB)”, Study to the European Parliament’s Subcommittee on Security and Defence, June 2013.

¹²⁸ M. Drent and D. Zandee, “More European defence cooperation”, Clingendael Institute, June 2018.

the length of the series produced, a limited capacity to tap on economies of scale and a lower frequency of new development projects”¹²⁹.

The European defence industrial landscape

98 A comprehensive set of data on the European Defence Technological and Industrial Base (EDTIB) does not exist¹³⁰. The European defence industry has a turnover of about €100 billion and employs about 500 000 people directly¹³¹. It is structured like a pyramid¹³², with a limited number of large defence companies – the prime contractors – on the top. All along the supply chain, these companies are supported by 2000-2500 lower-tier companies¹³³ – mainly mid-caps and SMEs – that provide subsystems or components to the prime contractors.

99 The EDTIB is not evenly spread across the EU. Mirroring the level of national budgets, defence industries are concentrated in the six Letter of Intent¹³⁴ (LoI) countries, i.e. France, Germany, Italy, Spain, Sweden and the United Kingdom. These generate more than 80 % of turnover in the European defence sector¹³⁵. The capacities, capabilities and competitiveness of the DTIB differ between Member States and sub-sectors¹³⁶ (see *Annex IV* for the key features of the aerospace, land and naval sectors). This fragmented base is the result of geographical, historical and military cultures that have contributed to shaping the industrial landscape in the various

¹²⁹ European Commission staff working document, Impact assessment accompanying the proposal for a Regulation of the European Parliament and of the Council establishing the European Defence Fund, SWD(2018) 345 final, June 2018.

¹³⁰ Keith Hartley, “Creating a European Defence Industrial Base”, 2013.

¹³¹ DG GROW website : https://ec.europa.eu/growth/sectors/defence_en.

¹³² A. Marrone and A. R. Ungaro, “Actors in the European defence policy area: roles and developments”, *Istituto affari internazionali*, November 2014.

¹³³ European Commission staff working document, Impact assessment accompanying the proposal for a Regulation of the European Parliament and of the Council establishing the European Defence Fund, SWD(2018) 345 final, June 2018.

¹³⁴ The Letter of Intent was signed on 20.7.1998 by six EU countries to set up a cooperative framework to facilitate the restructuring of the European defence industry.

¹³⁵ The Aerospace and Defence Industry Association of Europe, *Facts and figures*, 2017.

¹³⁶ C. Mölling, “Future of the EDTIB at the Defence Council 2013. The German Position, European Realities and December Opportunities”, 2013.

Member States¹³⁷. In Europe, there are as many DTIBs as there are Member States and related national policies in the fields of defence, technology, markets, procurements, etc¹³⁸.

100 Studies have pointed out the strengths of the defence sector in Europe. In particular, Europe's defence industry overall has been described as "globally competitive, innovative, high-tech and capability-driven"¹³⁹. The European defence industry is able to provide a full spectrum of defence capabilities, from large and complex platforms to innovative products. However, several negative trends have impacted the EDTIB and its global competitiveness in recent years (see [Annex V](#)).

The demand side: the Member States

101 The competitiveness of the defence industry is highly dependent on demand from the Member States. Between 2007 and 2015, significant cuts of about 15 % were made in the EU's national defence budgets, set against a global increase in military spending. Since 2015, the trend in overall defence spending in the EU has been positive¹⁴⁰, although in real terms defence expenditure in 2017 was still below its 2007 level ([Figure 8](#)).

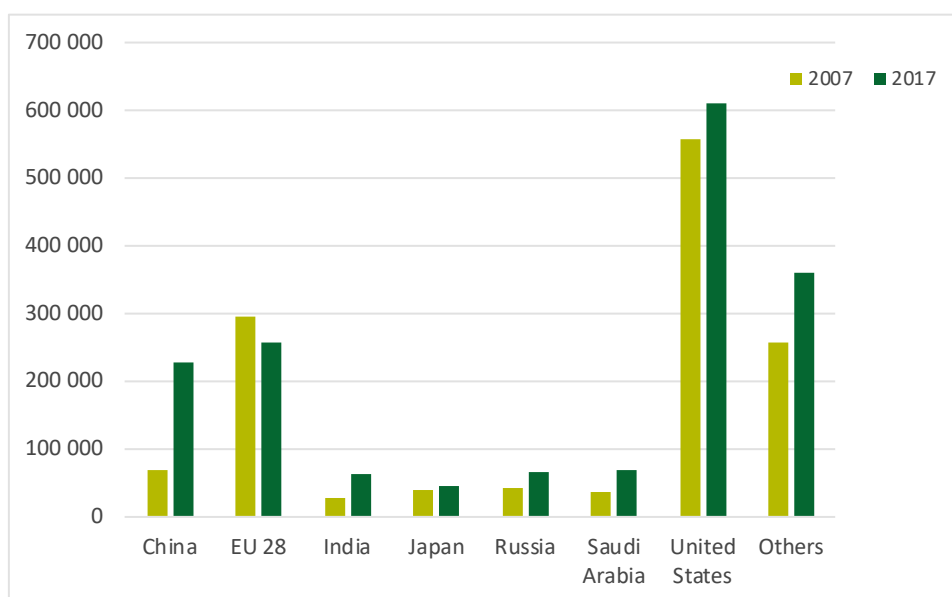
¹³⁷ "The State of Europe's defence industrial base", NATO Parliamentary Assembly, Economics and Security Committee, October 2017.

¹³⁸ "The development of a European Defence Technological and Industrial Base (EDTIB)", Study to the European Parliament's Subcommittee on Security and Defence, June 2013.

¹³⁹ Report of the Group of Personalities on the Preparatory Action for CSDP-related research, February 2016.

¹⁴⁰ [CARD trial-run findings](#).

Figure 8 – Evolution of defence expenditure 2007-2017 (million current USD)



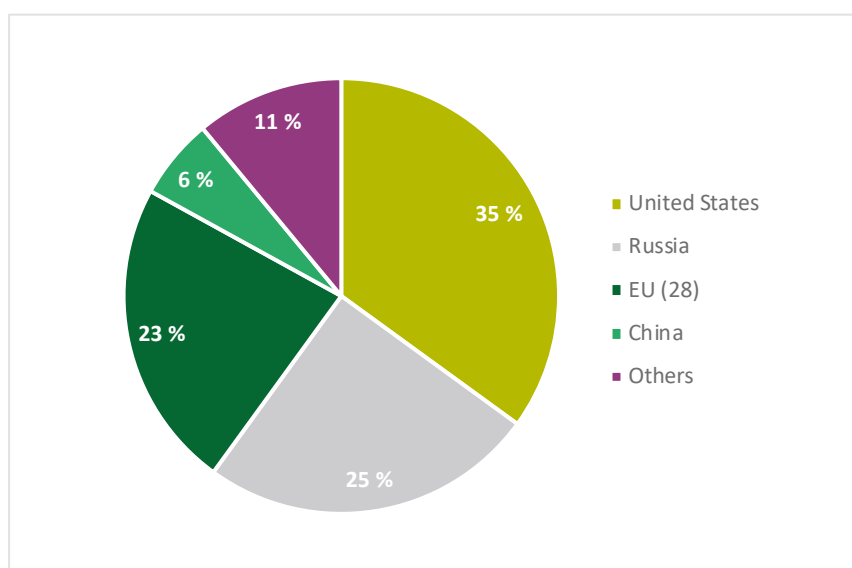
Source: ECA, based on SIPRI database¹⁴¹.

102 Declining internal demand in the EU market, together with growing demand on international markets, has led the EU defence industry to increase its exports to non-EU markets¹⁴². As **Figure 9** shows, the EU – though still behind the United States and Russia – represents a significant share of total arms exports, which illustrates the competitiveness of its defence industry.

¹⁴¹ In this review, we use the databases of the Stockholm International Peace Research Institute (SIPRI) as a reference for our analysis. For the limitations of the underlying data and the attendant impact on our analysis, see <https://www.sipri.org/databases>.

¹⁴² “The extra-EU defence exports’ effects on European armaments cooperation”, Study to the European Parliament’s Subcommittee on Security and Defence, June 2015.

Figure 9 – Average share of arms exports, 2010-2018 (corrected from intra-EU exports)



Source: ECA, based on SIPRI database.

103 The EDTIB is increasingly dependent on exports, which raises challenges for the future. The first challenge is the differences between EU Member States' arms-export policies and legislation. As the supply chains of Europe's major defence manufacturers are increasingly integrated, the fact that Member States' export policies differ¹⁴³ may limit opportunities for major EU companies to be competitive on the international market.

104 In addition, transfers of the technology required to access foreign markets, coupled with significant defence investments in foreign countries, have led to the emergence of new international competitors¹⁴⁴. To sustain its competitive advantage, the EU's industry is dependent on its capacity to innovate.

105 However, EU Member States' defence budgets are characterised by a high share of personnel expenses (49 %) when compared with investment expenditure (21 %)¹⁴⁵. In addition, previous cuts in defence budgets have negatively impacted R&D

¹⁴³ "The further development of the Common Position 944/2008/CFSP on arms exports control", Study to the European Parliament's Subcommittee on Security and Defence, July 2018.

¹⁴⁴ "The State of Europe's defence industrial base", NATO Parliamentary Assembly, Economics and Security Committee, October 2017.

¹⁴⁵ Defence data for 2016-2017, EDA.

expenditure¹⁴⁶. The fact that Member States do not collectively reach the 2 % target for defence research and technology¹⁴⁷ raises questions about their long-term capacity to innovate in future technology¹⁴⁸ and so jeopardises the competitiveness of the EDTIB.

106 Until now, cooperation between EU Member States in R&D and defence-equipment investments has been limited and below target¹⁴⁹ (**Figure 10**). Previous EU attempts to support the establishment of an open and competitive European defence equipment market were unsuccessful. In particular, implementation of the 2009 Defence Procurement Directive has been uneven across Member States¹⁵⁰. A very significant share of defence procurement expenditure, in particular for high-value and strategic defence systems, still occurs outside the Directive¹⁵¹, resulting in contracts being awarded mainly to national companies.

¹⁴⁶ Commission staff working document, Impact Assessment accompanying the document “Proposal for a Regulation of the European Parliament and of the Council establishing the European Defence Fund”, SWD(2018) 345 final, 13.6.2018.

¹⁴⁷ In November 2007, the EDA Ministerial Steering Board approved four collective benchmarks for investment:

- Equipment procurement: 20 % of total defence spending;
- Collaborative equipment procurement: 35 % of total equipment procurement;
- Defence R&T: 2 % of total defence spending;
- Collaborative R&T: 20 % of total defence R&T.

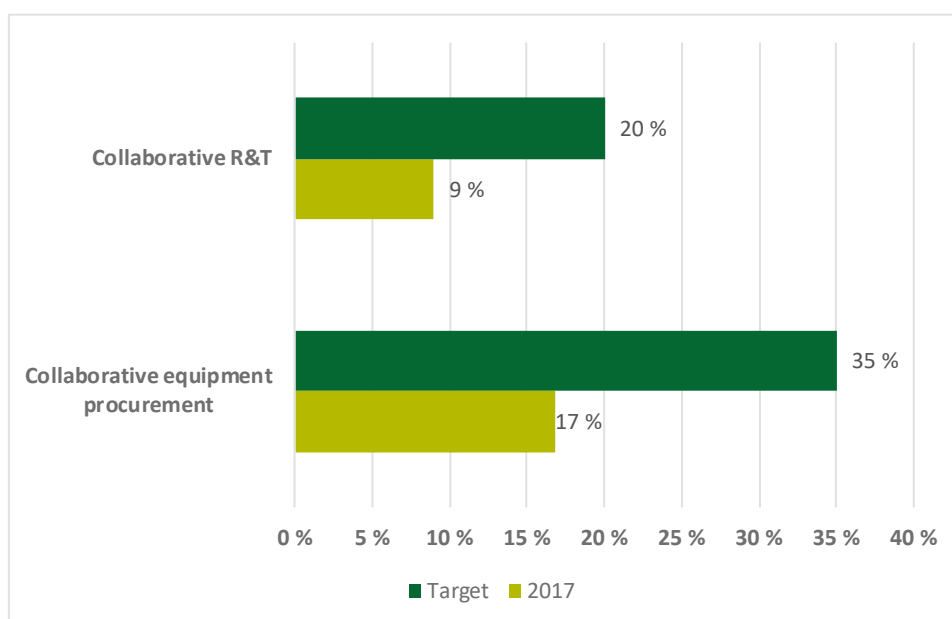
¹⁴⁸ “Coordinated Annual Review on Defence”, *EDA factsheet*, 26.11.2018.

¹⁴⁹ For the data limitations attached to the reported figures, see <https://www.eda.europa.eu/info-hub/publications/publication-details/pub/defence-data-2016-2017>.

¹⁵⁰ Report from the Commission to the European Parliament and the Council on the implementation of Directive 2009/81/EC on public procurement in the fields of defence and security, to comply with Article 73(2) of that Directive, COM(2016) 762 final, 30.11.2016.

¹⁵¹ Ibid.

Figure 10 – Benchmark results for collaboration between Member States - 2017



Source: ECA, based on EDA Defence Data 2016-2017.

The supply side: industry

107 In order to adapt to the increasing globalisation of the defence market, the defence sector has undergone a process of consolidation through mergers and acquisitions, leading to the emergence of a few large multinational companies, such as BAE, Airbus and Thales. However, cross-border consolidation has been limited mainly to the aerospace and electronics sectors. The prevalence of national sovereignty considerations led to a consolidation process that took place mainly at national level, in particular in the land and naval segments.

108 A lack of cooperation on the demand side, i.e. between Member States, has prevented further integration and consolidation in the European defence equipment market¹⁵². This fragmentation in turn leads to inefficiencies in the form of duplication, overcapacity in some areas and missing economies of scale, which ultimately hinders the competitiveness of the European defence industry on the global market and, from an operational perspective, does not support interoperability between the Member States' armed forces. Compared to the US with its 11 defence platforms and systems,

¹⁵² European Commission staff working document, Impact assessment accompanying the proposal for a Regulation of the European Parliament and of the Council establishing the European Defence Fund, SWD(2018) 345 final, June 2018.

Europe had 36 in production in 2013¹⁵³, even though EU military expenditure is 2.5 times lower than in the US.

109 The global position of the EU defence industry is reflected in its share of the turnover of the top 100 defence companies¹⁵⁴. The EU's main companies account for a significant share of global turnover (about a quarter), but remain far behind US companies, which are in a dominant position. The trend over the past 20 years (*Figure 11*) illustrates increasing competition from non-EU and non-US-based companies. In terms of major players, the turnover generated by the top five EU and US companies (*Figure 12*) shows that the main US companies operate on a much larger scale than the EU's.

Figure 11 – Turnover share of the top 100 defence companies, 2007 to 2017

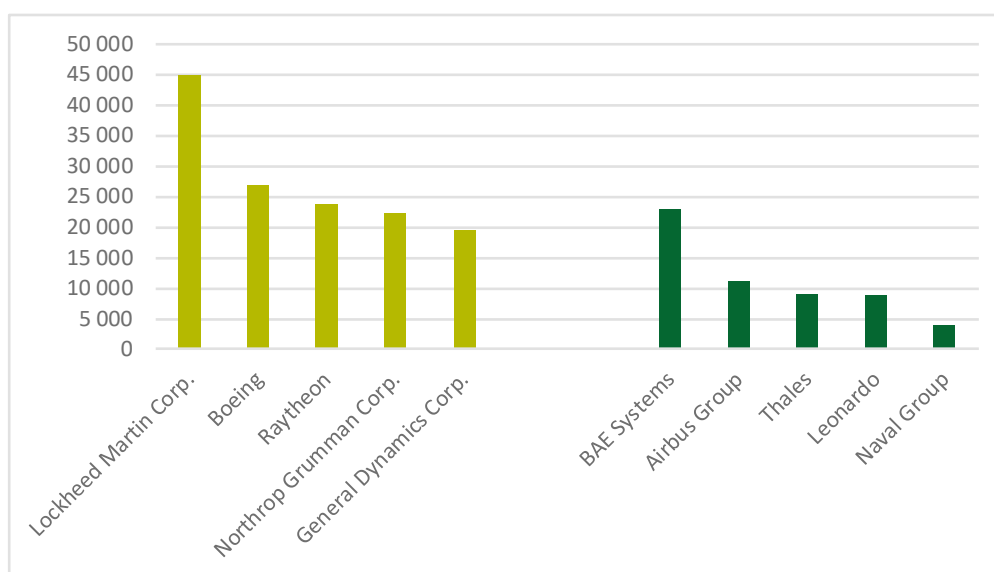


Source: ECA, based on SIPRI Database.

¹⁵³ V. Briani, "Armaments duplication in Europe: A quantitative assessment", CEPS Policy brief, No 297, July 2013.

¹⁵⁴ The SIPRI top-100 ranking does not cover Chinese arms-producing companies.

Figure 12 – Turnover of the top 5 US and EU companies (2017) – million USD



Source: ECA, based on SIPRI Database.

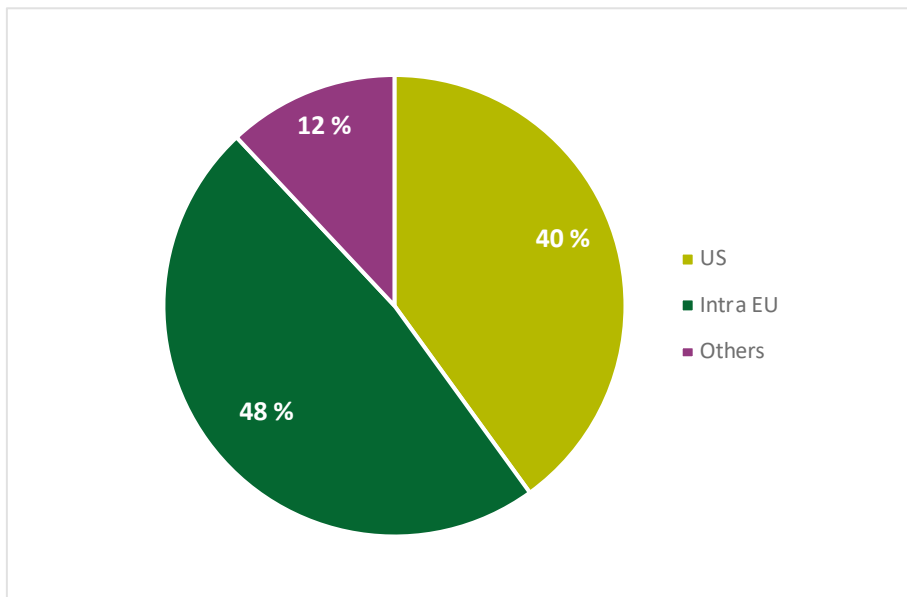
110 The respective positioning of the EU and US defence industrial bases in the global market highlights the competitiveness of the European defence industry. In terms of industrial and commercial links, EU imports from US companies are close to intra-EU exchanges over the 2010-2018 period and amount to 40 % (Figure 13). Over the same period, more than 50 % of US arms imports originated in the EU Member States¹⁵⁵, but this represents a limited amount in absolute terms¹⁵⁶. The imbalance in transatlantic trade in favour of the US is related to (i) US technological dominance, but also to (ii) trade restrictions in accessing the US defence market for foreign and thus EU competitors¹⁵⁷, and (iii) the lack of European preference among Member States.

¹⁵⁵ ECA calculation based on SIPRI data.

¹⁵⁶ Daniel Fiott, EUISS, “The poison pill: EU defence on US terms?”, June 2019.

¹⁵⁷ “Anticipating restructuring in the European defence industry”, BIPE, March 2008.

Figure 13 – Share of EU imports (2017)

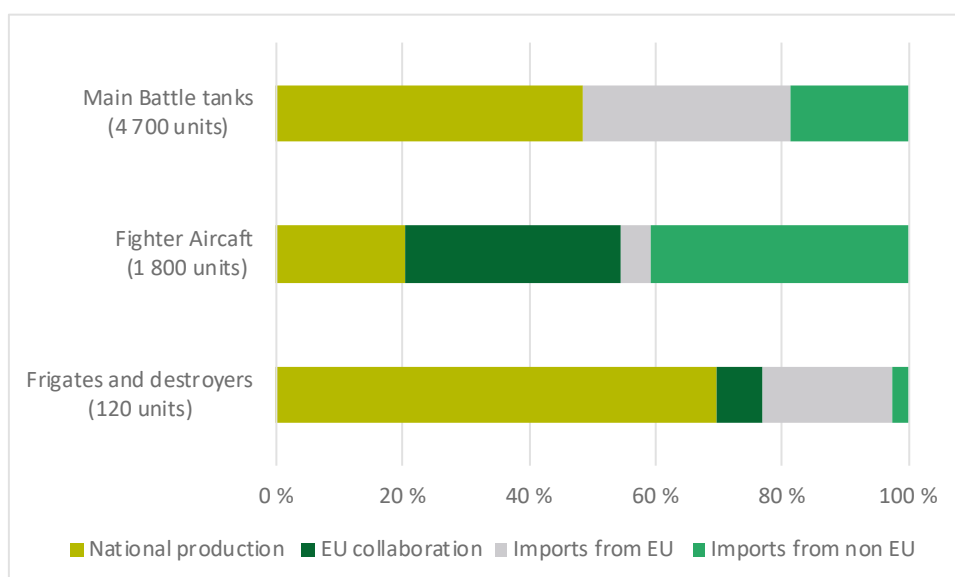


Source: ECA, based on SIPRI Database.

111 The degree of EDTIB dependence on non-EU-based production differs by segments. As shown in [Figure 14](#), 2.5 % of the main military ships used by EU Member States come from non-EU suppliers, whereas this increases to 18.5 % for main battle tanks and 39.3 % for fighter aircraft¹⁵⁸.

¹⁵⁸ D. Fiott, “Strategic autonomy: towards ‘European Sovereignty’ in defence”, EUISS, November 2018.

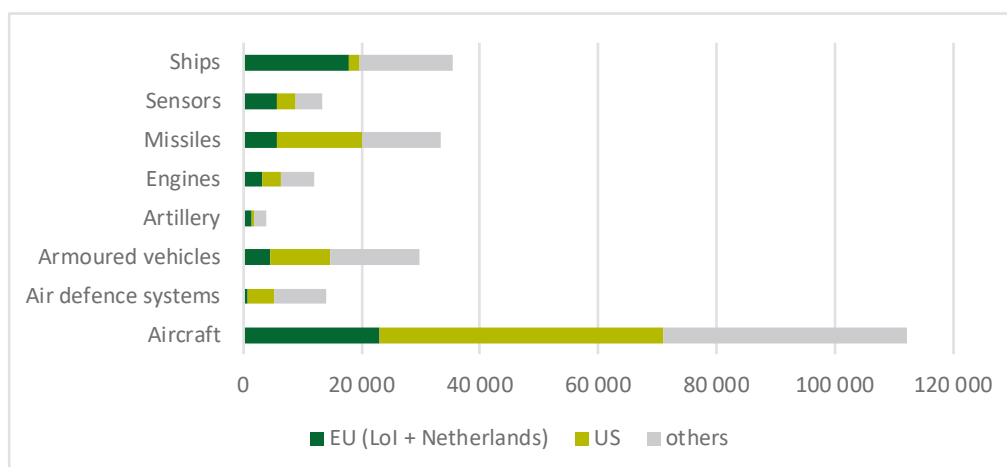
Figure 14 – Origin of production for defence products in use in the EU (2017)



Source: ECA, based on EUISS – “Strategic autonomy: towards ‘European Sovereignty’ in defence” – November 2018.

112 On a global level, the dominant US position in international trade is not uniform across segments. In particular, US defence companies have a clear lead in exports of aircraft, air defence systems, armoured vehicles and missiles. By contrast, EU companies¹⁵⁹ have a competitive advantage in exports of ships and sensors (Figure 15).

Figure 15 – Origin of defence products in international markets (“trend indicator values”) – 2010-2018



Source: ECA, based on SIPRI Database.

¹⁵⁹ Based on LoI countries and the Netherlands, which represent 95 % of EU exports.

113 Although a complete overview of foreign dependency in the supply chain does not exist, it is often reported that the European defence industry is dependent on specific technologies or sub-components (US) and critical raw materials (China). For instance, the EDTIB is fully dependent on imports from a small number of third countries for 19 of the 39 critical raw materials it needs for its production processes¹⁶⁰. This dependency on external sourcing threatens not only the EU Member States' autonomy of action but also the competitiveness of the European defence industry.

2.3 Enhancing cooperation at EU level

114 Based on the rationale that increased cooperation between Member States would enhance their defence capabilities and strengthen the European defence industry, several initiatives have been developed in recent years to promote defence cooperation at EU level.

Capability Development Plan

115 The Capability Development Plan (CDP) is both a document and a process, developed by the EDA, in collaboration with the EUMS/EUMC and the Member States. It provides an overview of capability requirements, with the aim of making national defence planning processes more consistent and supporting Member States' cooperation in the area of capability development.

116 The CDP is regularly updated and was revised and adopted by Member States in June 2018. In particular, the 2018 CDP takes account of the new EU level of ambition as set out in the EUGS (see [Box 1](#)) and reflects the need for “full-spectrum” capabilities, in particular high-end land, air, sea, space and cyber warfare capabilities¹⁶¹. As part of the 2018 procedure, the EDA identified 11 strategic priorities¹⁶² (see [Annex III](#)), covering short- to long-term capability development needs and opportunities.

¹⁶⁰ “Exploring Europe’s capability requirements for 2035 and beyond”, EDA, June 2018.

¹⁶¹ “The EU Capability Development Priorities”, 2018 CDP revision, EDA.

¹⁶² The priorities are further categorised into 38 detailed sub-areas in the 2018 CDP revision of “The EU Capability Development Priorities”.

CARD

117 The Coordinated Annual Review of Defence (CARD) was introduced following Members States’ adoption of the IPSD in November 2016. CARD is an intergovernmental mechanism, implemented on a voluntary basis, with the aim of providing “a more structured way of developing the required capabilities, based on greater transparency and commitments from the Member States”¹⁶³.

118 CARD aims to structure the planning process and enhance cooperation at EU level through greater transparency and sharing of information by Member States. By means of systematic monitoring by the EDA, the CARD process provides an overview of (i) Member States’ defence plans; (ii) progress made towards CDP priorities; and (iii) the development of European collaboration.

119 The first CARD, in the form of a trial run, took place in autumn 2018. Building on this trial run, a full CARD is expected to take place in autumn 2019.

Box 5

Conclusions of the CARD 2018 trial run¹⁶⁴

The first CARD report noted some recent positive trends, in particular the level of defence spending and the relative share of collaborative programmes in capability development between Member States.

However, defence R&T remains an area of concern, with a decrease in the share of investments allocated to it. This jeopardises Member States’ long-term capacity to innovate in the area of future technologies.

PESCO

120 Permanent structured cooperation (PESCO) was introduced by the Lisbon Treaty in 2009¹⁶⁵. The Treaty allowed “Member States whose military capabilities fulfil higher criteria and which have made more binding commitments to one another” significantly to deepen their collaboration on defence. PESCO is a Member State-

¹⁶³ “Implementation Plan on Security and Defence”, 14.11.2016.

¹⁶⁴ “Coordinated Annual Review on Defence”, *EDA factsheet*, 26.11.2018.

¹⁶⁵ Articles 42(6) and 46 and Protocol 10 TEU.

driven process within the EU framework. Being both a permanent framework and a structured process, it differs from other ad hoc cooperative frameworks.

121 PESCO was formally established on 11 December 2017¹⁶⁶ with the participation of 25 Member States¹⁶⁷. It includes two levels: (i) the fulfilment of high-level commitments and (ii) the development of collaborative defence projects.

122 A key feature of PESCO is the legally binding nature of the commitments involved. The participating Member States agreed on 20 commitments to invest, plan, develop and operate defence capabilities¹⁶⁸. Progress towards fulfilment of the commitments is assessed annually by the High Representative, based on the National Implementation Plans the Member States have submitted.

123 The second level of PESCO concerns collaborative projects. So far, the Council has adopted 34 projects in total¹⁶⁹, dealing with both capability development and operations. The Member States' participation in individual projects is voluntary, with a current average of five Member States per project. The capabilities developed under the PESCO framework are owned by the Member States, which can decide to use them in other frameworks such as NATO.

The European Defence Fund

124 The idea of a European Defence Fund was proposed by the Commission in the European Defence Action Plan in November 2016 (see paragraph 40). In practice, two pilot programmes were set up during the 2017-2020 period, the aim being to test the feasibility and added value of acting at EU level and to prepare for the future European Defence Fund that will be implemented for the next MFF (2021-2027):

- o the Preparatory Action on Defence Research (PADR), with €90 million to support collaborative R&T projects for 2017-2019;

¹⁶⁶ Council Decision (CFSP) 2017/2315 of 11 December 2017 establishing permanent structured cooperation (PESCO) and determining the list of participating Member States.

¹⁶⁷ Denmark, Malta and the UK do not participate in PESCO.

¹⁶⁸ <https://pesco.europa.eu/>.

¹⁶⁹ 17 initial projects were approved on 6.3.2018, and the Council agreed on another batch of 17 projects on 19.11.2018.

- o the European Defence Industrial Development Programme (EDIDP), with €500 million to co-finance joint industrial projects in the development phase for 2019-2020 (**Box 6**).

Box 6

EDIDP – First joint defence industrial projects

In March 2019, the Commission issued the work programme for the EDIDP. A share of the €500 million budget has been allocated to calls for proposals, in the following areas¹⁷⁰:

- (1) enabling operations, protection and sustainability of military forces: €80 million;
- (2) intelligence, secured communication and cyber-defence: €180 million;
- (3) ability to conduct high-end operations: €70 million;
- (4) innovative defence technologies and SMEs: €27 million.

In addition, the Commission selected two projects for direct award:

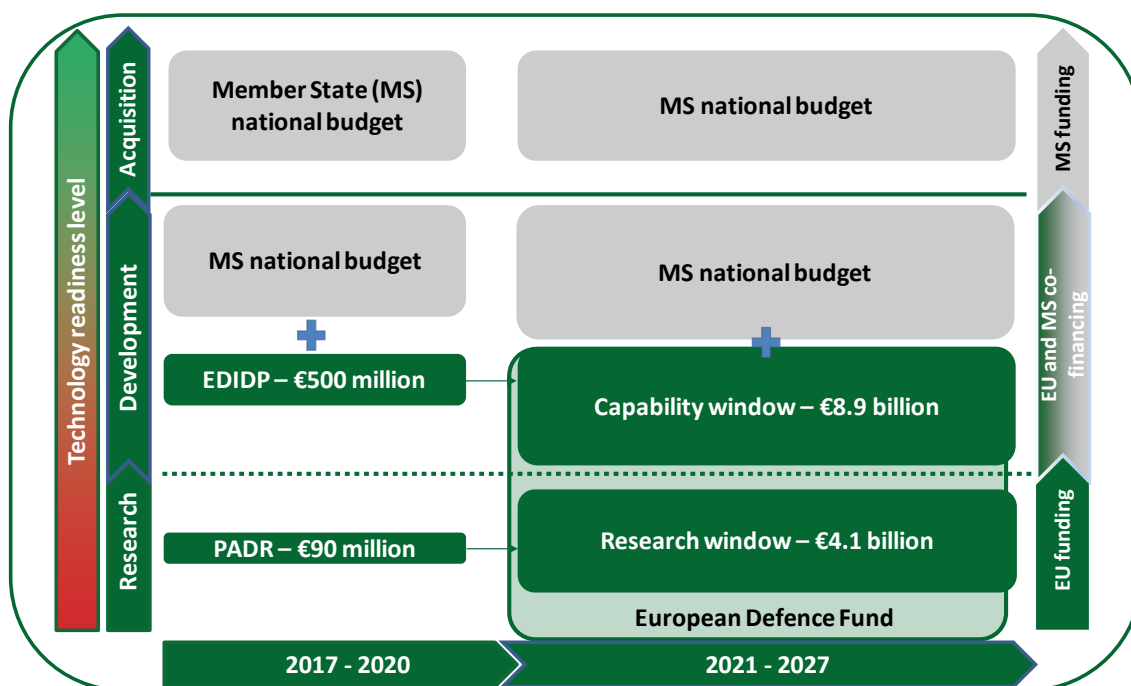
- (5) €100 million for the development of European long-endurance drones (RPAS MALE);
- (6) €37 million for a secure radio system (European Secure Software defined Radio).

125 For the next MFF, the European Defence Fund builds on the PADR and EDIDP by integrating the research and development components into a fully-fledged fund, with a substantial increase in funding, from €590 million to €13 billion. This represents a 22-fold increase compared to the present seven-year cycle. The current proposal has a budget of €13 billion, split into €4.1 billion for research and €8.9 billion for development (see **Figure 16**), thus making the EU the fourth-largest European contributor to R&D activities related to defence¹⁷¹.

¹⁷⁰ For a detailed list of proposed projects, see Commission Implementing Decision of 19.3.2019 on the financing of the European Defence Industrial Development Programme and the adoption of the work programme for 2019 and 2020, C(2019) 2205 final <https://ec.europa.eu/docsroom/documents/34515>.

¹⁷¹ “EU budget for the future”, *European Commission factsheet*, 13.6.2018.

Figure 16 – The European Defence Fund



Source: ECA.

126 The objective of the Fund is “to foster the competitiveness, efficiency and innovation capacity of the European defence industry, (...) thus contributing to the Union’s strategic autonomy, in technological and industrial terms”¹⁷². To do so, the fund aims to stimulate and support collaborative actions and cross-border cooperation through financial incentives for legal entities in both research and development.

127 The Fund has the following key features:

- Collaborative projects must involve at least three eligible entities from three Member States or associated countries.
- The proposed level of funding can be up to 100 % for the research phase and from 20 % to 80 % co-financing (with Member States’ budgets) for the development phase.
- Bonuses in the form of higher funding rates are envisaged to promote SMEs and mid-cap participation and for PESCO projects.

¹⁷² Article 3 of the proposal for a Regulation of the European Parliament and the Council establishing the European Defence Fund, dated 12.12.2018.

- o A share of 4 %-8 % of the €13 billion budget should be devoted to supporting disruptive technologies in defence.

2.4 Performance risks associated with EU defence programmes

128 Compared to the limited advances in defence in EU history, the recent initiatives (PESCO, CARD and the European Defence Fund) can be regarded as a “step change”¹⁷³. However, as for the impact of these new EU initiatives and the associated rapid increase in spending, several key conditions for these initiatives to be effective are not yet in place or are unknown.

An effective EU planning process

129 Until the 2018 CDP revision (see paragraph **116**), a recent study for the European Parliament¹⁷⁴ found that previous initiatives had not succeeded in creating a meaningful EU planning process as a basis for development capabilities. As things stand, a proper defence planning process, in the form of a White Book comparable to national planning documents, is still lacking at EU level. In practice, Member States carry out defence planning and acquisition from a national perspective, which highlights the need for greater alignment in their defence plans¹⁷⁵.

130 The EU planning process is complex and involves many stakeholders. In the above-mentioned study, it was reported as non-cyclical, incomplete due to a lack of clear military ambition (see paragraphs **60** to **61**), and characterised by logical flaws¹⁷⁶. It consists of four overlapping layers which are fragmented between the stakeholders that lead the various processes¹⁷⁷. At the same time, steps to increase the capacity of

¹⁷³ European Political Strategy Centre, “Joining forces – the way towards the European Defence Union”, February 2019.

¹⁷⁴ “The European defence planning process is ineffective and complicated; it has produced virtually no capability since it came into existence” from Frédéric Mauro, “EU Defence: The White Book implementation process”, study requested by the European Parliament’s Subcommittee on Security and Defence, 12.12.2018, p. 64.

¹⁷⁵ EDA, Factsheet on Coordinated Annual Review on Defence CARD, updated on 26.11.2018.

¹⁷⁶ Frédéric Mauro, “EU Defence: The White Book implementation process”, study requested by the European Parliament’s Subcommittee on Security and Defence, 12.12.2018.

¹⁷⁷ “This [EU] system was set in place in successive stages, like layers one on top of the other, and its overall coherence is by no means assured. Indeed, there is not just one capability process in the EU, but four: the Capability Development Mechanism (...) the CDP, (...), CARD

EU defence planning also tend to increase activities that are parallel to NATO's, as well as potentially overlapping¹⁷⁸.

131 As things stand, the capability planning processes of the EU and NATO lack consistency. NATO's Defence Planning Process has existed for almost 50 years and has been described as a well-established, structured process¹⁷⁹. By contrast, the EU's recently established capability process is not yet mature. The potential exists to align CDP and CARD more closely with NATO's planning processes, the aim being to ensure that outputs and timelines are consistent and to limit the inefficiencies associated with processes being duplicated¹⁸⁰.

132 The new initiatives bring additional elements to structure the planning process. Consistency and appropriate sequencing, i.e. from priorities to capability development, are of critical importance¹⁸¹. However, in reality, the parallel launch of the various mechanisms has not yet allowed a logical flow to take place. In fact, the first PESCO projects were adopted in March 2018, whereas the CDP was revised only in July 2018. In parallel, PADR projects started as early as 2017, followed by EDIDP in early 2019. Meanwhile, the EDA completed a CARD trial run only in November 2018. Effective links and consistency between all the initiatives is yet to be demonstrated in practice.

The Member States' participation

133 The implementation and effectiveness of CARD, the European Defence Fund and PESCO depends on the Member States' willingness and fulfilment of their

(...) and PESCO". Frédéric Mauro and Olivier Jehin, Institut de Relations Internationales et Stratégiques (IRIS) and Group for Research and Information on Peace and Security (GRIP), "A European Army to do what?", April 2019.

¹⁷⁸ Dick Zandee, "PESCO implementation: the next challenge", Clingendael Institute, September 2018.

¹⁷⁹ Frédéric Mauro, EU Defence: The White Book implementation process, study requested by the European Parliament's Subcommittee on Security and Defence, 12.12.2018, pp. 12-13.

¹⁸⁰ The Headline Goal process, which is the EU's systemic approach in developing the necessary military capabilities for CSDP, has recently been synchronised with the NATO Defence Planning Process, in terms of timelines, taxonomy and tools.

¹⁸¹ EDA, Factsheet on Coordinated Annual Review on Defence CARD, updated on 26.11.2018.

commitments. As it is the Member States that set priorities, and develop and use capabilities, the new initiatives cannot be a success without them¹⁸².

134 As a voluntary process, CARD is heavily dependent on trust between Member States. PESCO entails binding commitments, but Member States' willingness to achieve them remains an unknown factor, amplified by the fact that the ability to enforce those commitments is, for both legal and political reasons, very uncertain¹⁸³.

135 In addition, the European Defence Fund assumes a buy-in from the Member States that should co-finance development expenditure. Therefore, the number and types of project will be contingent upon Member States' willingness to invest additional funds. Another risk is that EU financial incentives might replace rather than complement national funding¹⁸⁴.

The impact on real capability needs

136 The significant and rapid increase in funding to support defence-oriented R&D activities entails performance risks for the European Defence Fund. In particular, there is a risk that the funding could be used as an exercise which is not going to make the European defence industry more competitive, or create and build the capabilities that are needed. Implementing it therefore requires an appropriate balance to avoid being perceived as a subsidy for SMEs in smaller Member States, or as a tool dedicated solely to major companies in bigger Member States¹⁸⁵.

137 With regard to PESCO, a study carried out by the European Leadership Network and the IISS concluded in February 2019 that although the first 34 PESCO projects were useful, it was unlikely that they would have a significant impact on the EU's requirements, in particular as regards the shortfalls identified for the EU level of

¹⁸² Daniel Fiott, "European Defence Markets and Industries: new initiatives, new challenges", *Nação e Defesa*, November 2018.

¹⁸³ S. Blockmans, "The EU's modular approach to defence integration: An inclusive, ambitious and legally binding PESCO?", 2018 and Daniel Fiott "European Defence Markets and Industries: new initiatives, new challenges", *Nação e Defesa*, November 2018.

¹⁸⁴ Bastian Giegerich, "After the EU global strategy: Consulting the Experts", 2016.

¹⁸⁵ Daniel Fiott "European Defence Markets and Industries: new initiatives, new challenges", *Nação e Defesa*, November 2018.

ambition¹⁸⁶. Defence involves creating real military capabilities, with a clear potential to deter possible threats, and implies readiness to act when required.

The governance and accountability framework

138 Governance at EU level is complex and involves many stakeholders.

139 In particular, the governance of defence capability development in the EU is in the process of being fundamentally changed¹⁸⁷. With the set-up of the European Defence Fund, the Commission, the European Parliament and the EU budget are now involved in developing defence capabilities, a domain traditionally governed by intergovernmental arrangements. The European Defence Fund aims to connect two different and complex systems – the EU and national defence systems – each of which has specific operational characteristics, traditions and rules¹⁸⁸.

140 Lastly, from an accountability perspective, CSDP bodies, missions and operations do not have similar audit and discharge arrangements (see paragraphs 26 and 27). In particular, EDA and CSDP military missions lack oversight from the European Parliament, have specific audit arrangements, and lie for now outside the ECA's audit mandate. As noted in the past, the ECA considers that it should be appointed to act as the external auditor of all bodies set up to implement EU policies, including the EDA¹⁸⁹.

141 The development of European Defence cooperation, in particular through new initiatives such as PESCO, CARD and the European Defence Fund, is likely to create additional complexity. Indeed, while the initiatives are supposed to be mutually reinforcing, they are distinct and have different legal bases, and therefore may be subject to different audit and discharge arrangements (see *Annex VI*). This could prevent effective and comprehensive control over EU defence and security policy. The

¹⁸⁶ Alice Billon-Galland and Yvonne-Stefania Efstathiou, European Leadership Network and IISS, "Are PESCO projects fit for purpose?", 20.2.2019.

¹⁸⁷ Dick Zandee "Developing European defence capabilities - bringing order into disorder", Clingendael Institute, October 2017.

¹⁸⁸ Burkard Schmitt, "The European Defence Fund – a potential game-changer for European Defence" in *European Files*, Aerospace and Defence Industries Association of Europe, June 2018.

¹⁸⁹ ECA, Briefing paper, "The Commission's proposal for the 2021-2027 Multiannual Financial Framework", July 2018, paragraph 33.

European Parliament has repeatedly called on the Member States to increase the CSDP's transparency, accountability, and parliamentary oversight in line with its powers in other areas¹⁹⁰.

¹⁹⁰ European Parliament resolution of 12 December 2018 on the annual report on the implementation of the Common Security and Defence Policy (2018/2099(INI)), paragraphs 60-63.

Concluding remarks

142 Until recently, there had been limited action in the area of defence at EU level and a European Defence Union does not exist. However, in response to a challenging new global environment, the EU has developed new ambitions and launched new initiatives to enhance cooperation between Member States.

143 In this review, our aim has been to highlight some of the main challenges associated with the EU's new level of ambition in defence and the proposed increase in funding. As it is too early to assess the impact of recent EU initiatives, the value added by acting at EU level in the field of defence is yet to be demonstrated in practice.

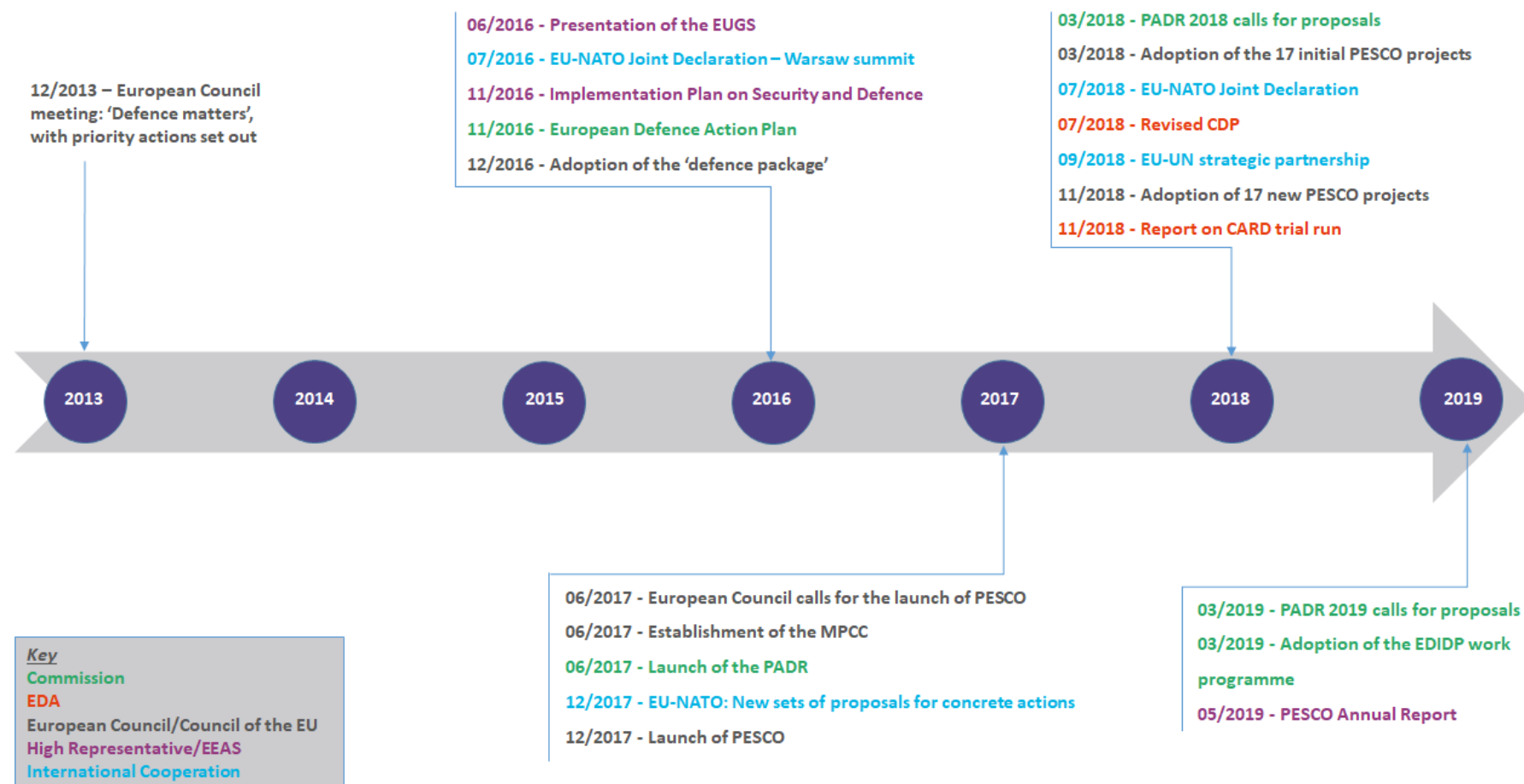
144 Contributing to better defence capacity in Europe means going beyond words and requires effective implementation of real initiatives, with the aim of supporting a competitive European defence industry and enhancing Member States' military capabilities in full complementarity with NATO. Ultimately, the EU's success and future in the field of defence depends entirely on the Member States' political will, as they play the central role in Europe's defence architecture.

This Review was adopted by Chamber III at its meeting of 16 July 2019.

For the Court of Auditors

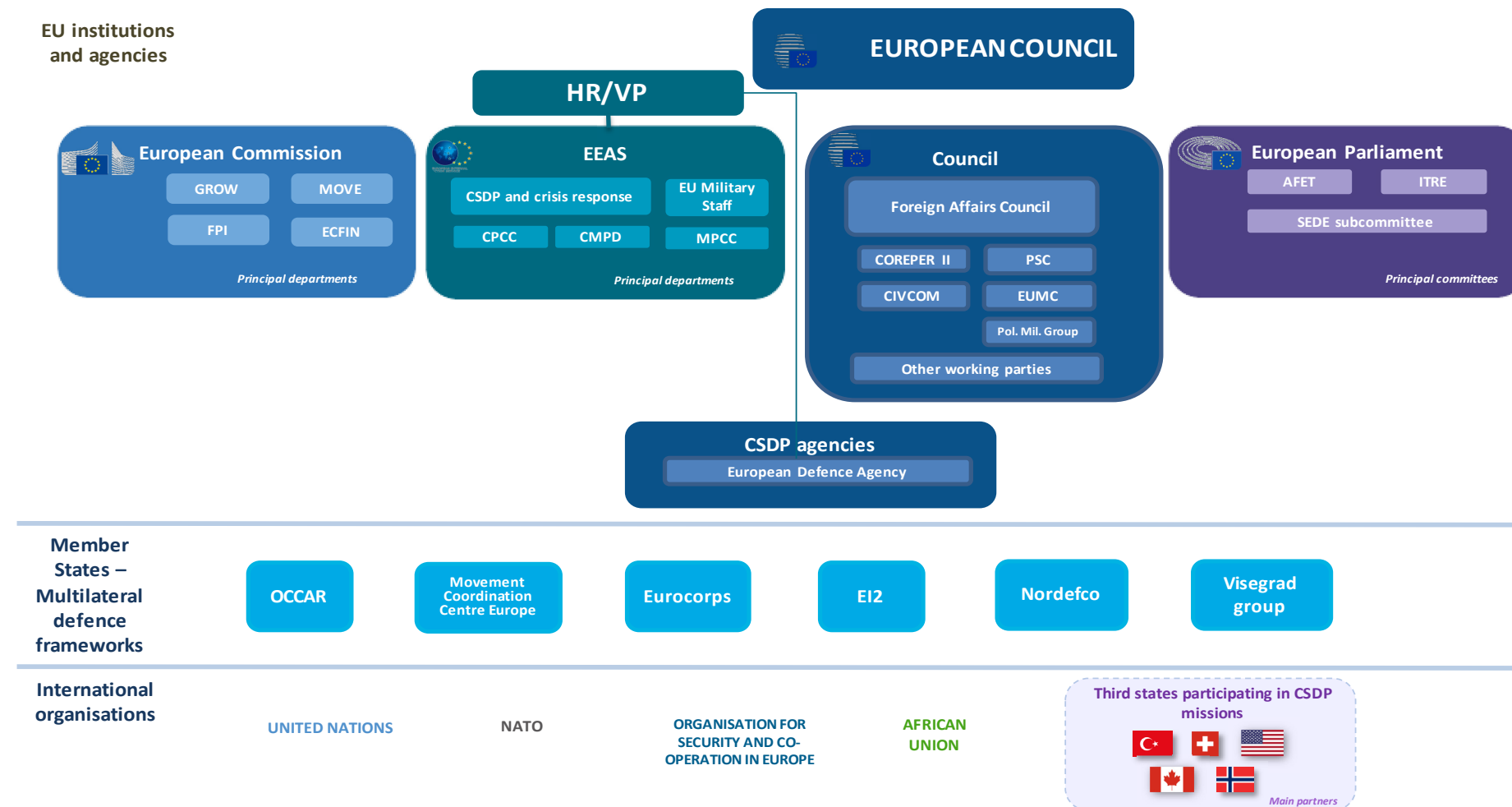
Klaus-Heiner LEHNE
President

Annex I — Timeline



Source: ECA.

Annex II — The European defence institutional framework: a complex and multi-player domain



Source: ECA.

Annex III — Capability priorities identified in key EU documents, 2013-2019

	2013 European Council	2014 CDP	2016 EU Global Strategy	2018 CDP
Air	Unmanned aerial vehicle (UAV) Air-to-air refuelling	Inter-Theatre Air Capabilities Single European Sky Air Traffic Management Research (SESAR)		Air mobility Air superiority Integration of military air capabilities in a changing aviation sector
Command, Control, Information and Cyber	Cyber defence Satellite communication	Counter Cyber Threats (Cyber Defence) Space-based information service Enhance Battlespace Information and Communication Services Remotely Piloted Aircraft providing Surveillance Provide SATCOM Capabilities	Intelligence, Surveillance and Reconnaissance Autonomous access to space and permanent earth observation Digital capabilities and cyber technologies Remotely Piloted Aircraft Systems	Enabling capabilities for cyber-responsive operations Space-based information and communication services Information superiority
Land		Intra-Theatre Combat Capabilities Enhance Logistic Support for Deployed Forces Provide Medical Support for Operations		Ground combat capabilities Enhanced logistic and medical supporting capabilities
Maritime		Maritime Patrolling and Escorting Naval Surveillance systems		Naval manoeuvrability Underwater control contributing to resilience at sea
Transversal		Energy and Environmental Protection Modelling, Simulation and Experimentation	Full-spectrum land, air, space and maritime capabilities, including strategic enablers	Cross-domain capabilities helping to achieve EU's level of ambition

Source: ECA based on:
 Conclusions of the European Council of December 2013;
 The 2014 and 2018 Capability Development Plans;
 The 2016 EU Global Strategy.

Annex IV — Key features of EU defence industry subsectors (Aerospace, Land, Naval) 1/2

	Turnover (billion €)	Employment	Example of products	Main locations	Main EU companies	Main non-EU stakeholders	Key features of the EU industry
Aerospace	45	187 000	Aircraft Aero-engines Helicopters Missiles Space systems	France Germany Italy Sweden United Kingdom	BAE Systems (UK) Airbus (EU) Thalès (Fr) Leonardo (It) MBDA (EU)	Lockheed Martin Corp. (US) Boeing (US) Raytheon (US) Northrop Grumman Corp. (US) General Dynamics Corp. (US)	<p>The sector includes a small number of large industrial groups and many SMEs and Mid-Caps in the supply chain.</p> <p>It has a high level of consolidation at national and European level, with global companies such as Airbus and EADS. However, the main EU companies are relatively small compared to their US counterparts.</p> <p>The sector is R&D-intensive (up to 30% of total costs for a combat aircraft) and strongly interconnected with the civilian sector. Except for a few cases (such as BAE Systems, MBDA and Saab), the main leading companies are involved in dual-use activities and are not fully dependent on the defence sector.</p>
Land	28	258 000	Armoured vehicles (Main battle tanks, etc.) Artillery Small arms and ammunition Engines Sensors C4ISR	France Germany Italy United Kingdom Finland	BAE Systems (UK) Leonardo (It) Rheinmetall (De) Krauss-Maffei Wegmann (De) Nexter (Fr)	General Dynamics (US) Oshkosh Corp. (US) Textron (US) Mitsubishi Heavy Industries (Jp) Indian Ordnance Factories (In) High Precision Systems (Ru) Uralvagonzavod (Ru)	<p>The sector is less concentrated than in aerospace. Main integrators are concentrated in EU countries. However, SMEs play a significant role as subcontractors and specialised product suppliers operating in niche markets across the EU.</p> <p>The set-up of the "KNDS" joint venture between Nexter and Krauss-Maffei Wegmann illustrates a recent consolidation of the sector in the EU.</p> <p>The sector is relatively more defence-dependent and public ownership is still present.</p> <p>The sector is as well less R&D intensive (< 15% for land based armement programme) than the aerospace one and there are less dual-use opportunities.</p>
Naval	22		Surface ships Amphibious ships Submarines Naval weapons	France Germany Italy United Kingdom Spain The Netherlands	BAE Systems (UK) Naval Group (Fr) ThyssenKrupp (De) Fincantieri (It) Navantia (Sp) Damen (NI)	Northrop Grumman Corp. (US) General Dynamics Corp. (US) Huntington Ingalls Industries (US) United Shipbuilding Corp. (Ru)	<p>European suppliers are concentrated around six major naval companies that act as prime contractors and system integrators. By nature, the sector relies on a diverse supply chain, made up of a large number of specialised suppliers, often with links to other sectors, in particular electronics (Thales) or aerospace for weapons or engines (Rolls Royce and MBDA).</p> <p>The sector is relatively dependent on defence (except for Fincantieri). State ownership is relatively high (Naval group, Fincantieri and Navantia) and the main EU companies (except for BAE Systems) are usually specialised in the naval sector.</p> <p>Opportunities arising from dual-use technologies are increasingly considered in the supply chain.</p>

Sources: ECA, based on:

ASD facts and figures 2017

Study to the European Parliament's Subcommittee on Security and Defence – "The development of a European Defence Technological and Industrial Base (EDTIB)" – June 2013

Study commissioned by EDA on Industrial and Technological Competences in the Naval Sector – 2016

TNO - Development of a European Defence Technological and Industrial Base – 2009

IKEI Research and Consultancy - Study on the Perspectives of the European Land Armement sector – 2012

Annex IV — Key features of EU defence industry subsectors (Aerospace, Land, Naval) 2/2

	EU collaboration	Main collaborative programmes	Capacities, competence, competitiveness
Aerospace	<p>A key feature of the aerospace sector is a relatively high level of cooperation and integration in the EU compared to other sectors.</p> <p>A significant number of bilateral to multilateral collaborative programmes took place within the EU in the last few decades, in combat aircraft, helicopters, UAVs, missiles and space systems.</p> <p>However, past duplications of programmes have taken place in fighter aircraft (Rafale, Gripen and Eurofighter).</p>	<p>A400 NH-90 Eurofighter Typhoon MALE RPAS Meteor Tiger</p>	<p>The sector is able to deliver key military capabilities and cutting-edge technologies, such as modern combat aircraft, missiles, helicopters and strategic airlift and air tanker capabilities.</p> <p>A technological gap exists in Medium-Altitude Long-Endurance (MALE) Drones that until now have mainly been purchased from the US and Israel. However, several collaborative projects are ongoing at EU level (e.g. European MALE RPAS).</p> <p>The industry is currently well positioned in the global market with top players. Some EU products had strong export records, e.g. combat aircraft (Rafale and Typhoon), missiles (MBDA) or helicopters (Eurocopter). However, the market is still dominated by main US companies and emerging competitors may challenge the competitiveness of EU industry in this sector.</p>
Land	<p>EU collaborative projects in the land armament industry have been very limited. The sector is characterised by duplication of capabilities along national borders. For instance, in 2018 there were 17 types of armoured infantry vehicles in the EU.</p> <p>Opportunities for more collaborative programmes exist with the European main battle tank and a future artillery system to be developed by France and Germany.</p>	<p>Boxer</p>	<p>The sector is able to design, manufacture, upgrade and support key military capabilities for land warfare, such as main battle tanks and armoured fighting vehicles, ammunition, precision munitions, artillery systems and missile launchers.</p> <p>The sector performs strongly in exports (Leopard and armoured vehicles) to South East Asia, India, Middle-Eastern countries, Brazil or Australia.</p> <p>Competition in the global market involves players from countries across the world (US, Russia, Japan, Israel, India and South Korea). The competitiveness of EU industry is affected by the relatively small size of the main EU companies, in particular compared to their US competitors.</p>
Naval	<p>Experience with EU collaborative projects has been limited in the naval sector, and mainly took place on a bilateral basis (FREMM between Italy and France).</p> <p>The sector remained organised along national borders, with 60% to 80% of materials, components and systems sourced at national level by prime contractors. This rises to 95% if EU cooperation in the supply chain is considered.</p>	<p>FREMM</p>	<p>The European naval industry is able to design, integrate and produce the whole range of key capabilities in the naval sector, from ships to almost all core systems and components. There is no dependency on non-EU countries for critical systems.</p> <p>The industry is highly competitive in international markets, as reflected by a strong market share and export results, especially in market segments of higher added value such as submarines, destroyers and frigates.</p> <p>The naval sector is increasingly dependent on exports. The main export markets are the Middle East, Africa, Asia and South America. There is growing competition from China, South Korea and Russia.</p>

Sources: ECA, based on:

ASD facts and figures 2017

Study to the European Parliament's Subcommittee on Security and Defence – “The development of a European Defence Technological and Industrial Base (EDTIB)” – June 2013

Study commissioned by EDA on Industrial and Technological Competences in the Naval Sector – 2016

TNO - Development of a European Defence Technological and Industrial Base – 2009

IKEI Research and Consultancy - Study on the Perspectives of the European Land Armament sector – 2012

Annex V — SWOT¹⁹¹ analysis – EDTIB

Strengths	Weaknesses
Presence of European leaders in the global markets	Fragmented defence market with excess capacity, duplications and missed economies of scale
Capacity to design and produce a wide range of military products in aerospace, land, naval and electronic segments	Increasing costs of defence equipments and systems
Experience in multinational cooperation (in particular in aerospace sector)	Relative low level of R&D expenditures
Highly skilled workforce	Lack of collaborative defence procurements and R&D
	Divergence in Member States' exports policies
	Limited access to cross-border markets within the EU, in particular for SMEs
Opportunities	Threats
Growth in global military expenditure	Competition from traditional and emerging competitors
Momentum for EU defence cooperation supported by Member States	Loss of innovative capacity and technological superiority, hindering global competitiveness
Launch of large new collaborative programmes (Future Combat Air Systems programme, Eurodron MALE, European Main Battle Tank)	Security of supply with increased dependency on international and complex supply chains
Potential for rationalisation and restructuring, in particular in the land and naval sectors	No preference for using EU suppliers by Member States
Dual-use possibilities and growing interaction with the civilian sector	High entry barriers in non-EU market

Source: ECA.

¹⁹¹ Strengths, Weaknesses, Opportunities and Threats.

Annex VI — Main audit arrangements in the field of EU Defence

		ECA	College(s) of Auditors	National audit institutions and bodies
Current MFF (2014-2020)	CFSP Chapter including civilian CSDP missions	X		
	EEAS administrative expenditures, including EU military staff	X		
	Military CSDP missions Common operational costs (ATHENA mechanism)		X	
	Military CSDP missions Individual operational costs			X
	CSDP Agencies, including the European Defence Agency		X	X
	African Peace Facility	X		
	PESCO - Projects without EU budget funding		?	
	PESCO - Projects with EU budget funding	X		
	PADR	X		
	EDIDP	X		
	Capacity Building in support of Security and Development (financed under IcSP)	X		
MFF 2021-2027	European Defence Fund*	X		
	European Peace Facility**	X		
	Military mobility*	X		

* Based on the Commission's legislative proposals

** Based on the proposal of the HR/VP

Source: ECA.

Acronyms and abbreviations

APF: African Peace Facility

CARD: Coordinated Annual Review of Defence

CBSD: Capacity building in support of security and development

CDP: Capability Development Plan

CFSP: Common Foreign and Security Policy

CIVCOM: Committee for Civilian Aspects of Crisis Management

CPCC: Civilian Planning and Conduct Capability

CSDP: Common Security and Defence Policy

DG GROW: The Commission's Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs

DTIB: Defence Technological and Industrial Base

ECA: European Court of Auditors

EDA: European Defence Agency

EDIDP: European Defence Industrial Development Programme

EDTIB: European Defence Technological and Industrial Base

EEAS: European External Action Service

EUGS: European Union Global Strategy

EUMC: European Union Military Committee

EUMS: European Union Military Staff

FPI: Foreign Policy Instrument

HR/VP: High Representative for Foreign Affairs and Security Policy

IISS: International Institute for Strategic Studies

IPSD: Implementation Plan on Security and Defence

Lol: Letter of Intent

MFF: Multi-annual Financial Framework

MPCC: Military and Planning Conduct Capability

NATO: North Atlantic Treaty Organisation

NORDEFECO: Nordic Defence Cooperation

OCCAR: Organisation for Joint Armament Cooperation

PADR: Preparatory Action on Defence Research

PESCO: Permanent Structured Cooperation

R&D: Research and Development

R&T: Research and Technology

SIPRI: Stockholm International Peace Research Institute

SME: Small and Medium-sized Enterprise

TEU: Treaty on European Union

ECA team

This ECA's Review - [European Defence](#) was adopted by Chamber III External action/Security and justice. The task was led by ECA Member Juhan Parts, supported by [Ken-Marti Vaher](#), Head of Private Office and [Margus Kurm](#), Private Office Attaché.

COPYRIGHT DISCLAIMER

© European Union, 2019.

Reproduction is authorised provided the source is acknowledged.

For any use or reproduction of photos or other material that is not under the European Union copyright, permission must be sought directly from the copyright holders.

Figure 1, map: © [OpenStreetMap contributors](#). The cartography in the map tiles is licenced under the [Creative Commons Attribution-ShareAlike 2.0](#) licence (CC BY-SA).

Defence is a specific domain, at the heart of Member States' national sovereignty. Until recently, there had been limited action in the area of defence at EU level. However, in response to a challenging new global environment, the EU has launched new defence-related initiatives to enhance cooperation between Member States. This has placed defence clearly on the ECA's radar, as the significant and rapid increase in funding associated with new EU ambitions and initiatives entails performance risks.

Therefore, the ECA has prepared this review, which is not an audit but an analytical review based on a documentary review of publications on the topic and interviews with staff from EU and other institutions and bodies. It specifically focuses on (i) the legal, institutional and financial framework in the area of defence and (ii) the state of play as regards Member States' defence capabilities and industries. The idea of this review is to look at the current landscape of EU defence cooperation and to highlight some of the main risks associated with the EU's new level of ambition and defence-related initiatives that have been developed in recent years.

Contributing to better defence capacity in Europe means going beyond words and requires effective implementation of real initiatives, with the aim of supporting a competitive European defence industry and enhancing Member States' military capabilities in full complementarity with NATO. Ultimately, the EU's success and future in the field of defence is fully dependent on the Member States' political will, as they play the central role in Europe's defence architecture.

EUROPEAN COURT OF AUDITORS

12, rue Alcide De Gasperi
1615 Luxembourg
LUXEMBOURG

Tel. +352 4398-1

Enquiries: eca.europa.eu/en/Pages/ContactForm.aspx

Website: eca.europa.eu

Twitter: @EUAuditors

© European Union, 2019

For any use or reproduction of photos or other material that is not under the European Union copyright, permission must be sought directly from the copyright holders.



EUROPEAN
COURT
OF AUDITORS