



Get it Together

Smart Defence Solutions to NATO's Compound
Challenge of Multinational Procurement

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This report is a part of the Centre for Military Studies' (CMS) policy research service for the political parties to the Danish Defence Agreement 2009-2014. The purpose of this report is to examine and further the follow-up to the Chicago Summit declaration on Allied military capabilities in 2020. In particular, the report analyses impediments and possible solutions to NATO's compound political problem of multinational defence procurement.

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This report is an analysis based on research methodology. The conclusions of this report should not be interpreted as the view and opinions expressed by the Danish government, the Danish armed forces or by any other authorities.

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Baggrund: Smart Defence i NATO og i aftale om forsvarsområdet 2013-2017

Ved NATOs topmøde i Chicago i maj 2012 vedtog regeringslederne en fælles deklARATION for udvikling af alliansens forsvarskapaciteter frem mod 2020.¹ Her spiller 'Smart Defence'-initiativet en vigtig rolle. NATO forsøger med dette initiativ at forstærke forsvarssamarbejdet i form af en øget harmonisering og koordinering af nationernes forsvarspolitiske valg. Smart Defence-initiativet har tre hoveddimensioner: samarbejde, prioritering og specialisering. Initiativet minder i indhold om tidligere kapacitetsinitiativer indenfor NATO og internationalt forsvarssamarbejde, selvom det i anslaget er mere ambitiøst. Smart Defence ses derfor som en fundamentalt ny måde at tænke forsvarspolitik på (nyt 'mindset').

I *Aftale på forsvarsområdet 2013-2017* fremgår det, at forligspartierne er 'enige om, at NATO's Smart Defence initiativ skal søges udnyttet til at opnå større operativ effekt for de samme eller færre ressourcer', at Danmark 'målrettet' skal 'virke for at opretholde sin status som NATO kerneland', herunder igennem Smart Defence, ligesom multinationalt fremhæves som et særskilt hensyn indenfor dansk forsvarspolitik, herunder i form af Smart Defence.²

Hovedargument: Smart Defence begynder med multinationalt indkøbssamarbejde

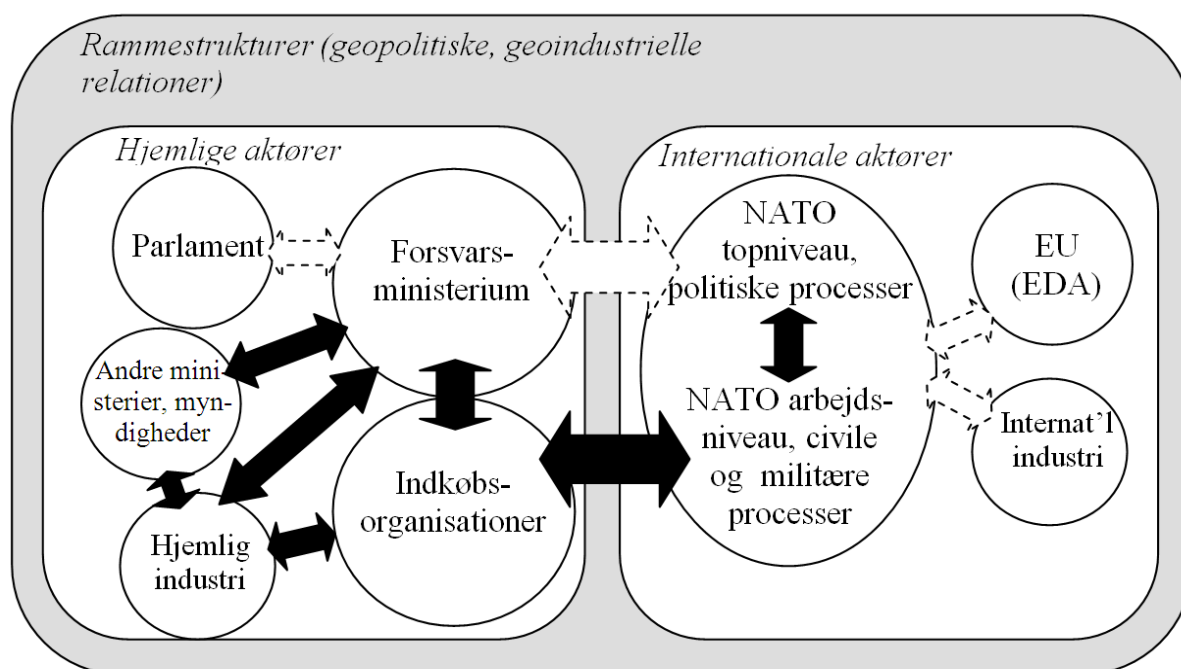
Denne rapport beskæftiger sig med et specifikt og underbelyst aspekt af Smart Defence. Overordnet fokuserer Smart Defence-dagsordenen mest på *output*, det vil her sige operative militære kapaciteter. Stigende priser på forsvarsmateriel i kombination med faldende budgetter udgør en tilskyndelse til øget multinationalt samarbejde i hele Alliancen, men i særhed for de mindre lande. Rapporten argumenterer derfor for, at der er fordele ved at fokusere på at styrke samarbejdet på *input*-siden, i forhold til indkøb af militære platforme. Logikken er, at det er mindre følsomt at købe ind sammen til *hver sin* kapacitet, end det er at købe ind sammen til en *fælles* kapacitet. Til gengæld vil man opnå stordriftsfordele over hele

udstyrets levetid, nemmere operativt samarbejde og en dybere forankring af Alliancen. Men der findes imidlertid et dødvande indenfor multinationale indkøb. Dødvandet er forårsaget af en kombination af nationale, internationale, administrative, politiske og industrirelaterede faktorer. For at fremme Smart Defence-dagsordenen analyserer denne rapport, hvordan man kan skabe en positiv spiral for multinationale indkøb indenfor NATO.

Første del: Dødvandet ift. multinationale forsvarsindkøb skabes hjemme og ude

Rapportens første del beskriver udfordringer for forsvarsindkøb i en international kontekst. Multinationale forsvarsindkøb begrænses af en række sammenhængende faktorer. Der skelnes her mellem tre hovedområder som er indeholdt i den nedenstående figur, 'Kredsløbet for indkøb af forsvarsmateriel i et NATO-land'.

Kredsløbet for indkøb af forsvarsmateriel i et NATO-land



Disse er for det første de bagvedliggende rammestrukturer som udgøres af geopolitiske og geindustrielle forhold. USA, Storbritannien, Frankrig og Tyskland tegner sig for over 85% af Alliancens forsvarsudgifter. Kun disse lande har meget væsentlige forsvarsindustrier, og kun USA kan meningsfuldt siges at være selvforsynende med forsvarsmateriel. Italien, Holland, Spanien, Tyrkiet og Canada tegner sig for endnu ca. 10% – og de mindste 19 lande, herunder Danmark, står for under 5% af Alliancens forsvarsudgifter. Forholdet mellem NATO og EU, og USA's og de store europæiske landes respektive syn herpå er et afgørende forhold i disse rammebetingelser (den grå baggrund i figuren).

For det andet er der i alle NATO-landene hjemlige aktører som er involveret i indkøb af forsvarsmateriel. De indbefatter det politiske niveau, indkøbsorganisationerne, parlamentet, andre relevante ministerier og myndigheder, og den hjemlige forsvarsindustri. Den største udfordring for øget multinationalt samarbejde er, at indkøbsorganisationer og militære værn i praksis i vidt omfang kan modarbejde politiske ønsker om flere multinationale indkøbsløsninger. Det skyldes, at de besidder en særlig teknisk indsigt eller formel ret til at bestemme over doktriner, som ministerier og politikere kun vanskeligt kan udfordre.

For det tredje er der det internationale niveau som her primært udgøres af NATO – hvor der igen skelnes mellem de politiske processer på topniveau, og civile og militære administrative processer – samt EU og EU's forsvarsagentur EDA, og endelig den internationale forsvarsindustri. På figuren er ikke medtaget bilaterale relationer landene imellem samt andre former for mellemstatsligt samarbejde vedrørende indkøb af forsvarsmateriel, såsom indenfor OCCAR. Det skyldes rapportens fokus på, hvordan særligt NATOs egne processer kan styrkes med henblik på at forøge andelen af multinationalt indkøbt forsvarsmateriel.

Anden del: Løsningsforslag til at styrke multinationale forsvarsindkøb

Den dagsorden, der blev vedtaget i Chicago, er ved at blive implementeret. Anden del redegør for implementeringen og undersøger først – af særlig interesse for Danmark som står udenfor EDA – hvilke EDA-initiativer NATO vil kunne lære noget af, særligt i forhold til multinationale indkøb. Dernæst beskrives både en overordnet tilgang og konkrete forslag til, hvordan landene i Alliancen fremadrettet kan styrke den multinationale andel af forsvarsindkøbene.

Vigtigst kan multinationale indkøb styrkes ved at øge det politisk niveaus involvering, især i forholdet mellem nationerne og NATO. Selvom NATO-samarbejdet i modsætning til EU ikke er juridisk bindende kan det bruges som løftestang af det politiske niveau i medlemslandene. Videre har de nationale parlamenter en vigtig rolle at spille i form af tilsyn, transparens og kvalitetskontrol i forhold til beslutningsprocesser. Endelig vil en tilnærmelse til EDA i praksis være en oplagt udviklingsmulighed for de dele af NATO, der skal udvikle og fastholde Smart Defence-dagsordenen, ligesom industriens repræsentanter kan inddrages bedre. På figuren ovenfor vises dette udviklingspotentiale i kraft af de stiplede pile, mens de sorte pile viser eksisterende relationer.

Hvis NATO-landene i fællesskab skal bryde med det nuværende dødvande i forhold til multinationale forsvarsindkøb og skabe en positiv spiral bør de derfor:

- Forpligte sig politisk til som udgangspunkt altid at forfølge en multinational løsning (det vil sige i fællesskab med mindst et andet land)
- Fremme reformer af NATOs forsvarsplanlægning NDPP så det multinationale aspekt (hvordan vi køber forsvarsmateriel) gøres ligeså vigtigt som kvalitet og kvantitet (hvad vi køber), herunder i form af krav til afrapportering
- Fremme reformer af NATOs processer og institutioner med henblik på en øget harmonisering af indkøbsplaner for forsvarsmateriel
- Styrke sådan harmonisering ved at anvende standardiserede indkøbsplaner og dele disse med alliancen med henblik på synkronisering af behov
- Udvikle grundlaget for en standardisering af tekniske materielbeskrivelser i NATO-regi såvel som af relaterede doktriner
- Løfte behandlingen af det multinationale indkøbsprocesser op fra Konferencen af nationale materieldirektører (CNAD) til det politiske niveau, og herunder integrere målsætninger og afrapporteringer i NDPP
- Give NATO til opgave at indsamle og udgive løbende data om forsvarspolitik, herunder budgettal vedrørende nationale og multinationale indkøb i Alliancen for at sikre et debatgrundlag
- Udvikle og udvide Parlamenternes rolle i forhold til tilsyn og kvalitetskontrol i forhold til større materielindkøb, herunder om de foretages som et multinationalt indkøb

Perspektivering: Multinationalt samarbejde er dansk alliancepolitik

Kun USA er i realiteten selvforsynende med forsvarsmateriel. Hvis det at være selvforsynende med forsvarsmateriel er en forudsætning for handlefrihed, så er de fleste lande i Alliancen i praksis kun suveræne i kraft af internationalt samarbejde. For de 19 mindste lande betyder det, at det er særligt vigtigt at skabe et udbygget samarbejde vedrørende indkøb af forsvarsmateriel – både for at fastholde de større lande i et forpligtende samarbejde, og for at sikre, at Alliancen har de bedst mulige militære kapaciteter i 2020. Det gælder dermed også for Danmark, som må se det som en vigtig opgave at bidrage til styrkelsen af både en fælles ramme i NATO-regi for multinationale indkøb, og overveje at implementere rapportens forslag til styrkelse af det multinationale aspekt.

Relevans for beslutningstagere

Rapportens analyse og løsningsforslag er relevante for beslutningstagere i forhold til:

- Forsvarsforligets implementering
- Indkøb af nyt kampfly
- Indkøb af andre større materielgenstande, herunder pansrede mandskabsvogne og våbensystemer med videre til fregatterne
- Forsat effektivisering indenfor forsvarspolitikken
- Større åbenhed indenfor forsvarspolitikken, herunder i form af Folketingets inddragelse

Executive summary

At the Chicago Summit in May 2012, NATO political leaders agreed to the *Summit Declaration on Defence Capabilities: Toward NATO Forces 2020*. The Smart Defence initiative is an important component of the declaration. Compared to earlier allied capability efforts, this initiative is unique given the high-level involvement and emphasis on a new mindset. This report proposes ways of institutionalising the new mindset through increased multinational procurement.

Some of the most difficult aspects of the Smart Defence efforts deal with outputs, that is with the integration of operational defence capabilities. We propose beginning instead by focusing on the input side. It is easier to agree on buying the same defence equipment together than to agree on buying *and operating* defence equipment together. In enabling increased multinational procurement, ministers of defence from different countries will likely reap benefits of economies of scale for both the actual acquisition and during the entire platform life-cycle, as there will be partners with whom to share development and maintenance costs. By operating identical equipment, nations will also be ready for a high degree of interoperability in terms of both operations and maintenance. This also renders them capable of engaging in more ambitious sharing and capability-pooling arrangements. Raising the ratio of multinational to national procurement is therefore a positive policy goal for the Alliance and a promising way of implementing the Smart Defence agenda.

But if enhanced multinational procurement appears to be less ambitious than other aspects of the Smart Defence agenda, it is not a straightforward task. It is in fact a compound international political problem with diverse and interlocked problem areas. Some of these are found within the NATO organisation and processes and in other international contexts, but many are of a domestic character. The current system is therefore in a stalemate with regard to multinational procurement. Adopting the solutions proposed here offer an opportunity to NATO and its member states to break this stalemate.

This report assesses the stalemate and proposes a general approach and concrete initiatives to create a positive spiral of enhanced multinational procurement in the Alliance. The general approach should be for NATO organisations and processes to further the harmonisation of national defence policies with regard to capability development and planning. With regard to procurement, harmonisation means both standardisation and synchronisation – the standardisation of capability requirements, of doctrine and national reporting, and

synchronisation of plans and planning requirements. In concrete terms, this means elevating the principle of multinational procurement to a main focus of political level NATO cooperation, including in the NATO Defence Planning Process, and helping nations to pursue the principle of going multinational first.

Even if nations should push for reforms of NATO organisations and processes which should enable such a development, the greatest challenges are found in the capitals. Some of the strongest impediments to multinational procurement are found in the relationships between ministries of defence (MoDs) and subordinate armaments organisations, including the military services. We propose that the political level leadership in nations – MoDs – should reform and employ the NATO processes, including the Defence Planning Process, to deal with this issue. Political level attention to making commitments and reporting requirements at the international level can create a substantial downward pressure at the domestic level, from ministers and their cabinets down to National Armaments Directors, armaments organisations, and service bureaucracies. NATO processes should be used in capitals as a lever in this domestic tug of war. While NATO will not acquire any of the *formal* characteristics of a supranational organisation in the foreseeable future, it can acquire such *functional* characteristics when MoDs use NATO processes as leverage in their respective domestic management processes.

In order for this to happen, we propose a set of initiatives at both NATO and national levels. In particular, NATO organisations and processes should be adapted to:

- Elevate the principle of multinational procurement (how we buy things) at par with the quality and quantity of capabilities (what we buy), including in the NATO Defence Planning Process (NDPP).
- Establish a permanent staff for the NATO Procurement Organisation (NPO).
- Establish a ministerial-level governing board for the NPO to replace the Conference of National Armaments Directors (CNAD) so that responsibility for multinational procurement rests at the political level rather than the technical level.
- Institutionalise reporting requirements to include the ratio of national to multinational procurement projects and explanations of deviations from multinational procurement.
- Gather and publish transparent data on defence expenditures.
- Propagate international standards for military requirements so as to achieve standardisation of capabilities.

- Enhance contracting transparency through accessible projects databases for nations and companies.
- Harmonise doctrine in order to avoid differing requirements.

These NATO-level initiatives could enable Alliance member states to engage in multinational procurement if they choose to do so. Yet this is a compound political problem, and lowering barriers to cooperation at the NATO level is not sufficient. Member states must take action and reform their own processes if they are to engage in multinational procurement more easily. To achieve this, initiatives such as the following should be undertaken by MoDs:

- Pledge to increase multinational procurement by making it the default principle.
- Adopt standardised national procurement plans (for NATO reporting purposes).
- Share these with Allied nations so that procurement can be synchronised in time and standardised in capability.
- Link national procurement plans to the NDPP so that capability shortfalls and surpluses can be coordinated and avoided more easily and multinational potential can be identified.
- Gather and publish transparent data on defence expenditures.
- Adopt international requirement standards so that equipment purchases can be harmonised more easily.
- Institutionalise relations with industry based upon transparent requirements and contracting opportunities, both nationally and internationally.
- Enhance parliamentary oversight in order to strengthen the transparency and accountability of the involved actors and processes.

These domestic reforms mirror those proposed at the NATO level. The synchronisation of processes at each level will facilitate cooperation by removing key impediments as the process moves from one level to the next. Harmonising these processes will allow national political leaders to utilise NATO processes to enforce their will upon their subordinate procurement agencies, thereby solving the principal–agent issue that hampers multinational procurement. The strategic challenge of maintaining military capabilities in an era of severe fiscal constraints requires the exercise of political leadership in the Alliance.

No single country outside the United States has the money, expertise, and political will to have a full-fledged defence. No Western country – even the European NATO countries

together – is able to be self-sufficient in defence affairs regarding both capability development, sustainment, and operational use. In this context, cooperation, coordination, and sharing in defence matters increasingly constitute a precondition for sovereignty – especially if sovereignty is to be understood less as an abstract legal term than as a practical issue of maintaining autonomy and freedom of action. Nations engaging in multinational procurement are likely to increase their autonomy and freedom of action via the benefits accrued in the form of economies of scale and increased interoperability.

Introduction

At the Chicago Summit in May 2012, NATO political leaders agreed to the *Summit Declaration on Defence Capabilities: Toward NATO Forces 2020*.³ The declaration includes description of the Smart Defence initiative. Smart Defence is about creating value for money in European defence by encouraging synergies through economies of scale. Smart Defence has three components: aligning national capability investments with NATO's capability priorities, pooling Allied military capability among Allies to generate economies of scale and improve inter-operability, and achieving a more effective division of labour through specialisation.⁴ Compared to earlier allied capability efforts, this initiative is particular given high-level involvement and emphasis on a new mindset.

This report proposes ways of institutionalising the new mindset through increased multinational procurement. Some of the most difficult aspects of the Smart Defence efforts deal with outputs, that is with the integration of operational defence capabilities. Clearly, issues of sovereignty and burden-sharing at the international level come to the fore when such prospects are being considered. It therefore makes sense to focus especially on cooperation in the input side aimed at enhancing multinational procurement – regardless of how the capabilities are employed, whether in national or multinational settings. By purchasing defence materiel together – with at least one other member nation – NATO nations will gain both economies of scale along the life-cycle of the platforms and ensure better interoperability, thereby improving future allied operational cooperation.

Focus of the analysis

The Smart Defence initiative covers a wide-ranging agenda to strengthen cooperation in NATO in ways that touch upon sovereignty-related issues. We focus on a specific subset of this agenda: investments in military capabilities, which is where the future of Allied capabilities is laid down. This report therefore examines challenges related to enhancing the multinational procurement of defence capabilities, discusses the agenda agreed to at the Chicago summit, and proposes a set of recommendations for policy-makers at various levels. Like issues further downstream in the defence policy process, such as force employment, multinational procurement poses many challenges. Structural geopolitical and geo-industrial tensions also expressed in the unresolved NATO–EU relationship are clearly relevant when accounting for the limitations to the harmonisation of Allied procurement processes.

Despite these challenges, the specific focus on multinational procurement is smart. The future of the Alliance is being made at this public–private intersection in the form of armaments organisations and industry, domestic and international processes through national and NATO defence planning, and civilian and military with ministers and MoDs in combination with military establishments. Despite the challenges – which are many – this is also the obvious starting point for a renewed push for stronger harmonisation of allied defence policies. It sidesteps many of the political sensitivities related to operational requirements and geostrategic differences of perspective. Moreover, procurement is also basically a political issue that political leaders have the power to change.

To be clear, the argument concerns multinational defence procurement. This is understood here as defence materiel procured by at least two NATO nations, or a NATO nation and a partner nation, at the same time. The focus is solely on procurement, not what is referred to in NATO parlance as multinational capabilities and common funding.⁵ It is important to emphasise that the multinationally procured capabilities can then be deployed as either purely national capabilities, as part of a multinational framework, or some combination of the two. From a life-cycle management perspective, the possibilities for multinational cooperation on training, platform development, operational deployment and sustainment, and retirement are much greater when the starting point is capabilities that have been procured together by at least two allied nations. While these issues provide reason to pursue multinational procurement, they involve their own challenges and are not covered here. The focus is on enhancing multinational procurement only, as a first and important stepping stone towards better and more affordable future allied capabilities. Furthermore, our focus is on equipment manufactured or intended primarily for military use, such as tanks, armoured personnel carriers, fighter aircraft, and frigates. Our analysis excludes goods and services purchased by MoDs that are generic or intended for civilian use, such as office furniture, information technology, or catering services.⁶

The report focuses primarily on NATO, even if EU developments are included. NATO is the central Western security actor and the centrepiece of security and defence matters in the North Atlantic area. More than an alliance, NATO is also the most important organisation for communicating and harmonising defence and military policy standards, including the necessary knowledge of the art of war as it develops in the global security environment. NATO's internal processes for communication and harmonisation are therefore of crucial importance. The NATO Smart Defence initiative aims at reinforcing these processes so that a

more effective use of the defence budgets will mean a higher relative output through economies of scale. While the United States is and will remain the Alliance's most important member, in this context the other nations – mid-sized and smaller nations with or without significant defence industries – play the main role. For ease of language, this group of states will be referred to in the report as 'European NATO'.⁷ Specific examination of the European angle to NATO matters, as this is where the most efficiencies to pursue are found. Moreover, the arguments here will likely be of special interest to the smaller European NATO nations for whom the business case of multinational procurement and cooperation is the most pressing and evident.

While we have spoken with many defence industry executives in the course of the research done in preparation for the report, the focus is not on supply but rather on demand. This is because the defence industry is one of the most politically conditioned industries: supply is ultimately determined by whatever states demand. This is not to say that the issue of industry is unimportant; rather, industry and geo-industrial relations largely underlie the current stalemate. This means that a higher degree of involvement with industry in everyday and formalised terms is necessary just to make small amounts of progress, and also that some kind of grand transatlantic bargain or agreement is necessary for the materialisation of a transatlantic defence market. Less is perhaps necessary to further multinational defence procurement in European NATO, but drawing up the parameters of the possible in order to know what can be achieved nevertheless matters.

How we did it

As part of the production and service contract for 2012 between the Danish MoD and the Centre for Military Studies/University of Copenhagen, the Centre for Military Studies (CMS) was tasked with preparing a report on Smart Defence as part of the analyses for the parties to the Danish Defence Agreement.⁸ In addition to following the procedures laid out in the CMS project manual, including external peer review, the analyses underlying the report were organised in the following way:⁹ One member of the project team was involved in preparatory international think-tank workshops organised by the Center for Strategic and International Studies (CSIS), the Atlantic Council of the US (ACUS), and the International Institute for Strategic Studies (IISS) in cooperation with NATO Public Diplomacy Division (PD) in the six month run-up to the Chicago Summit. These observations resulted in an op-ed on industry and Smart Defence published *Defense News's* international edition during the summit.¹⁰ As part of our research, we have made desk studies and carried out dozens of

interviews with high-ranking international defence industry representatives, senior international officials, and think-tank researchers. Apart from doing research in Denmark, the team travelled in September–November 2012 to NATO HQ, NATO Allied Command Transformation’s (ACT) Industry Day in Riga, a NATO Parliamentary Assembly Rose-Roth Meeting in Montenegro, NATO ACT’s Strategic Foresight Workshops, a NATO PD and IISS workshop on Smart Defence in Brussels, and conferences organised by the Danish Atlantic Council and the Nordic Atlantic Councils on Smart Defence and Nordic Security Cooperation in Copenhagen and Helsinki.

During this process, we have developed and examined various hypotheses about the existing impediments to multinational procurement. Our consistent approach has been to ask all types of stakeholders, civilian and military, as well as representatives of the defence industry about the often complex and technical issues surrounding defence materiel procurement.

Interviewing international defence industry representatives has several advantages. Defence companies are profit-driven and motivated to achieve the highest possible sales, including the international context. Defence companies (beyond a certain size or with specific international export capabilities) therefore have an incentive to further multinational procurement. Defence companies have a unique understanding of the political conditions of the market and therefore also of the impediments government officials may be reluctant to mention. Finally, industry appeared to be a crucial partner for future NATO HQ efforts to organise the NATO Europe defence market, as mentioned in the *Defense News* op-ed.

Overview

This introduction is followed by two main analytical sections and a conclusion. The first of the analytical sections examines the system of relations constituting the compound political problem of multinational defence procurement in NATO. This means that the section contains a review of each of the different problem areas and a discussion of their relative challenges and impediments to multinational procurement. In this way, the analysis also identifies chokepoints within the problem areas and discusses how they are interlocked, making for a certain balance in the overall system. The second analytical section then emphasises the political character of the compound political problem. This means looking for initiatives that may become solutions to change the current balance in the system in favour of a positive spiral for enhancing multinational defence procurement in NATO. The section therefore contains both an overall approach to reshaping and breaking the current stalemate

as well as some concrete proposals for doing so. Even if these proposals can be implemented in relatively straightforward terms on the various institutional levels they are aimed at, they also indicate the possibility of applying the general approach to breaking the stalemate in other ways. The second section therefore also emphasises the importance of an explicit and shared political understanding of the stalemate as a compound political problem requiring multi-level initiatives that reach into shared NATO processes as well as national procurement and strategic planning processes in order to succeed with this important part of the Smart Defence agenda. Finally, the conclusion sums up the argument and offers further suggestions for how progress can be achieved.

A compound political problem

As the Alliance proposes the further harmonisation of defence policies under the Smart Defence headline, defence procurement merits special attention. The procurement of new defence capabilities not only amounts to a significant part of the aggregate defence budgets of the Alliance, it also paves the way for the Alliance of tomorrow, as these capabilities are literally the means of our future armed forces. In numerous different ways, the current system of defence procurement impedes a higher ratio of multinational to national defence procurement. This section argues, first, that the challenge is of a fundamentally political, not economic, nature. Second, it describes the system of actors and multinational defence procurement processes and their relations in the context of NATO. Third, it sums up the different chokepoints and assesses the overall stalemate as a way of introducing the subsequent chapter's review of on-going reforms as well as an agenda for change.

Defence cooperation – economics and efficiency or politics and security?

Normally, the story of European defence inefficiencies is presented something like this: The European states have developed armed forces and their favoured approaches to equipping them in light of their indigenous resources and the primary security challenges that they have each traditionally faced. For various reasons – limited resources concentrated in a relatively small area, the difficulty of power projection, and the heterogeneity of peoples – most European states developed the capacity to arm themselves and focused upon territorial defence against the possible aggression of their neighbours. The few exceptions to this functional imperative have been the great powers, which possessed a surplus of resources and the desire to devote them towards what we now call expeditionary operations. Yet even these great powers were forced to grant priority to territorial defence during the Cold War. The common threat of the Soviet Union and the institutional frameworks developed under the banners of NATO and the European Community facilitated historic levels of cooperation. This cooperation even extended into the realm of military equipment requirements, with NATO's Military Agency for Standardization being founded in 1951.¹¹ Despite steady and incremental improvement in the area of common military procurement, significant challenges remain.¹²

Unlike the United States, Europe has long suffered the deleterious effects of a fragmented military equipment market. Sovereignty in the realm of national security led to an exemption

for the production and trade in armaments, munitions, and war materiel in the 1958 Treaty of Rome that established the European Economic Community.¹³ It also allowed member states to retain information concerning their national security secrets from one another.

Consequently, the market for military supplies has remained fragmented, competition has been limited to suppliers within national boundaries, and transparency has been lacking.

Demand has also been fragmented, with national governments developing their own requirements for military capabilities and relying primarily upon national suppliers so as to retain control over sensitive information, technology, and economic opportunities. The result has been national monopolies or oligopolies in the defence industry sector and a patchwork of national regulations, processes, and practices. Together, these have reduced the incentives and increased the barriers for suppliers to cooperate with one another, even as they face reduced demand from their primary customers.

Thus, opportunities for cooperation leading to economies of scale in the production of military equipment and for larger purchases that could further reduce the unit cost have been lost. From a purely economic perspective, the Alliance is allocating its defence spending in a suboptimal manner. This argument has been underlying efforts in the context of NATO and the EU with respect to integrating defence investment policies since the birth of NATO and the first continental European defence project with the European Defence Community in the mid-1950s.¹⁴ The longevity of the argument demonstrates the value of examining the Alliances' defence budgets from such a utilitarian viewpoint. It allows us to see how improvements can be made under the assumption that everything else is equal.

There is a lot of truth to this story – it is also a driver of the Smart Defence initiative – but it is not the whole story. Everything else is not equal. While global and European politics certainly have seen considerable integration since the end of World War II, there has been nothing inevitable about this grand integration process. Rather, these processes have been and will always remain deeply political. They are acts of conscious choice rather than acts of fate. This is good because the power of politics is that it can change the framework within which other decisions are made. Thus, reducing the issue to an economic problem of allocation is to miss its essence: it discounts the geopolitical and political-administrative dimensions of the problem.

Enhancing multinational defence procurement is therefore best understood as a compound political problem. A compound political problem consists of a set of distinct but interlocked

problem areas. Each of the problem areas contains their own particular dynamics that impede solutions. These areas include the relations between actors at the national level, such as ministers and MoDs, military procurement agencies, other ministries, parliament, and industry. They also include actors at the international level, including the relations between states within NATO processes, and their interaction with the international defence industry marketplace. The intersections of these actors and processes present chokepoints that work against an increase in the number of multinational defence procurement projects. The overall system results in a stalemate.

Despite their apparent technical content, all of the issues are of a political character and can be solved by political means. Consequently, this report proposes a general approach to breaking the stalemate as well as a set of concrete proposals for how political leaders and civil servants may start a positive spiral of multinational defence procurement. History shows that problems that are inherently political can be solved through political means. The EU and indeed NATO itself offer clear examples of this. Moreover, the interlocked character can be utilised to devise solutions in one area that will alleviate some of the challenges in others.

The system of multinational defence procurement can best be conceptualised as a series of relations between domestic and international actors and processes. These different locations and problem sets are described in Figure 1.

Figure 1: The procurement process actors

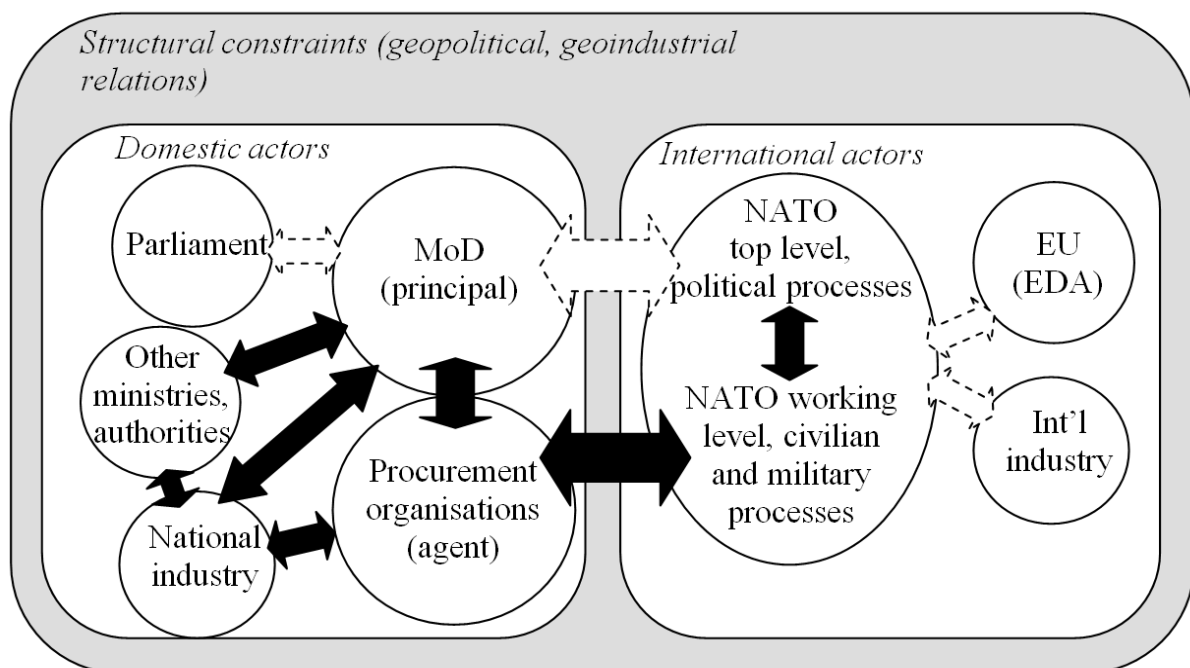


Figure 1 describes the actors and problem areas in multinational defence procurement in a generic perspective, including the domestic and international levels (where we find concrete actors and processes) with geopolitical and geo-industrial structural conditions in the background (limiting and influencing the specific actors and processes). On the left side, the domestic level contains a number of typical actors and processes: the MoD and its underlying procurement-related authorities, including dedicated and general armaments organisations, service specific organisations, and other relevant organisations formally answering to the MoD. Formal defence procurement almost always proceeds within this top-down relationship. Next (to the left), we find a set of supporting domestic actors: industry (national and international), other relevant authorities such as ministries of finance, industry, labour, technology, foreign affairs, and the equivalent of a prime minister's cabinet. Finally, we find the parliament, which plays an important role regarding oversight, ensuring transparency, and the democratic legitimacy of major defence policy decisions.

The arrows indicate the most important relations with regard to the procurement process. They are not exhaustive. Industry can have direct contact with parliamentarians, for example. The darker the arrow, the more significant the relationship. The major domestic relationship is between the MoD and its armaments organisations (and their underlying authorities in the military services). These subordinate and implementing organisations naturally deal with the providers of the services and products that they are created to procure; that is, they deal with industry in its various forms, including national and international industry representatives. The least developed arrow is for the role of parliament in providing quality control to major decisions, oversight, and democratic legitimacy. Another less-emphasised arrow is crucial for improving multinational procurement: the relationship between the MoD (at its highest level) and the political level processes in NATO. As argued in the next chapter, that relationship should be leveraged by MoDs in order to deal with the most difficult chokepoint at the domestic level: the management of their subordinate agencies.

The right side of the figure provides a generic description of the international actors and processes with a NATO focus. Here, distinction can be drawn between NATO top-level forums and processes, such as ministerial meetings, meetings in the North Atlantic Council (NAC), the Military Committee (MC), and political/civilian high-level working groups – and the working level day-to-day processes carried out in meetings among nations or being prepared by NATO personnel, such as the NDPP and others. Here, the arrow is again bold, emphasising a main component in the multinational procurement framework. At the same

time, crucial components of the multinational procurement framework at the international level are left to underlying national authorities. This is expressed in the black arrow, which connects the domestic and international systems at the working levels. Outside NATO, the EU and its European Defence Agency (EDA) are underutilised resources for NATO, while the same is the case for international industry, especially in the shape of the NATO Industrial Advisory Group (NIAG). We have left out important international relations such as bilateral relations and international groupings in defence procurement such as OCCAR. This omission is based on the subsequent focus on how NATO's own processes can be strengthened to support further multinational procurement among member nations.

Connecting the domestic and international levels, we find two arrows: a black arrow at the working level and a dotted arrow at the political level. The difference between the lower black arrow and the higher white arrow indicates a main issue impeding multinational procurement: the lack of elevation of the issue to the highest political levels.

When taken together, the black arrows show the main elements in the current stalemate. In the domestic sphere, national industry and underlying armaments authorities can stall or impede multinational procurement policy decisions at the political level. As they are also responsible for managing and developing multinational procurement at the working level in Brussels, there is limited opportunity for feedback from NATO to domestic armament organisations to spur multinational cooperation.

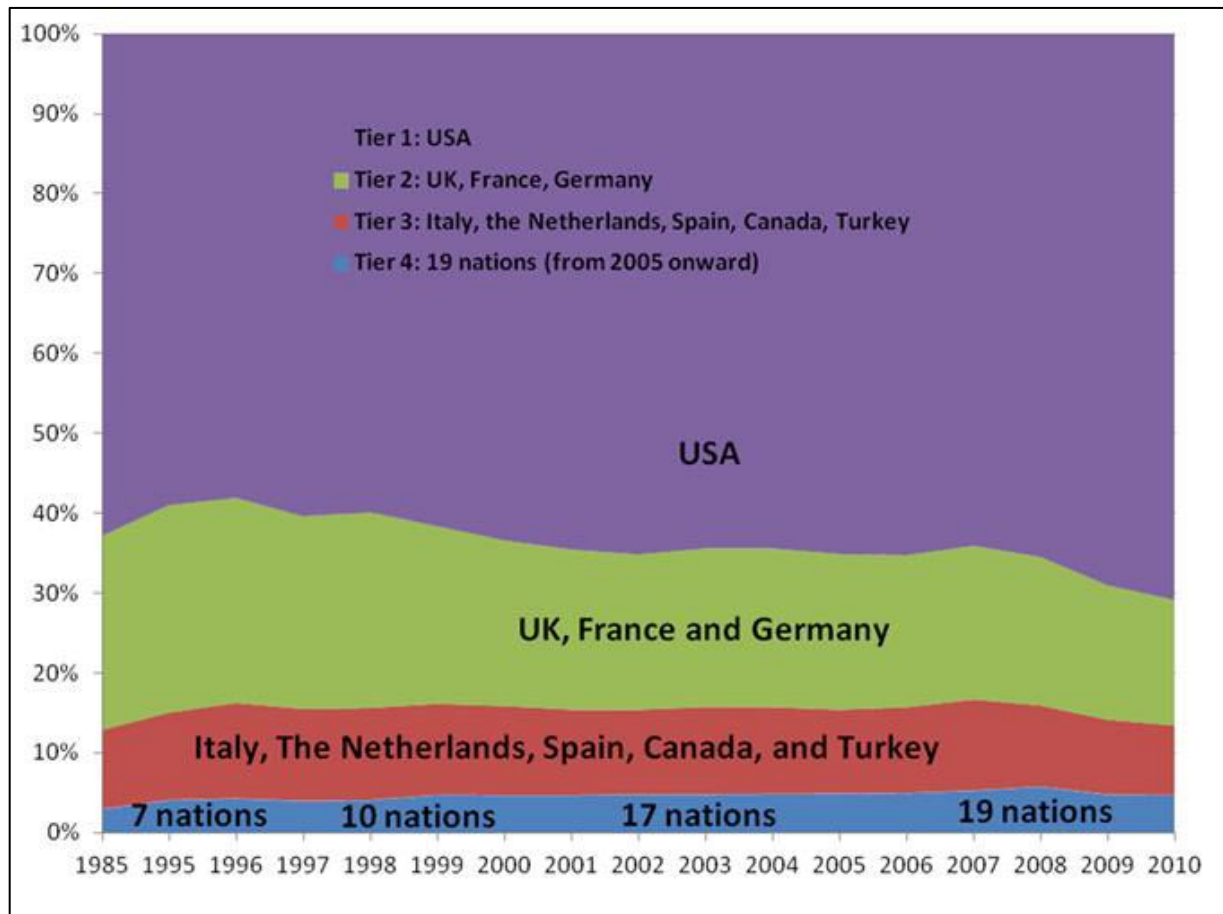
Multinational procurement will become a much sturdier fixture on the political agenda, particularly by emphasising the relations captured by the middle, upper white arrow between the domestic and international political domestic levels. Moreover, by letting NATO development be inspired by the EDA and by building a better working relationship with the EDA, many things will be gained. Finally, giving Parliaments a substantial function in major defence policy decisions will not only boost democratic legitimacy but possibly also provide much-needed transparency and oversight to such decisions.

The political defence market in the Euro-Atlantic region

The generic description captured in Figure 1 shows how the domestic–international interface both conditions the current stalemate and offers possibilities for dealing with the stalemate. As also indicated in Figure 1, however, there are a number of geopolitical and geo-industrial structural conditions behind the generic setup that limit and shape the forms and amounts of multinational procurement. The geopolitical tensions behind the Alliance – divisions over

what purpose the alliance should serve, the transatlantic relationship, and the unsettled relationship and division of labour between NATO and the EU – are all constraining factors. In Figure 1, such unsettled issues form the deep structural background for the development of further allied cooperation in defence. Some of the resulting practical impediments are likely to remain unresolved as long as the deep ones persist. Until then, the space for better cooperation is limited by these structural constraints.

Figure 2: Relative NATO Defence Expenditures (data from *The Military Balance*)



When it comes to defence expenditures, industries, and the dynamics of multinational defence procurement, the Allied nations are quite different. Overall, there are four distinguishable state types in the Alliance:

- Tier one: the United States
- Tier two (defence expenditure over USD 25 billion, 2010 data from the *Military Balance*): the UK, France, and Germany
- Tier three (defence expenditure of USD 10–25 billion): Italy, the Netherlands, Canada, Spain, and Turkey

- Tier four: 19 states with defence spending under USD 10 billion. To this group may be added a number of partner nations in geographical Europe.

Over time, the relative importance of the four groupings has developed as described in Figure 2: Relative NATO defence expenditures. Figure 2 illustrates the development of defence spending in the Alliance over time.¹⁵ The US relative contribution has risen from around 60 per cent in the mid-1990s to about 70 per cent of the Alliance's defence expenditures a decade and a half later. At the same time, it is noteworthy that the relative share of the smallest countries (Tier 4) has not grown despite NATO enlargement. These four tiers face different challenges with regard to multinational procurement. We will describe these in turn.

The American role and position is paramount for how the Alliance works – including any movement with respect to the overall stalemate. American defence industry consolidation corresponded to the structural adjustments that occurred in the 1980s and were accelerated by defence spending cuts in the 1990s. Consolidation of the defence sector proved too important to be left solely to the market, and the US Department of Defense concluded that it would protect key defence industry capabilities as well as allowing for efficiencies that would reduce expenditures.¹⁶ In practice, the American approach has since been the development of a hub-and-spokes model, exemplified by the Joint Strike Fighter programme, for an increasing number of capability development programmes. US defence market policy already encourages a partial globalisation of the US market, especially in terms of buyers.¹⁷ This means that the political economy of the American defence industry and defence industry base increasingly depends on – or rather, is interdependent with – its international allies and partners.

Unlike the United States, 'there has so far never been a genuine pan-European defence procurement market but rather 27 national markets fenced off with regulatory barriers to entry aimed at protecting national defence industries'.¹⁸ This situation of fragmented national demand, fragmented national-based supply, and hence duplication of productive capacity and R&D spending has had significant consequences for European defence procurement and the defence industry base. To this may be added politically and economically motivated protectionism on both sides of the Atlantic.

Turning to Tier 2, great powers such as Great Britain, France, and Germany retained a self-sufficient defence industry base into the 1990s.¹⁹ The prevailing conditions driving the

consolidation of the American market also affected the more heavily state-owned defence sector in Europe.²⁰ Defence industry consolidation through mergers, acquisitions, and cross-national partnerships allowed suppliers to reap some of the benefits of a larger market, including economies of scale derived from horizontal and vertical integration. This resulted in the formation of numerous large multinational defence companies around the primary firms within these countries, each with sufficient scale to develop and produce high-technology products at prices competitive with those of American companies. This has resulted in transnational oligopolistic competition replacing national monopolies for major systems across the continent. Indeed, the companies of the Tier 2 states account ‘for more than 80% of armament production and for 90% of military R&T expenses in Europe’.²¹

In Tier 3 and 4 countries, defence industries have long been unable to supply their governments with all of their military equipment needs.²² These countries generally buy major platforms produced by companies located in larger countries. Nor can the defense industries of these countries survive on domestic sales alone. Under pressure from the wave of industrial consolidation of the 1990s, they have taken to specialising in niche components and often assumed the role of subcontractors to larger, foreign companies. Such industries are vulnerable to market fluctuations and their home governments have thus utilised the off-set mechanisms under Article 296 of the Treaty of Rome to ensure their survival.²³ While the companies in mid-sized countries are concerned with becoming second-tier subcontractors for American firms, the companies in small countries are often more reluctant to partner with larger companies from Tier 2 countries.

Under the impression of rising platform prices and austerity budget cuts, defence analyst Christian Mölling has warned that European countries will only have ‘bonsai armies’ at their disposal in the not-so-distant future.²⁴ This argument is especially pertinent for the Tier 4 states whose share of the overall defence expenditures has not risen with the enlargements. Because they have less operational capability, however, the Tier 3 and 4 nations have a particular opportunity to move forward on multinational defence procurement. In terms of industry, they have less strategic reason to be protective, as they are not sovereign in any practical sense if sovereignty is to mean self-sufficiency in capability development.²⁵ If you cannot provide for your own security even in theory, including the development, production, procurement, and deployment of the platforms needed within your own borders, then you need to cooperate in order to achieve security. Only Tier 1 and 2 countries can theoretically aspire to this status and, as seen with the US example, even these countries are increasingly

dependent on allied markets. This means that Tier 3 and 4 countries are freer to act from a market perspective when shopping for arms on the international market. They can go for best value instead of being tied to specific producers. Moreover, cooperation is a precondition for them for sovereignty, not an impediment to it. As should be clear to decision-makers at all levels in these national capitals, Tier 4 nations are optimal candidates for moving forward with multinational procurement.

This argument is strengthened by trends in relative defence procurement. The relative spending gaps shown in Figure 2 are only exacerbated when considering defence procurement.²⁶ Smaller countries generally spend a smaller percentage of their overall defence budget on procurement and research and development. Based on numbers provided by the EDA's annual defence data publication, the Tier 2 and 3 nations are estimated to procure about 23–27 per cent of their equipment in cooperation with others. The few available numbers for Tier 4 nations suggest that the multinational procurement ratio is somewhat or even far lower here,²⁷ meaning that the smallest nations are playing catch up to the larger nations in terms of multinational procurement.

International frameworks: A first round of NATO and EU perspectives

This constellation of actors with divergent interests poses a complex challenge of bureaucratic, political, industrial, and geopolitical nature that must be overcome if multinational procurement is to be enhanced. In principle, NATO possesses central mechanisms for addressing these issues – some longstanding and well-known, such as the NDPP, and others that are under development, such as the NPO. These processes aim to cope in various ways with the issue of coaxing sovereign countries towards increased integration of their defence capability development processes. NATO Secretary General Anders Fogh Rasmussen has called for NATO to act as an 'honest broker' in the Smart Defence attempt to achieve greater allied coherence. In this way, it is clear that the NATO processes are intended to enable market coordination, from demand to supply. On the demand side, the NDPP and NPO focus on standardising and synchronising defence capability development projects. On the supply side, they provide opportunity for dialogue with industry and encourage the development of multinational rather than national programmes. We will return to these international level NATO processes in the following chapter on solutions.

Because NATO is not a supranational organisation, its processes are not legally binding for nations. Yet 21 NATO nations are also EU members. EU defence-related market reforms will

increasingly shape the capacity of these countries to do multinational procurement. European defence industrial consolidation has been facilitated by reductions in the scope of goods considered to be validly exempted from the common market under Article 296. Although the 1992 Maastricht Treaty did not revise Article 296, the definition applied to goods intended for 'purely military purposes'²⁸ has been progressively narrowed over the past twenty years.²⁹ As military forces have turned to commercial and dual-use technologies, the percentage of equipment that can be excluded from pan-European market competition has narrowed significantly.³⁰ The EU Defence and Security directive solidifies this requirement to justify deviations from EU law.³¹ Thus, we might expect some barriers to multinational procurement of defence equipment to be eroded progressively by EU regulations in NATO nations that are also EU members.

Whether NATO nations are EU members or not, the domestic level remains the most significant dimension with regard to multinational defence procurement.

Domestic chokepoints

There are barriers to enhanced multinational procurement at the domestic level. The issue is less about market functions than political control in a multi-layered political-administrative system. Taking the political level announcements made at the Chicago Summit at face value, then the MoDs and their cabinets support the Smart Defence agenda, as they have signed up for the overall vision. In a multi-layered political-administrative system, however, nominally subordinate authorities often have their own agendas, not least with regard to defending budget shares. Other turfs to defend include national defence industries, either through formal or informal networks between government and industry, and military service-specific dimensions. As anyone who has worked with political-administrative systems knows intuitively, organisational self-interest makes for non-linear implementations of policy, even without ascribing bad faith to any of the actors. These impediments can be derived from the structural organisation of the administrative-political system in general. For procurement specifically, we may add the particular element of technical expertise in combination with ever-developing technology. Together, they place a special premium on the subordinate organisation or organisations possessing the necessary knowledge to make technically sound recommendations, including descriptions of capability requirements descriptions.

This is what is known as a principal-agent issue.³² Principal-agent issues arise in public administration when strategic authorities are faced with managing underlying organisations

that possess special technical expertise. In this case, it is a challenge for the principal (MoD) to compel agents (their subordinate procurement organisations) to prioritise multinational solutions. Services and armament organisations possess extensive technical expertise that is impractical to mirror in ministries and other oversight authorities. Added to the purely technological knowledge, military services also sometimes possess the formal authority over training, tactics, and procedures (TTPs) and other doctrine which can shape the definition of requirements descriptions. The ability to enforce a clear line of command and implement policy vanishes somewhere between the MoDs and the regiment workshops. As a matter of common sense, procurement agencies and armed forces branches know so much about the ships, planes, and guns they are supposed to buy that it becomes very difficult for the political level – especially at the top of the MoDs – to monitor processes effectively and make informed decisions. In practical terms, MoDs are at the mercy of procurement agencies.

Procurement agencies and armed forces branches thus retain large decision-making power regarding materiel investment. This is especially the case when processes are in their early formal or even informal stages and still under development. Requirements descriptions are not innocuous, as seemingly small differences may rule in or out specific platforms available on the international market. Even in competitive processes, technical arguments may help select or deselect qualified candidates which service organisations, for instance, find are too dangerous for their preferred candidates, resulting in false competitions. The knowledge monopoly of the underlying organisations makes it difficult for the formally directing organisations to impose their will.

Furthermore, procurement agencies often rely upon industry to know what is possible and what it will cost. This three-level game renders the monitoring and enforcement of political guidance even more difficult. Finally, the legislative branch provides an alternative source of political guidance to which the procurement agency and industry can appeal if their preferences are not supported by the cabinet. This ‘iron triangle’ poses significant opportunities to prevent cooperation in procurement, even after it has been agreed upon by the head of government.

In sum, we may describe the challenge of furthering multinational defence procurement within NATO Europe as involving three sets of interlocking issues: geo-industrial rivalry; complex domestic relations between aspects of the executive, industry, and the legislature; and international NATO processes. There may be sufficient impediments to multinational

procurement at any of these levels. Their combination into interlocking impediments makes for additional difficulties. So how are we to approach solutions to the stalemate? This is the theme of the next chapter.

Initiatives for a positive spiral

The problem of multilateral cooperation in military procurement might seem intractable. Issues on several levels impede enhancing multinational defence procurement. There are, however, reasons for guarded optimism. The most important of these is that the challenge is fundamentally one of politics. Politics can remedy negative structures, create new institutions, and change patterns of behaviour, even if such change may be incremental and only visible in the long term. This chapter draws up a general approach for doing so and proposes concrete policy initiatives to go with the approach.

This section consists of four main parts. The first introduces the general approach – advocating a political choice of multinational solutions as a default policy and the harmonisation of procurement plans. The two following sections then discuss initiatives at the domestic and international levels. At the domestic level, we focus especially on ways of addressing principal–agent issues by revitalising the political and international dimensions of procurement processes. At the international level, we focus on NATO processes and how they can be further developed to increase multinational procurement. Finally, we bring these two strands together in a set of recommendations for the further harmonisation of national defence policies in the shape of synchronisation and standardisation in procurement planning and policy.

To break the stalemate and create a positive spiral, nations should:

- *Commit politically to pursuing multinational procurement as a default policy; report to each other on their multinational-to-domestic procurement ratio; and offer transparent and systematic arguments about decisions not to procure multinationally.*
- *Promote institutional reform in NATO in order to further the harmonisation of defence procurement plans – not only of the NPO, but also make multinationality a part of the NDPP.*
- *Offer to further such harmonisation at home through the adoption of standardised procurement plans (for sharing with allies and partners), such that they can be synchronised over time.*
- *Promote the standardisation of capability requirements as well as of doctrine and TTPs that stand in the way of multinational procurements.*
- *Promote the reform of NATO processes such that the political level sees the multinational aspect of procurement at par with the quality and quantity of new capabilities. How they are acquired matters increasingly as much as what and how much – without multinationality, there will be fewer and sub-optimal new capabilities.*
- *Take the responsibility for multinational procurement away from CNAD and elevate it to the political level.*

General approach: Break the stalemate, create a positive spiral

Even if the challenge is great, the solutions need not necessarily be revolutionary. Rather, the approach most likely to succeed is a combination of institutional changes in NATO and initiatives by a group of nations' ministers of defence. Change must come from the nations, supported by NATO, and under the pressure of economic and strategic necessity. For the smaller NATO nations – and increasingly for the larger ones as well – more extensive cooperation is a precondition for sovereignty, not an impediment to it. It is therefore the highest strategic levels in capitals – including both the political, administrative, and military top – that must embrace and further a principle of multinational procurement as a *default option* for defence acquisitions. This means always pursuing new procurement with another nation first. It also means supporting and promoting NATO processes that advance this principle.

In particular, nations and NATO should create processes that can be leveraged in the capitals in order to address the blocking power of services and armament organisations. Both parliaments and ministries should be mobilised for this purpose. The principle of choosing multinational solutions first and national ones only after systematic and transparent scrutiny should be furthered by general reforms of national defence planning processes. These should aim at harmonising defence planning cycles – synchronising specific future needs – as well as harmonising defence requirements, equipment specification, and ultimately doctrine. To sum up: efforts in both nations and in NATO are needed. But the centre of gravity is in the capitals, and NATO processes should be designed for the strategic and political levels to be able to set this priority. By deciding on such a matter of principle in public, ministers of defence can increase their ability to compel their subordinate agencies.

As a whole, NATO must therefore further the harmonisation of defence procurement plans, both in terms of synchronisation (when to buy something) and standardisation (what to buy together). Because change can only be achieved in NATO if it happens in capitals, it is the nations which must push for these reforms in NATO and adopt their respective domestic components at home. Nevertheless, NATO has a very important role to play as the forum and framework for defence procurement cooperation. The following section therefore deals with on-going and future possible reforms within NATO, inspired especially by the EDA.

NATO's internal processes and multinational procurement

This section briefly introduces relevant reforms underway in NATO followed by discussion of related EU initiatives. It does so in order to lay the ground for the subsequent presentation of a set of concrete initiatives intended to remedy the chokepoints identified above, including through the international level processes within NATO.

Since the 1991 Strategic Concept, NATO has cast itself as a defence and security organisation. It has developed institutions for addressing collective defence, security cooperation, and crisis management. These three tasks are emphasised in the 2010 Strategic Concept. Although legacy institutions and processes remain, NATO is adapting to deal with these roles more efficiently. The most important elements in this adaptation are the NATO Defence Planning Process, the NATO Support Agency (NSPA), the NATO Communications and Information Agency (NCI), and the NATO Procurement Organisation (NPO). We discuss each in turn.³³

The NDPP is the most important of these processes. It is an iterative, multi-annual process that creates the basis for the implementation of the politically agreed level of ambition and force goals. It is overseen by the Defence Policy and Planning Committee (DPPC), a working-level group of delegation 'defence counsellors' chaired by the Assistant Secretary General for Defence Policy and Planning.³⁴ It reports directly to the North Atlantic Council (NAC). The process constitutes the major defence policy planning elements within NATO. The NDPP is the largest game in NATO HQ and the one that most consistently draws nations and national processes into the overall allied framework as it compares the plans of individual nations to the agreed and shared allied force goals. Importantly, the NDPP is institutionalised and iterative, making it useful for measuring and furthering defence planning and procurement harmonisation.

The NDPP consists of five steps following its April 2009 revision:³⁵ establishing political guidance, determining requirements, apportioning requirements and setting targets, facilitating implementation, and reviewing results.³⁶ A central outcome in the first step is the dimensioning description of NATO's Level of Ambition, which describes the character and number of military missions NATO armed forces are required to have the capability to carry out concurrently.³⁷ The second step of determining requirements is implemented by the Defence Planning Staff Team,³⁸ with the Allied Command Transformation in the lead. The third step is to apportion requirements for each Alliance member. 'Minimum Capability

Requirements' are negotiated with member states and agreed to by ministers of defence. The fourth step of facilitating implementation 'is done by encouraging national implementation, facilitating and supporting multinational implementation, and proceeding with the collective (multilateral, joint, or common-funded) acquisition of the capabilities required by the Alliance.'³⁹ This is a key step in which the principle of multilateral procurement could be implemented.

Perhaps the key NDPP element is the review of results. Reviewing national progress towards the mutually-agreed-to allocations, first bilaterally and then in plenum, at the 'reinforced' DPCC enables diplomatic 'naming and shaming' of relative laggards following 'the working practice of consensus-minus-one'.⁴⁰ The process is not legally binding, but the diplomatic pressure to follow through on commitments is increasing. The United States continuously decries the European lack of burden-sharing.⁴¹ Indeed, the United States has unofficially indicated that it will encourage Allied contributions by limiting its own pledges to fill capability gaps – as it did in Operation Unified Protector. The United States is not the only major ally raising the equity of burden sharing. As one interviewee put it, it is well known that the top five members of the Alliance account for almost 90 per cent of its combined defence budgets and provide 70 per cent of common funding.⁴² The bottom fourteen account for 1 per cent of NATO's collective defence budget and utilise fifteen per cent of the common funds. Even without a permanent staff, the NDPP provides a systematic process for airing such issues and does as much as one could expect of a non-legally binding framework. In political terms, it can be fairly successful in creating a common framework for setting shared goals for defence policy.

Apart from the NDPP, NATO offers a set of procurement-related processes and institutions, some of which were already being reformed by the Chicago Summit, while others have received increased impetus after the Summit's declaration on Alliance Capabilities in 2020. With the Smart Defence concept, NATO has agreed to improve the procurement process both within NATO and in its member states. To this end, new bodies are being developed and the existing structures will be eased into the new structure in the 2012–2014 period while these processes are on-going. The new agencies cover three areas: procurement, support, and communications and information. The reform is to improve efficiency and effectiveness in the delivery of capabilities and services.⁴³ The new bodies of interest to the procurement process are the NATO Support Agency (NSPA), the NATO Communications and Information Agency (NCI), and the NATO Procurement Organisation (NPO).

The new reform process resulted in the establishment of the NATO Support Agency (NSPA).⁴⁴ One of the NSPA's functions is to combine logistics and procurement support into one organisation capable of providing these capabilities to nations.⁴⁵ It utilises two publicly accessible databases to inform potential suppliers of contracting opportunities with NATO, or the procurement agencies of member and partner states.⁴⁶ This offers suppliers the advantage of dealing with a single entity – and the Alliance and its members the opportunity to increase competition between potential suppliers. It does so particularly for logistics operations, wherein it provides 'cooperative logistics services to ... NATO nations and other NATO bodies' under the principle of 'consolidation', by which NSPA means the 'consolidation of logistics requirements expressed by two or more customers. The consolidation of requirements means larger quantities can be ordered, resulting in economies of scale.'⁴⁷ Thus, in the realm of logistics support, the NSPA has already adopted the principle of multinational procurement and has developed processes for implementing it.

The second reformed institution is the NATO Communications and Information Agency (NCIA).⁴⁸ Among its other duties, it has undertaken to 'provide support to the establishment and the execution of the multinational [command, communication, intelligence, surveillance, and reconnaissance] projects between nations, national and international organizations and industries.'⁴⁹ This support comes in the form of facilitating 'consultation and liaison with the NATO Strategic Commands, Agencies and other entities to ensure coherence with other NATO programmes and activities in the area of multinational projects.'⁵⁰ Unlike the NSPA, the NCIA has not taken steps to pool procurement opportunities from either the demand or supply side of the equation.

The NATO Procurement Organisation (NPO) is the final institutional pillar of Smart Defence that can be used to facilitate multinational defence procurement. Previously, NATO set up *ad hoc* agencies to facilitate multinational procurement projects, such as the NATO Helicopter Management Agency and Airborne Early Warning Programme Management Agency.⁵¹ The NPO is currently under development. Its organisational concept is to be completed in 2014. The concept is to establish a single, permanent agency to oversee all common and multilateral procurement projects. The agency will benefit from resident expertise that can be applied across programs and reduce administration costs. The NPO was established by the North Atlantic Council and will be a subsidiary body of NATO. During the design phase, the governing body will be the CNAD.

The CNAD is a crucial element in NATO's efforts to improve the amount of multinational defence procurement. Even if it consists of national representatives, the CNAD technically reports directly to the NAC and meets twice annually. In these biannual meetings, the CNAD agrees on overall policies and conducts oversight of underlying processes. There are roughly 50 working groups underlying the CNAD, while daily processes are handled in NATO HQ by the representatives of the National Armament Directors or NADREPs.⁵² In order to further cooperation, including in the form of co-operative, joint, multi-national, and commonly funded programmes, CNAD adopted the Phased Armaments Programming Systems (PAPS) in 1990.⁵³ PAPS was last revised in 2010. PAPS is a non-binding framework for furthering multinational procurement cooperation and, as such, merely an offer to member nations. It provides a 'systematic and coherent, yet flexible, framework for promoting cooperative programmes on the basis of harmonised military requirements.'⁵⁴ The framework consists of the description of a structured process consisting of a number of phases with an emphasis on aiding decision-makers at all levels at each of the decision points.⁵⁵ PAPS offers the conceptual description of best practice, a shared terminology, and planning logic that potentially can alleviate national concerns over multinational projects.

Each of these institutions represents a consolidation of NATO procurement efforts, yet they should be treated as an intermediate step. Substantial overlap will remain between these three agencies, with NCIA handling the C4ISR procurement portfolio, NSPA handling the life-cycle support portfolio for some national and common-funded systems, and the NPO handling all others. If multinational procurement is to be elevated as a principle under Smart Defence, then ideally these procurement areas ought to be consolidated in a single agency. This will facilitate ownership and accountability at the political level and preclude buck-passing strategies at the working level when shortfalls in capability occur. Moreover, responsibility for the NPO and multinational procurement cannot be reduced to CNAD but must be elevated to the political level. We will return to these arguments below.

EU defence cooperation initiatives

As emphasised in the NATO Summit Declaration on Alliance Capabilities in 2020, the Smart Defence efforts are both a continuance of '60 years of allied cooperation in defence' and an ambition to install a new defence harmonisation mindset. NATO's own reforms mirror both the continuity and tentatively the new, more ambitious agenda. Yet more remains to be done. NATO's Smart Defence project was spurred by the 2008 financial crisis and clear shortfalls in capability highlighted by Operation Unified Protector in 2011. These provided renewed

vigour to ideas that have been present in the Alliance since its founding. But these ideas have also received attention elsewhere, particularly in the EU, where the supranational project of economic and political unity has lapped at the shores of foreign and defence policy for the past two decades.

The EU's Common Security and Foreign Policy, including its defence components, is a late starter compared to NATO. In terms of actual external policies, it possibly also carries much less weight than would be inferred from the policy statements of the High Representative. But the analytical solutions developed and implemented by the European Defence Agency (EDA) since its founding in 2004 offer an interesting source of inspiration for NATO as it moves forward with Smart Defence. The EDA is also the obvious primary collaborator for comparable NATO processes as NATO and the EU attempt to find a division of labour between them.

The European Defence Agency (EDA) 'brings together all four communities of the [defence procurement] chain, from planners to researchers, from programme developers to the production side, that is industry', in order to assist in the harmonisation of capability requirements, from definition to development to production, use-in-service, and disposal.⁵⁶ The EDA has focused on five areas: developing defence capabilities, promoting military research and technology (R&T), promoting armaments co-operation, creating a competitive European Defence Equipment Market, and strengthening the European Defence Technological and Industrial Base. The EDA has developed strategies to address each of these areas, but most relevant here is their approach to developing military capabilities. This approach resembles the NDPP in many ways and provides indication of how military capabilities can be standardised and their procurement synchronised in the NATO context.

The Capabilities Directorate utilises a Capabilities Development Plan to provide member states an 'assessment of capability trends and requirements, over the short, medium and long term, in order to inform national decisions on defence investments.'⁵⁷ The Capabilities Development Plan is 'developed collectively with the EDA participating Member States, the Council Secretariat and the EU Military Committee (EUMC), supported by the EU Military Staff (EUMS).'⁵⁸ It is envisioned as the strategic guide for investment in military research and technology, armament cooperation, and industry consolidation amongst the participating member states, but it is not a supranational plan that imposes itself upon them. The Capabilities Directorate implements the Capabilities Development Plan using two

approaches: a centralised staffing function performed by integrated development teams to harmonise requirements amongst participating member states and a centralised database for acquisition programs to allow cooperation on projects falling outside of those that have been harmonised.

In the ideal, ‘capability development starts with harmonising military requirements. This is essential to prevent fragmentation of demand, which ultimately leads to national capabilities lacking interoperability and standardisation...Harmonisation of military requirements is the core business of EDA’s Capability Directorate.’⁵⁹ The EDA does this through analysis teams of experts open to all participating states.⁶⁰ The results of the analysis then drive the cooperation in procurement from the demand side. ‘Once military requirements have been harmonised and, in applicable cases, R&T [research and technology] results have taken on board, the preparation phase of Armaments Co-operation starts. This leads to an Armaments Cooperation programme of industrial development and procurement, to be conducted outside EDA but with Agency...monitor[ing] in order to guarantee the capability-driven approach throughout the remainder of the process. The EDA Armaments Directorate plays the central role in conducting these programme preparation phases.’⁶¹

For capability requirements that are extant and/or have not been harmonised from the outset, the EDA has established the Collaborative Database (CODABA). The CODABA

‘allows participating Member States to publish opportunities to cooperate over the entire acquisition cycle: short term to long term, from Research & Technology (R&T), through Armaments Cooperation, to in-service support well as potentially for involving industry...The CODABA is used by the [participating Member States] as an information tool for national project proposals or already existing projects, and as a result, inputs in the CODABA are permanently updated. In the shorter term the CODABA aims to provide an overview of all existing national collaborative opportunities.’⁶²

Regardless of whether the cooperation occurs from the beginning or later in the process, the EDA facilitates projects that presume the participation of all member states, except those that opt out, as well as projects composed of coalitions of the willing that opt in.

In attempting to extend its free-trade Single Market mechanisms to the defence area, the EU has adopted a set of policies to further competition and open up an EU market for defence

materiel. The EDA has undertaken initiatives to increase competition and cooperation between suppliers, thereby facilitating the rationalisation of the European defence equipment market.⁶³ Specifically, the Defence Ministers of the participating member states approved a code of conduct that came into force on 1 July 2006. ‘The Code covers defence equipment purchases (with a value over €1m) where the provision of Art. 296 of the EC Treaty are applicable. The contracts are placed on the Agency’s Electronic Bulletin Board (EBB), accessible to any visitor at EDA’s website.’⁶⁴ Participation, monitoring, and enforcement of the code of conduct are on a reciprocal basis, with no legal commitment implied. However, the EDA is devoting resources to monitoring the conduct of member states and has established a reporting mechanism so that the Agency Steering Board, composed primarily of the Ministers of Defence of the participating member states, can ensure that the code operates as intended.

Furthermore, the EDA has taken steps to increase cooperation amongst industry. A Code of Best Practices in the Supply Chain complements the Code of Conduct. It

‘extends the benefits of greater competition through the supply chain, especially lower tier companies and SMEs [smaller or medium-sized enterprises] who may not be able to bid for contracts directly but could act as sub-contractors. Its supporting electronic tool: the Electronic Bulletin Board (EBB) – Industry Contracts was launched on 29 March 2007 to enable Prime Contractors and commercial buyers to advertise sub-contract opportunities.’⁶⁵

Defence contractors in any of the participating member states can apply to gain access to the EBB in order to find business opportunities.

In sum, the EDA has undertaken a comprehensive set of initiatives to facilitate the harmonisation of defence capabilities through the standardisation of requirements and synchronisation of purchases. These initiatives include utilising the Capabilities Directorate to harmonise requirements, collecting and informing member states of capability requirements and programs that have yet to be harmonised, facilitating industrial consolidation through peer pressure applied by vanguard ministers of defence in compliance with EDA’s Code of Conduct, and informing industry members – prime contractors as well as subcontractors – about the opportunity to tender contracts with member states or amongst themselves via a transparent and publicly available database. These initiatives suggest how

NATO could go about designing processes to facilitate multinational defence equipment procurement.

It is important to emphasise the formal differences between NATO and the EU as well as the differences between the two organisations' perspectives. While NATO is concerned with getting the most effective output in terms of capabilities for a given input, the EU is also concerned with wider defence and non-defence-related priorities, such as extending the Single Market free trade principles and protecting a European defence industrial base. Should NATO and its nations choose to prioritise multinational procurement, they will have an edge on the EDA, which does not see this as a specific achievement. In addition to applying lessons from the EDA, NATO and individual states should push for further organisational and process reform.

NATO harmonisation through synchronisation and standardisation

Harmonisation is a key word in NATO's defence planning efforts. Indeed, the NDPP is designed to provide a 'framework which permits national and multinational defence planning arrangements to be harmonised in order to meet the Alliance's agreed requirements in the most effective way.'⁶⁶ If the Alliance is to achieve strategic, operational, tactical, and future unity of effort as well as an optimal output for a given input, defence policies must be harmonised to the greatest extent possible. Of course, a purely economic or technocratic approach – even if it is the implementation of political wishes – must be tempered by the political realities of an alliance of sovereign nations which reserve the right to make their own decisions in defence matters. Even so, there are still many ways that harmonisation can be enabled short of granting supranational status to NATO and making legally binding commitments to nations. The following sections describe the general approach of harmonisation through synchronisation and standardisation a little further before proceeding to specific recommendations, first for the level of NATO organisations and processes, and then finally to specific recommendations for nations to apply at home in their capitals.

Harmonisation means bringing into accord, making fit each other. Harmonisation therefore has two major components: synchronisation and standardisation. Synchronisation of defence investments is the first leg of harmonisation of national defence procurement policies. It is necessary if the Alliance is to achieve its Smart Defence objectives in terms of enhancing multinational defence procurement. In this context, synchronisation means the alignment in time of national decision-making processes regarding defence investments in

new capabilities. In practical terms, there are two main elements in synchronisation: First, the national adoption and sharing of materiel plans and consultation in the Alliance over possible alignments in time. Second, as a means to the first, nations should adopt a Code of Conduct for Defence Investments, including a pledge to increase the multinational procurement and a set of administrative procedures enabling harmonisation. This Code of Conduct should be hosted by the NPO.

The synchronisation of materiel plans means that nations must have continuously updated materiel plans that follow a standard format, enabling the use of these documents in an Allied setting. The materiel plans will include potential, planned, and on-going defence investments over a certain minimum size. The potential and planned categories are essential, as they are where consultation over potential cooperation leading to multinational procurement is especially promising. The NPO can serve as a clearing house for materiel plan alignments.

Working for synchronisation is a piecemeal approach, not an either-or issue; it is about creating the foundations for certain nations to go first with specific projects and then create a positive spiral for all nations to emulate. Synchronisation can only be achieved by nations, and the groundwork will likely be provided by a few nations with strong political leadership. But NATO and especially the NPO can play an essential role in paving the way for synchronisation. Synchronisation is a first pragmatic step towards creating a better foundation for multinational procurement.

But one more step is needed in order to achieve progress. Standardisation is the second leg of the harmonisation of national defence procurement policies: in this context, it covers standard requirements descriptions and shared doctrine. Standardisation addresses the underlying but concrete reasons for national rather than multinational procurement. Put simply, nations purchase different platforms, because each has established different requirements that the equipment must satisfy. They are different in spite of the fact that the allied nations face the same security environment, same changing face of warfare in a global context, and almost identical technological possibilities. Requirements are therefore the first part of standardisation. Differing requirement descriptions despite a common security environment are an important impediment to multinational procurement. Shared minimum requirement descriptions can pave the way for political leadership to overcome bureaucratic inertia. The formulation of requirements is an integral and important part of the early steps of each procurement process.

NPO should be the main anchor site for the process. First, NPO would need to develop an agreed list of platforms with a focus on low-hanging fruits by consolidating a list of the least controversial platform types. Second, a set of minimum requirements should be developed for each of the platforms, starting with a few projects. This process must include consultation with industry and national armaments agencies. Importantly, the NPO must be supported by a group of ministers of defence who are willing to push the agenda.

On a deeper level, different doctrines are a main reason for contrasting requirements descriptions. In general, interoperability is a major NATO aim (including through the Connected Forces Initiative and NATO Response Force). The development of shared doctrine could enable both interoperability and reduce one source of impediments to multinational procurement. Clearly, having shared doctrine – including to the level of TTPs – will not make complete sense across the different natural environments faced by the nations (arctic *versus* desert conditions, for example). Yet interoperability is already an accepted aim and principle for the nations’ armed forces. Moreover, for the Tier 4 nations especially, the development of national doctrine is relatively costly, so there will be long-term cost-savings to be gained by sharing doctrine.

NATO clearly has a major role to play in this process. Indeed, the NPO has a stake in synchronisation and standardisation – but both also go beyond its immediate remit. This means that developing NPO’s mandate and capabilities is absolutely essential to any progress in this domain, but also that other actors and processes within NATO must be coordinated with the NPO efforts as part of the overall Smart Defence initiative, including the NDPP, NSPA, NCIA, and Allied Command for Transformation’s Framework For Collaborative Interaction (FFCI). Some lessons can be drawn for each of these from the experience of the EDA.⁶⁷ We address each in turn.

NATO Defence Planning Process (NDPP)

1. *Pledge to Increase Multinational Procurement.* First-mover national political leaders could draft a pledge to be signed by their ministers of defence and national armaments directors to make multinational procurement the default choice. Establishing the pledge and procedures of multinational procurement at the political level would drive forward harmonisation of national procurement processes with concurrent allied projects. The NDPP should be changed to reflect such a change of priorities –

multinational procurement (how we buy capabilities) then becomes as important as the quality and quantity of capabilities (what we buy).

2. *Institutionalised Reporting Requirements.* Multinational cooperation suffers from a first-mover's dilemma: those who pledge to blaze a new trail take greater risks than those who follow. A potential solution to these risks would be to encourage all nations to join in the process by institutionalising a reporting requirement in the NDPP as part of the Defence Planning Capability Survey (DPCS). The DPCS ought to capture national procurement plans with sufficient detail so that they can be compared in order to achieve synchronisation and standardisation. Part of the reporting requirement ought to include explanation and justification for national procurement programs, particularly when opportunities for multinational procurement exist. The NDPP's Annual Capabilities Report ought to include a measurement of the ratio between national and multinational procurement investments in the preceding year for each nation and aggregately for the Alliance.⁶⁸ NATO HQ should include the request for this information in the Defence Planning Questionnaire sent out to each nation as part of the NDPP. Nation's Country Chapters should contain a separate page/section/line reporting these multinational procurement data. The ratio should be calculated as the percentage of multinational procurement investments in major weapons programmes compared to the aggregate multinational procurement investments. Nation's Country Chapters should contain a separate page/section/line reporting these multinational procurement data.⁶⁹ If multinational procurement is taken seriously, these reports could be utilised to trigger a naming-and-shaming process similar to that used to discourage capability shortfalls.

NATO Procurement Organisation (NPO)

1. *Ministerial-level Governing Board.* As argued above, procurement decision making at the national level is at times dominated by the subordinate procurement agencies within the ministries of defence rather than by the political principal embodied by ministers of defence. The EDA Steering Board is composed of the defence ministers of the member states. The 'operations [of the NPO] are overseen by an Agency Supervisory Board, its sole governing body, which during the design phase will be the Conference of National Armaments Directors.'⁷⁰ This places the responsibility for multinational purchases at the technical level as opposed to the political. National

armament directors, like any career official, desire to control their ability to fulfil their missions to the greatest extent possible. Indeed, ‘priority is attached to maintaining control over budgets. Organisations are often prepared to accept less money with greater control rather than more money with less control.’⁷¹ Several sources argued that national armament directors constitute the greatest barrier to the harmonisation of requirements and synchronisation of multinational procurement. The National Armaments Directors are perceived to be unwilling to accept a ‘95 per cent’ solution, even if it reduces the cost of equipment substantially. As multinational procurement cooperation is a political decision rather than a technical one, the NPO is unlikely to be effective unless political authorities are made responsible for its operations. Thus, NATO could learn from EDA and place the NPO under the control of a board composed of the MoDs of member nations.

2. *Permanent Staff.* At the working level, the EDA has a permanent resident staff of experts in the IDTs that provide independent analysis, retain institutional memory, and can pursue long-term objectives for the EU as a whole. This can facilitate developing common requirements, development, and equipment purchases. The NPO aspires to have a resident staff of experts, rather than the *ad hoc* collections that populate the disparate procurement program agencies. Nations should ensure that this permanent staff is well-manned and empowered to consider and propose harmonised requirements for capabilities to be procured by member states. NATO organisations benefit highly from permanent staff with specialised abilities and less of the downside following the transience of seconded staff officers from nations.
3. *Adopt International Standards.* The NPO’s processes have yet to be developed. Many of the services that EDA supplies would be very useful in a NATO setting and complement the NDPP. The NPO could facilitate the harmonisation of requirements and synchronisation of purchases between member states that agree to adopt and abide by defining their equipment requirements in terms of international technical standards rather than national or proprietary company standards and setting clear award criteria for contracts.⁷²
4. *Gather and publish transparent data on defence expenditures in the Alliance.* The NPO plays an important role with regard to breaking the monopoly on data with regard to defence expenditures. The current lack of easily accessible data on

multinational and national procurement expenditures hampers the Smart Defence agenda. NPO should gather and publish data on defence expenditures across the alliance in a transparent, systematic, and inclusive manner, building on NDPP reported numbers. By publishing such defence data, the NPO can enable research and analysis across the Alliance, thus pushing the agenda of multinational procurement.

5. *Enforce Contracting Transparency.* Furthermore, the NPO could adopt a Code of Conduct to enforce contracting transparency. This code would be based on the above requirements and enforced at the political level by the board of ministers of defence through the use of the naming and shaming procedures now resident in the NDPP.

Allied Command Transformation's Framework for Collaborative Interaction (FFCI)

1. *Contract Transparency.* The EDA's simple and elegant solution to facilitate industry cooperation by hosting a second publicly-accessible database for prime contractors and subcontractors to post contract opportunities could easily be adopted and would facilitate the development of a more international defence equipment market, both within Europe and across the Atlantic. Contract transparency rules and the electronic data bases would be quite different from NATO ACT's FFCI. At present, NATO informs defence industry companies of business opportunities through the NATO Industrial Advisory Group (NIAG). As NATO's website indicates, 'The NIAG composed of high-level industrial representatives of the member nations, each of them acting as a focal point and spokesman for his/her national defence industries.'⁷³ ACT also utilises its FFCI to discuss defence capability requirements with industry representatives one-on-one, under conditions of non-disclosure in the pre-competition phase of capability development.⁷⁴ Neither the NIAG nor the FFCI includes representatives of smaller or medium-sized enterprises (SMEs), and these limited attempts at outreach therefore provide the broader defence industry with only partial knowledge of business opportunities and the shape of future demand. The general lack of transparency has been of concern to the industry, has suppressed the liberalisation of the international defence equipment market, thereby hindering nations and the Alliance in achieving best value for money.

While the general approach as well as the concrete initiatives within NATO must necessarily be promoted and supported by nations in order to succeed, nations themselves have the largest task ahead of them. If nations only push for reform through NATO, very little will be gained. The effect of the reformed processes in NATO should be felt and leveraged in capitals to further the multinational agenda.

Domestic level initiatives

These national reforms must be pursued with the objective of pushing the principle of multinational procurement as far as possible into national decision-making and oversight structures. This means that the initiatives comprise all levels of the overall process as described in Figure 1.

1. *Share National Procurement Plans.* Here, it matters first and foremost to tie together national procurement plans with the NDPP as well as the coming efforts of the NPO. To begin with, this means the adoption of national procurement plans. National procurement plans are standardised lists of potential, planned, and existing procurement programmes. These documents are central management tools for MoDs and armaments agencies and function alongside other strategic documents as cornerstones in national security process. They may be classified but are intended to be shared beyond the armaments agencies – with, for example, parliament and indeed NATO NPO and members. Sharing information on potential and planned new capabilities is a first step towards synchronisation. This allows the identification of shared general requirements. The format of these documents must follow a basic standard formula in order to facilitate the ‘pairing’ of requirements and thus synchronisation, but simpler is better.
2. *Link National Procurement Plans to the NDPP.* Second, nations need to further their linking of national defence planning and the NDPP. Nations vary with regard to how they institutionalise the input from the NDPP. But the NDPP should not be an afterthought to national planning but rather a cornerstone element from which much else springs. Other allies’ armaments plans, obtained through information sharing with the NPO, should be important elements in taking decisions to move potential armaments projects to the right or left on the calendar. Longevity of defence materiel means that such decisions can in practice be tweaked in time with relatively little cost within the overall investment portfolio.

3. *Adopt International Requirement Standards.* Third, nations should enable standardisation in how they institutionalise their requirements descriptions, including down to the military services agencies. Standardisation should become the order of the day, driving specification descriptions all the way down the chain of command so that any deviations from emerging project-specific or NATO general standards raise alarms for high-level project managers. Moreover, work on doctrine and TTPs must be reviewed so that it tends towards the standardisation agenda. Explicit and transparent reasons must be given for deviation from international Allied best (or even most current) practice where this impinges on capability requirements. Services must be required to report to and follow joint and strategic guidance in these areas.
4. *Institutionalise Relations with Industry.* Fourth, relations with industry should be institutionalised to follow international transparency standards such that armaments agencies keep national industry at arm's length. National armaments agencies must pursue the best value for money and follow transparent and explicit rule sets when awarding contracts. Industry is and will remain a valued partner for NATO and nations, but relations with industry must be regulated in a transparent and systematic manner.
5. *Enhance Parliamentary Oversight.* Fifth, parliaments have an important role to play. As the domestic side of the compound political problem is a principal-agent issue, it is important to emphasise that parliaments are also part of the principal. In a democracy, parliament ought to at least have a substantive role in oversight, both in terms of forward priority setting where international political goals, such as an increased ratio of multinational to national procurement, are enmeshed with more mundane military and organisational concerns, as well as in terms of after-the-fact reviews of decisions and implementations. In practice, most democratic nations have a large degree of consensus around their defence and security policies. Major strategic reviews as well as defence budgets are often approved either directly in parliament or its committees (such as defence, national security, foreign affairs, and financial appropriations committees) or indirectly through the involvement of relevant MPs in defence commissions and the like. As the Geneva Centre for the Democratic Control of Armed Forces (DCAF) describes in its backgrounder on defence procurement and

the role of parliaments, parliaments can play a role in all stages of the defence procurement cycle. Parliamentarians can establish legal frameworks for procurement, debate and approve budgets, they can ‘exercise oversight’ of the procurement process by ‘requesting reports from the executive, hearing statements or testimony by government officials or directing questions and interpellations to the government’. In some cases, parliament may also be required to approve procurement exceeding a certain amount.⁷⁵ Thus, parliament should be briefed on long-term strategic priority documents such as a national armaments plan and should seize the opportunity to emphasise the need for multinational solutions. Moreover, parliaments can use their powers to oversee the implementation of multinationality in defence procurement through hearings, questions to the executive, and individual press releases.

6. *Gather and publish systematic and transparent data on national defence expenditures.* The absence of readily available and systematically comparable data on defence expenditures hampers analysis and efforts to promote multinational defence procurement. Gathering and publishing such data is a useful tool for MoDs to support the Smart Defence agenda, as the data can enable policy analysis and public debate, including parliamentary oversight on issues related to multinational procurement.

Synchronisation and standardisation are complimentary lines of effort when working to achieve harmonisation with regard to enhancing multinational procurement. Even if synchronisation and standardisation as described above can take the form of separate concrete initiatives, they should be thought of as complimentary. Given technological development and a changing security environment, requirements will always be a moving target, even in national procurement. Even in national capability development, however, final requirements are settled upon at a given moment. In order to create a positive spiral for multinational procurement, one set of shared requirements should be developed for given development projects. The possibility for standardisation in terms of requirements therefore depends on the synchronisation of planned national demands. This also means that synchronisation – from information sharing to reforms of national defence planning processes – is a precondition for standardisation to have an effect on multinational procurement.

Conclusions

If the NATO Smart Defence initiative is to achieve its ambitious goals, the most promising place to institutionalise the efforts is likely to be upstream in the defence planning process, enhancing the ratio of multinational over-national procurement. Buying the same equipment is less sensitive than buying and sharing the same equipment. It is easier and will be less costly to cooperate with the same equipment, both when deploying for operations and developing and maintaining the platforms over their life-cycle.

Moving the Alliance forward to make the Capabilities 2020 declaration come true means changing things at several levels – in the nations, in NATO processes, in how we engage with industry, and having the courage to face and solve issues related to geopolitics and sovereignty.⁷⁶ Not least the latter is important. No single country outside the United States has the money, expertise, and political will to have a full-fledged defence. For any other country, including those within the Alliance, defence matters will not be a question of *how many* (as in the case of the US) but rather *which* capabilities to possess. It is becoming increasingly clear that cooperation, coordination, sharing, and yes, interdependence in defence affairs – through the Alliance – does not detract from sovereignty but rather is a precondition for sovereignty. No Western country, even the European NATO countries together, is self-sufficient in defence affairs regarding capability development, sustainment, and operational use. Our common security issues will be solved only through transatlantic cooperation or they will not be solved at all.

Pathways to a positive spiral

Immediate practical solutions to getting more multinational procurement lie in the NATO processes. They offer various and improved frameworks that will make it easier for nations to cooperate. Yet as NATO is not a supranational institution like the EU, none of the processes that NATO can supply will be binding and as such in themselves change nations' behaviour. This basic condition means that whatever the ingeniousness of the conceptual solutions that NATO HQ and nations develop together, they will still depend on political will at the highest levels. Ultimately, responsibility lies with the nations, and the initiatives will have to come from the capitals.

But proper political level attention to making commitments and reporting requirements at the international level will at the very least create a substantial downward pressure at the domestic level, from ministers and their cabinets down to National Armaments Directors, armaments organisations, and service bureaucracies. What we are pleading for is, in fact, the clever, political use of the NATO processes as a lever in this domestic tug of war. This compound political problem, of which the domestic agent–principal issue is an important aspect, can be addressed through a loop running from MoDs in capitals to NATO HQ and back to subordinate organisations in the nations. While NATO will not acquire any of the *formal* characteristics of a supranational organisation in the foreseeable future, it can acquire such *functional* characteristics when MoDs use NATO processes as leverage in their domestic management process. In order for this to happen, NATO organisations and processes should be adapted to:

- Elevate the principle of multinational procurement (how we buy things) at par with the quality and quantity of capabilities (what we buy), including in the NDPP
- Establish a permanent staff for NPO
- Establish a ministerial-level governing board for the NPO to replace the CNAD so that responsibility for multinational procurement rests at the political level rather than the technical level
- Institutionalise reporting requirements to include the ratio of national to multinational procurement projects and explanations of deviations from multinational procurement
- Gather and publish transparent data on defence expenditures
- Propagate international standards for military requirements so as to achieve standardisation of capabilities
- Enhance contract transparency through accessible databases of projects for nations and companies
- Harmonise doctrine with the view of avoiding differing requirements

These initiatives at the NATO level could enable Alliance member states to engage in multinational procurement if they choose to do so. Yet this is a compound political problem, and lowering barriers to cooperation at the NATO level is not sufficient. Member states must take action and reform their own processes if they are to engage in multinational procurement more easily. To achieve this, initiatives such as the following can be undertaken by ministers of defence:

- Pledge to increase multinational procurement by making it the default principle
- Adopt standardised national procurement plans (for NATO reporting purposes)
- Share these with Allied nations so that procurement can be synchronised in time and standardised in capability
- Link national procurement plans to the NDPP so that capability shortfalls and surpluses can more easily be coordinated and avoided, and multinational potential can be identified
- Gather and publish transparent data on defence expenditures
- Adopt international requirement standards so that equipment purchases can be harmonised more easily
- Institutionalise relations with industry based upon transparent requirements and contracting opportunities, both nationally and internationally
- Enhance parliamentary oversight in order to strengthen the transparency and accountability of the actors and processes involved

These domestic reforms mirror those proposed at the NATO level. Synchronising the processes at each level will facilitate cooperation by removing key impediments as the process moves from one level to the next. Harmonising these processes will allow national political leaders to utilise NATO processes to enforce their will upon their subordinate procurement agencies, thereby solving the principal-agent issue, which hampers multinational procurement. Policy need not be trumped by technical expertise. The strategic challenge of maintaining military capabilities in an era of severe fiscal constraints requires the exercise of political leadership in the Alliance.

Reasons for measured pessimism

Even if such (or comparable) initiatives should be considered and implemented, the underlying geopolitical and geo-industrial structures behind the current stalemate will remain present. There are many reasons to be pessimistic about the Smart Defence agenda's future. Austerity measures not only mean lower budgets but also instinctive reversals to national solutions, industries, and jobs. The geopolitical and geo-industrial tensions behind the still-unresolved relationship between the EU and NATO and between the industries in Tier 1, 2, and 3 nations is another. Add to this the disagreements at the strategic level over the Alliance's role and tasks.

This means that political attention will have to be clearheaded about at least two areas, where change will more likely only come even more gradually, like tectonic plates shifting, and only appear through grand bargains at the highest political levels. The first of these is the relationship between NATO and the EU. The second is a transatlantic market for defence products, where big players on both sides of the Atlantic have access to each other's markets. The chances that any of these two issues will be resolved in the next ten years may be slim. But the history of European integration offers a positive answer. In the context of globalisation and increased competition from BRIC countries, visionary political leaders can affect dramatic change through incrementally strengthened frameworks.

The NATO–EU relationship is the one that is most likely to move forward. Not only has this been a priority of Secretary General Anders Fogh Rasmussen, but the current fatigue within the European Commission will also contribute to the possibility of a pragmatic accommodation and acknowledgment of a division of labour. NATO should be inspired as much as possible by the analytical concepts found in the EDA. In any case, it is necessary to build a closer working relationship and pragmatic division of labour between the two organisations. Procurement policy is one area where they may proceed in this direction. For NATO, that means interfacing with the EDA so that EU capability goals and NATO capability goals coincide, perhaps to the point of allowing formal cooperation and collaboration.⁷⁷ As it is, the utility of the Capability Group derives from informal staff-to-staff contacts that allow limited coordination to take place. Clearly, a formal agreement between the EDA and NATO that delineated a process for cooperation would be helpful. In particular, synchronising requirements and facilitating cooperation on a transatlantic basis would further enhance the efficiency of the market.⁷⁸

The second underlying structural issue has to do with the entire Alliance-wide market for defence procurement. In order to move forward as an Alliance, it is necessary to have a frank debate and exchange about the elephants in the room. The larger European NATO countries with significant defence industries and which are also members of the EU are unlikely to abstain from working for a coherent defence market within the EU track as long as there is unbalanced reciprocity in the Alliance defence market structure. The American defence market is possibly the most competitive in the Alliance and relatively open to foreign companies. But as the long story about the KC-135 replacement air-to-air refuelling airplane shows, even in the United States it is difficult not to see political lobbying working through the acquisition system and its legal institutions. It goes beyond the remit of this report to

examine the possible pathways for developing a political understanding, which again could create a cooperative, transatlantic framework. Continued talks over a transatlantic free trade area could represent a first step towards a defence deal. Another solution is to work for the further consolidation of arms manufacturers so that they acquire a size, product portfolio, and expertise that is relevant at the level of an Alliance-wide defence market.

Whichever direction decision-makers choose to go when implementing the Chicago declaration, a few general lessons are important to keep in mind. The Alliance is faced with a compound political problem. Each of the problem areas is intricate in its own right, but the interlocked character results in the current stalemate. The second general observation is about the solutions. Above, we have suggested several ways of trying to break the stalemate and initiate a positive spiral in multinational defence procurement. Regardless of their specific feasibility, the crux of the matter is the intent and general gist of the proposed solutions. That is, first of all, to address comprehensively all of the problem areas while recognising that resulting change will initially be small, likely produced by a few countries. Building a positive spiral will take years if not decades, and the 2020 deadline may even be too early.

Nevertheless, there is no reason not to go down that road as continuously rising platform prices in itself will take most small European countries out of the defence equation within a couple of decades if nothing else changes. As Christian Mölling has argued, European nations will only have 'bonsai armies' at their disposal if current trends continue.⁷⁹ For everybody, NATO and EU member states alike, cooperation is increasingly a precondition for sovereignty, not an impediment to it. The question, therefore, is whether we will get it together or not at all.

Bibliography

Akşit, Chihangir. "The NATO Standardization Agency- A Continuing Success Story," *Defense Standardization Program Journal*. Okt/Dec 2011: p. 4. Print.

Aron, Raymond, and Daniel Lerner. *La Querelle de la C.E.D - Essais d'analyse sociologique*. 1. Paris: Librairie Armand Colin, 1956. Print.

Becker, Jeffrey . "The Future of Atlantic Defense Procurement," *Defense Analysis* 16. 1 (2000). Print.

Brady, Ryan and Victoria A. Greenfield. "Competing Explanations of U.S. Defense Industry Consolidation in the 1990s and their Policy Implications." *Contemporary Economic Policy* 28. 2 (2010). Print.

Breitenbauch, Henrik, and Bastian Giegerich. "A 'Smart' Opportunity - Industry Can Benefit from NATO Strategy." *Defence News International Edition*. 20 2012: Web. 26 Nov. 2012. <http://www.defensenews.com/article/20120520/DEFFEAT05/305200007/>

Breitenbauch, Henrik. En europæisk rustningspolitik? Et essay om reorganiseringen af forsvarsindustrien og forsvarspolitikken i den europæiske region. Copenhagen: Department of Political Science, University of Copenhagen, 2002. Unpublished.

Centre for Military Studies. "Production and Service Contract for 2012 Between The Danish Ministry of Defence and The Centre for Military Studies/ University of Copenhagen." www.cms.polsci.ku.dk. Danish Ministry of Defence & University of Copenhagen. 01 2011. Web. 26 Nov 2012. http://cms.polsci.ku.dk/english/performance_contract/Production___servicecontract_for_2012.pdf

Conrad, Gerry. *The NATO Defence Planning Process*. www.nato.int. Web. 26 November 2012. http://www.nato.int/cps/en/natolive/topics_49202.htm.

DCAF. "Parliament's Role in Defence Procurement." *DCAF Backgrounders*. 9: 2006. Web. 26 November 2012. http://www.dcaf.ch/content/download/35210/525637/file/bg_defence_procurement.pdf

Deutch, John. "Consolidation of the U.S. Defense Industrial Base." *Acquisition Review Quarterly* Fall. (2001). Print.

"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, and amending Directives 2004/17/EC and 2004/18/EC". Web. 26 November 2012. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:216:0076:0136:en:PDF>

European Defence Agency "2010 Defence Data". *European Defence Agency*, 2010. Web. 26 November 2012. http://www.eda.europa.eu/docs/eda-publications/defence_data_2010

European Defence Agency. "Strategies" *European Defence Agency*. Web. 15 July 2012.
<http://www.eda.europa.eu/strategies/capabilities/collaborativedatabase/aim>
<http://eda.europa.eu/Strategies/Technologicalandindustrialbase/Defenceequipmentmarket>

European Defence Agency. "About us" *European Defence Agency*. Web. 15 July 2012.
<http://www.eda.europa.eu/Aboutus/who-we-are/Organisation>;
<http://www.eda.europa.eu/Aboutus/how-we-do-it/coredrivers>
<http://www.eda.europa.eu/Aboutus/Whatwedo/eda-strategies/Capabilities>
<http://eda.europa.eu/Aboutus/who-we-are/Organisation/Capabilitiesdirector>
<http://www.eda.europa.eu/aboutus/howwedo/integratedwayofworking>
<http://www.eda.europa.eu/aboutus/howweareorganised/organisation/capabilitiesdirector/workingwithpms>
<http://www.eda.europa.eu/Aboutus/Howweareorganised/Workinglevel/IDTsandPTs>
<http://www.eda.europa.eu/aboutus/howwedo/integratedwayofworking>

European Defence Agency. "Other Activities" *European Defence Agency*. Web. 15 July 2012.
<http://www.eda.europa.eu/otheractivities/intergovernmentalregimedefenceprocurement/coc>
<http://www.eda.europa.eu/otheractivities/intergovernmentalregimedefenceprocurement>

Feaver, Peter. *Armed Servants: Agency, Oversight, And Civil-military Relations*. Cambridge, MA: Harvard University Press, 2005. Print.

Gates, Robert M. The Security and Defense Agenda (Future of NATO). Brussels. June 2011.
<http://www.defense.gov/speeches/speech.aspx?speechid=1581>. Web. 28 October 2012.

Gholz, Eugene and Harvey M. Sapolsky. "Restructuring the U.S. Defense Industry." *International Security* 24. 3 (1999-2000). Print.

Halperin, Morton H. *Bureaucratic Politics and Foreign Policy*. Washington: The Brookings Institution, 1974. 51. Print.

Hartley, Keith. "Collaboration and European Defence Industrial Policy." *Defence and Peace Economics* 19. 4 (August 2008). Print.

Hartley, Keith. "Defence Industrial Policy in a Military Alliance." *Journal of Peace Research* 43. 4 (2006). Print.

Heuinckx, Baudouin. *The Law of Collaborative Defence Procurement Through International Organisations in the European Union. PhD Dissertation*. Nottingham: University of Nottingham, 2011. 26 November 2012. Web.
<http://www.nottingham.ac.uk/pprg/documentsarchive/phdtheses/heuinckxthesiscompletefinal.pdf>

James, Andrew D. "Comparing European responses to defense industry globalization." *Defense and Security Analysis* 18. 2 (2002). Print.

James, Andrew D. "European Military Capabilities, the Defense Industry and the Future Shape of armaments Cooperation." *Defense and Security Analysis* 21. 1 (March 2005). Print.

Kapstein, Ethan B. "Arsenal's End? American Power and the Global Defence Industry."

CNAS. February 2010. Web. 10 October 2012.

http://www.cnas.org/files/documents/publications/ArsenalsEnd_Kapstein_Feb2010_0.pdf.

Lungu, Sorin. *European Defense Market Integration: The Aerospace Sector in 1987-1999*. Doctoral Dissertation. Boston: Fletcher School of Law and Diplomacy, Tufts University, 2005. Print.

Mölling, Christian. "Europe Without Defence.", *SWP Comments* 28. November (2011). Web.

26 November 2012. [http://www.swp-](http://www.swp-berlin.org/fileadmin/contents/products/comments/2011C38_mlg_ks.pdf)

[berlin.org/fileadmin/contents/products/comments/2011C38_mlg_ks.pdf](http://www.swp-berlin.org/fileadmin/contents/products/comments/2011C38_mlg_ks.pdf)

Mölling, Christian. "Europe Without Defence." *SWP Comments*. 38

(November 2011). Web. 26 November 2012. [http://www.swp-](http://www.swp-berlin.org/fileadmin/contents/products/comments/2011C38_mlg_ks.pdf)

[berlin.org/fileadmin/contents/products/comments/2011C38_mlg_ks.pdf](http://www.swp-berlin.org/fileadmin/contents/products/comments/2011C38_mlg_ks.pdf)

Defence Policy and Planning Committee. *NATO*. Web. 28 October 2012.

http://www.nato.int/cps/en/natolive/topics_69128.htm.

NATO. "NATO Defence Planning Process: A Driver for Transformation." *The Transformer*.

01. (2012). Web. 26 November 2012. <http://www.act.nato.int/transformer-2012-01/article-25/pdf>

NATO. "The NATO Defence Planning Process." *NATO*. Web. 25 October 2012.

www.nato.int http://www.nato.int/cps/en/natolive/topics_49202.htm. pp 2-4

NATO. "Evolution." *NATO Support Agency*. Web. 26 November 2012.

http://www.nato.int/cps/en/natolive/topics_88734.htm

NATO. "Main Task and Responsibilities." *NATO Support Agency*. Web. 26 November 2012.

http://www.nato.int/cps/en/natolive/topics_88734.htm

NATO. "Welcome to Procurement." *NSPA ePortal*. Web. 31 October 2012.

<https://eportal.nspa.nato.int/eProcurement/RFP/PublicRFPList.aspx>

NATO. "Procurement." *NATO Support Agency*. Web. 31 October

2012.<http://www.nspa.nato.int/en/organization/procurement/procurement.htm#>

NATO. "Logistics Operations." *NATO Support Agency*. Web. 31 October 2012.

<http://www.nspa.nato.int/en/organization/Logistics/Logistics.htm>

NATO. "Multinational Cooperation Development." *NATO Communications and Information*

Agency. Web. 31 October 2012. <http://www.ncia.nato.int/Opportunities/Pages/Cooperation-Development.aspx>

NATO. "Multinational Cooperation Development." *NATO Communications and Information Agency*. Web. 31 October 2012 <http://www.ncia.nato.int/Opportunities/Pages/Cooperation-Development.aspx>

NATO. "The NATO Procurement Organisation (NPO)." *NATO*. Web. 26 November 2012. http://www.nato.int/cps/en/natolive/topics_89040.htm

NATO. "Conference of National Armaments Directors (CNAD)." *NATO*. Web. 26 November 2012. http://www.nato.int/cps/en/natolive/topics_49160.htm

NATO. "Summit Declaration on Defence Capabilities: Toward NATO Forces 2020." *NATO*. Web. 20 May 2012. http://www.nato.int/cps/en/natolive/official_texts_87594.htm.

NATO. "Industrial Advisory Group". *NATO*. Web. 22 October 2012. <http://www.nato.int/structur/niag/introduction.html>

NATO. "Framework For collaborative Interaction Homepage." *NATO*. Web. 22 October 2012. <http://www.act.nato.int/subpages/ffci>

NATO. "A layman's guide to NATO (common) funding." *NATO*. Web. 26 November 2012. http://www.nato.int/docu/briefing/nato_funding_final.pdf.

NATO. "Summit Declaration on Defence Capabilities: Toward NATO Forces 2020." *NATO*. Web. 26 November 2012. http://www.nato.int/cps/en/natolive/official_texts_87594.htm.

NATO. "Welcome to the NCI Agency" (A merger of the NATO Consultation, Command and Control Agency (NC3A), the NATO ACCS Management System Services Agency (NCSA), the ALTBMD Programme and elements of NATO HQ NATO Communications and Information Agency). *NATO*. Web. 26 November 2012 <http://www.ncia.nato.int/Pages/default.aspx>

NATO. "Active Engagement, Modern Defence: Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organization" (Adopted by Heads of State and Government at the NATO Summit in Lisbon 19-20 November 2010). Web. 30 July 2012. http://www.nato.int/strategic-concept/pdf/Strat_Concept_web_en.pdf

NATO. "Phased Armaments Programming System (PAPS)." AAP-20, Edition 2. February 2010: pp. 1-5. Web. 26 November 2012. [http://www.msb.gov.tr/birimler/tekhiz/doc/ac327/AAP-20\(2\)Ec1.pdf](http://www.msb.gov.tr/birimler/tekhiz/doc/ac327/AAP-20(2)Ec1.pdf)

NATO. "NATO Handbook". 2006: p. 53. Web. 26 November 2012. <http://www.nato.int/docu/handbook/2006/hb-en-2006.pdf>

Panetta, Leon. *Remarks by Secretary Panetta at Carnegie Europe*. Brussels. October 2011. Web. 28 October 2012. <http://www.defense.gov/transcripts/transcript.aspx?transcriptid=4895>

SIGMA. "Brief 23 - Defence Procurement." www.oecd.org/site/sigma. OECD & EU, 2012. Web. 26 Nov 2012. <http://www.oecd.org/site/sigma/publicationsdocuments/49102610.pdf>.

SIGMA: "Support for Improvement in Government and Management." *Defence Procurement. Public Procurement Brief 23*. Paris: SIGMA, 2011- 3-4. Print.

SIGMA: "The European Commission's non-binding 'Interpretive Communication on the Application of Article 296 of the Treaty of Rome in the Field of Defence Procurement.'" *Defence Procurement*. SIGMA, 2006. 3-6. Print.

Steinberg, James B. Summary. *The Transformation of the European Defense Industry – Emerging Trends and Prospects for Future U.S – European Competition and Collaboration*. Santa Monica: RAND, 1993. vi-vii. Print.

Sticz, Laszlo. "The Defense Planning Systems and their Implications." *Journal of Defense Ressource Management* 1. 1 (2010), p 43. Print.

Stieglitz, Joseph E. "Principal and agent." *A Dictionary of Economics New Palgrave*., 1987. 3. 966-971. Print.

Struys, Wally. *The Future of the Defence Firm in Small and Medium Countries*. Brussels: Royal Military Academy, 2004. 551-561. Print.

Sturm, Paul. "NATO and the EU: Cooperation?" *ISIS Europe European Security Review*. 48, (February 2010): 2. Print.

The Military Balance. "Analyses and tables." *The Military Balance* 97.1 (1997): 264-316 (293-294). Web. 26 November.

The Military Balance. "Analyses and tables." *The Military Balance* 99.1 (1999): 280-318 (300-301). Web. 26 November.

The Military Balance. "Analyses." *The Military Balance* 101.1 (2001): 283-323 (299-300). Web. 26 November.

The Military Balance. "International tables of comparison." *The Military Balance* 103.1 (2003): 335-340 (335-336). Web. 26 November.

The Military Balance. "International tables of comparison." *The Military Balance* 106.1 (2006): 397-410 (398-399). Web. 26 November.

The Military Balance. "Chapter Nine: Country comparisons - commitments, force levels and economics." *The Military Balance* 109.1 (2009): 425-454 (447-448). Web. 26 November.

The Military Balance. "Chapter Ten: Country comparisons – force levels and economics." *The Military Balance* 112.1 (2012): 463-476 (467-468). Web. 26 November.

"The Treaty of Rome." 1957. Web. 20 July 2012.

http://ec.europa.eu/economy_finance/emu_history/documents/treaties/rometreaty2.pdf

Notes

¹ Rapporten er udarbejdet som led i Center for Militære Studiers produktionsaftale med Forsvarsministeriet. Den er en del af de analyser Center for Militære Studier udfører på vegne af kredsen af partier bag forsvarsforliget 2010-2014. Se mere på: [<http://cms.polsci.ku.dk/resultatkontrakt/>]

² Videre fremgår det, at der ' inden for den kommende forligsperiode [vil] blive udarbejdet evalueringer af erfaringerne fra og potentialet for bi- og multinationalt samarbejde om materielanskaffelser, drift og vedligeholdelse, herunder belyses evt. centrale barrierer herfor. Evalueringernes resultater forelægges løbende forligspartierne'. *Aftale på forsvarsområdet 2013-2017*, 1-2, 17, 24, [http://www.fmn.dk/videnom/Documents/Aftale_paa_forsvarsomraadet_2013-2017.pdf].

³ "Summit Declaration on Defence Capabilities: Toward NATO Forces 2020", 20 May 2012, [http://www.nato.int/cps/en/natolive/official_texts_87594.htm].

⁴ See e.g.: "Fundamental to achieving this goal will be improvements in the way we develop and deliver the capabilities our missions require. In addition to essential national efforts and existing, proven forms of multinational cooperation such as in the areas of strategic airlift and airborne warning and control, we must find new ways to cooperate more closely to acquire and maintain key capabilities, prioritise on what we need most and consult on changes to our defence plans. We should also deepen the connections among the Allies and between them and our partners on the basis of mutual benefit. Maintaining a strong defence industry in Europe and making the fullest possible use of the potential of defence industrial cooperation across the Alliance remain an essential condition for delivering the capabilities needed for 2020 and beyond.", "Summit Declaration on Defence Capabilities: Toward NATO Forces 2020", 20 May 2012, [http://www.nato.int/cps/en/natolive/official_texts_87594.htm].

⁵ For the latter, see for example [http://www.nato.int/docu/briefing/nato_funding_final.pdf].

⁶ Cf. the distinction in SIGMA (OECD/EU) 'Defence Procurement', Sigma Public Procurement Brief #23, September 2011 [<http://www.oecd.org/site/sigma/publicationsdocuments/49102610.pdf>].

⁷ Even if that means unfairly omitting Canada: 'Non-US NATO' seems both inelegant and a contradiction in terms, and 'non-American NATO' also logically excludes Canada.

⁸ [http://cms.polsci.ku.dk/english/performance_contract/Production___servicecontract_for_2012.pdf/]

⁹ The CMS project manual stipulates a set of quality control procedures for projects that are part of the research based government services offered by the Centre. This report has been carried out by the Centre for Military Studies in accordance with the contract between the University of Copenhagen on behalf of the parties to the Danish Defence Agreement 2009–2014. More information about the Centre, the procedures for quality control, and the contract can be found at the Centre's homepage at [<http://www.cms.polsci.ku.dk>].

¹⁰ Henrik Breitenbauch, Bastian Giegerich 'A "Smart" Opportunity – Industry Can Benefit from NATO Strategy', *Defense News*, International Edition, 20 May 2012, [<http://www.defensenews.com/article/20120520/DEFFEAT05/305200007/A-8216-Smart-8217-Opportunity>]

¹¹ Cihangir Aksih, 'The NATO Standardization Agency-A Continuing Success Story', *Defense Standardization Program Journal* (October/December 2011), page 4.

¹² For analyses of multinational procurement in NATO, see Paul Y. Hammond, David J. Louscher, Michael D. Salomone, and Norman A. Graham, *The Reluctant Supplier: U.S. Decisionmaking for Arms Sales* (Cambridge: Oelgescher, Gunn & Hain, 1983); Bastian Giegerich and Alexander Nicoll (eds) *European Military Capabilities: Building Armed Forces for Modern Operations* (London: International Institute for Strategic Studies, 2008); and Bastian Giegerich and Alexander Nicoll, 'The Struggle for Value in European Defence', *Survival* 54, 1 (February–March 2012).

¹³ Treaty of Rome, Article 296, available at http://ec.europa.eu/economy_finance/emu_history/documents/treaties/rometreaty2.pdf, accessed 20 July 2012.

¹⁴ Raymond Aron, Daniel Lerner (eds) *La Querelle de la C.E.D. Essais d'analyse sociologique* (Paris: Librairie Armand Colin, 1956).

¹⁵ The data is derived from various *Military Balance* publications: (1997): Analyses and tables, *The Military Balance*, 97:1, 264–316 (293–294); (1999): Analyses and tables, *The Military Balance*, 99:1, 280–318 (300–301); (2001): Analyses, *The Military Balance*, 101:1, 283–323 (299–300); (2003): International tables of comparison, *The Military Balance*, 103:1, 335–340 (335–336); (2006): International tables of comparison, *The Military Balance*, 106:1, 397–410 (398–399); (2009): Chapter Nine: Country comparisons – commitments, force levels and economics, *The Military Balance*, 109:1, 425–454 (447–448); (2012): Chapter Ten: Country comparisons – force levels and economics, *The Military Balance*, 112:1, 463–476 (467–468). The figures for NATO countries' military expenditures has been grouped in four segments based on the 2010 figures; USA; Other NATO countries spending more than USD 25 billion annually (UK, France, and Germany); NATO countries spending from USD 10–25 billion annually (Italy, The Netherlands, Spain, Canada, and Turkey); And the rest of the NATO countries spending less than USD 10 billion annually. For the period 1985, 1995–1998, the group of countries spending < USD 10B consists of seven countries. For the period 1999–2001, the group of countries spending < USD 10B consists of 10 countries. For the period 2001–2007, the group of countries spending < USD 10B consists of 17 countries. For the period 2008–2010, the group of countries spending < USD 10B consists of 19 countries. The data for 1985, 1995, and 1996 are based on 1995 constant prices USD. The data for 1997 and 1998 are based on 1997 constant prices USD. The data for 1999 and 2000 are based on 1999 constant prices USD. The data for 2001 are based on 2000 constant prices USD. The data for 2002, 2003, and 2004 are based on 2006 constant prices USD. The data for 2005, 2006, and 2007 are based on 2008 constant prices USD. The data for 2008, 2009, and 2010 are based on 2011 constant prices USD.

¹⁶ Ryan Brady and Victoria A. Greenfield, 'Competing Explanations of U.S. Defense Industry Consolidation in the 1990s and their Policy Implications', *Contemporary Economic Policy* 28, 2 (April 2010); Eugene Gholz and Harvey M. Sapolsky, 'Restructuring the U.S. Defense Industry', *International Security* 24, 3 (Winter 1999-2000); John Deutch, 'Consolidation of the U.S. Defense Industrial Base', *Acquisition Review Quarterly* (Fall 2001); Henrik Breitenbauch, 'En europæisk rustningspolitik? Et essay om reorganiseringen af forsvarsindustrien og forsvarspolitikken i den europæiske region', Working Paper (Copenhagen: Department of Political Science, University of Copenhagen), 2002.

¹⁷ Ethan B. Kapstein 'Arsenal's End? American Power and the Global Defence Industry', CNAS, February 2010, http://www.cnas.org/files/documents/publications/ArsenalsEnd_Kapstein_Feb2010_0.pdf, accessed 10 October 2012.

¹⁸ SIGMA: Support for Improvement in Government and Management, Defence Procurement. Public Procurement Brief 23 (Paris: SIGMA, September 2011), page 3.

¹⁹ Steinberg, *The Transformation of the European Defense Industry*, page vi.

²⁰ Andrew James, 'Comparing European responses to defense industry globalization', *Defense and Security Analysis* 18, 2 (2002); Sorin Lungu, *European Defense Market Integration: The Aerospace Sector in 1987–1999*. Doctoral Dissertation (Boston: Fletcher School of Law and Diplomacy, Tufts University, March 2005).

²¹ Struys, 'The Future of the Defence Firm in Small and Medium Countries', page 561.

²² Struys, 'The Future of the Defence Firm in Small and Medium Countries', pages 551–552.

²³ Struys, 'The Future of the Defence Firm in Small and Medium Countries', page 556.

²⁴ Christian Mölling 'Europe Without Defence', SWP Comments, 28 November 2011 [http://www.swp-berlin.org/fileadmin/contents/products/comments/2011C38_mlg_ks.pdf].

²⁵ The defence industries of these nations have little or low national security importance. Even in theory, these nations cannot be self-sufficient with arms in case of a national crisis or if a government decided to remove them from international cooperation and rely wholly on their own means. They are incapable of developing all or even any major weapons systems on their own, regardless of cost. The defence industry base argument is invalid for these countries, at least at the national level. Of course, some operational national security importance can be tied to remaining defence industries, as certain technical expertise is perceived to be of importance in times of crisis for availability reasons.

²⁶ Data are not readily available on defence procurement and especially national versus multinational procurement. Laudably, the EDA publishes an annual report on defence data. Even in this case, however, methodological transparency could be improved for the immediate purpose of comparisons with other data sets and thus for policy analysis and research purposes and ultimately for the sake of democratic deliberation and effective quality control.

²⁷ European Defence Agency 2011 '2010 Defence Data' [http://www.eda.europa.eu/docs/eda-publications/defence_data_2010], cf. also Baudouin Heuninckx 2011 *The Law of Collaborative Defence Procurement Through International Organisations in the European Union*. PhD Dissertation. The University of Nottingham, available at [<http://www.nottingham.ac.uk/pprg/documentsarchive/phdtheses/heuninckxthesiscompletefinal.pdf>]

²⁸ SIGMA, Defence Procurement, page 2.

²⁹ 'The EU rules regulating competition in public markets apply to all products except to those fulfilling two requirements: the product must be exclusively for military use [and] the product must appear on the list of armaments, ammunition and war materiel established by virtue of Article 296.' Struys, 'The Future of the Defence Firm in Small and Medium Countries', page 555.

³⁰ Indeed, it has been argued that Article 296 'has been interpreted wrongly by most member states as establishing an en bloc, automatic exclusion of defence procurement from the rules and principles of EU law. A number of cases brought to the CJEU have clearly demonstrated that such a wide interpretation of this provision is unlawful.' SIGMA, Defence Procurement, page 5. Moreover, The European Commission's non-binding 'Interpretive Communication on the Application of Article 296 of the Treaty of Rome in the Field of Defence Procurement', released in December 2006, places the onus on member states to make a positive case for excluding specific purchases from the common market's principles. SIGMA, Defence Procurement, pages 5–6.

³¹ 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 and amending Directives 2004/17/EC and 2004/18/EC.

³² Joseph E. Stiglitz 'Principal and agent', *A Dictionary of Economics* (New York: New Palgrave, 1987), v. 3, 966–71; Peter Feaver *Armed Servants: Agency, Oversight, And Civil-military Relations* (Cambridge, MA: Harvard University Press, 2005).

³³ Beyond these agencies and closer to output than the input focus of this report, the NATO Response Force (NRF) has also been a key driver of NATO transformation since 2002. The NRF plays a crucial role in furthering interoperability and the Connected Forces Initiative.

³⁴ 'Defence Policy and Planning Committee', http://www.nato.int/cps/en/natolive/topics_69128.htm, accessed 28 October 2012. The committee can meet in a 'Reinforced format', chaired by the Deputy Secretary General of NATO.

³⁵ Laszlo Sticz, 'The Defense Planning Systems and their Implications', *Journal of Defense Resource Management* 1, 1 (2010), page 43.

³⁶ 'The NATO Defence Planning Process', NATO website [http://www.nato.int/cps/en/natolive/topics_49202.htm]; Gerry Conrad 'ACT and NATO Defence Planning Process: A Driver for Transformation', *The Transformer*, 2012-01, web exclusive [<http://www.act.nato.int/transformer-2012-01/article-25/pdf>].

³⁷ The Level of Ambition (or LoA) is for NATO armed forces to have the capacity to carry out two major joint operations and six smaller joint operations concurrently outside NATO's area of responsibility.

³⁸ 'Conceptually, the Defence Planning Staff Team is a virtual pool of all civil and military expertise resident within the various NATO HQ staffs and Strategic Commands. This entity supports the entire defence planning process throughout the five steps. In practice, the Defence Planning Staff Team will provide the staff officers required to undertake the majority of the staff work to support the NDPP; a standing Core Element will facilitate the day-to-day coordination and an Internal Coordination Mechanism that oversees all aspects of the work', ('The NATO Defence Planning Process', page 3, available at http://www.nato.int/cps/en/natolive/topics_49202.htm, accessed 25 October 2012).

³⁹ 'The NATO Defence Planning Process', page 2, available at http://www.nato.int/cps/en/natolive/topics_49202.htm, accessed 25 October 2012.

⁴⁰ 'The NATO Defence Planning Process', page 3, available at http://www.nato.int/cps/en/natolive/topics_49202.htm, accessed 25 October 2012.

⁴¹ See Robert M. Gates, 'The Security and Defense Agenda (Future of NATO). As Delivered by Secretary of Defense Robert M. Gates, Brussels, Belgium, Friday, June 10, 2011', available at <http://www.defense.gov/speeches/speech.aspx?speechid=1581>, accessed 28 October 2012; Leon Panetta, 'Remarks by Secretary Panetta at Carnegie Europe, Brussels, Belgium, October 05, 2011', available at <http://www.defense.gov/transcripts/transcript.aspx?transcriptid=4895>, accessed 28 October 2012.

⁴² See also Carl Ek, 'NATO Common Funds Burdensharing: Background and Current Issues', *CRS 7-5700* (Washington: Congressional Research Service, 15 February 2012).

⁴³ NATO Support Agency, 'Evolution', http://www.nato.int/cps/en/natolive/topics_88734.htm

⁴⁴ On 1 July 2012, the agency was established as a merger of the NATO Maintenance Supply Agency (NAMSA), the NATO Airlift Management Agency (NAMA), and the Central European Pipeline Agency (CEPMA). One of the segments coming under the NSPA is the logistics operations. The majority of the logistic support is outsourced to industry through the ICB. NATO SUPPORT AGENCY, 'Main Task and Responsibilities', http://www.nato.int/cps/en/natolive/topics_88734.htm.

⁴⁵ The agency facilitates the procurement of support materiel, such as helicopter parts and bottled water, as well as support services, such as environmental impact surveys, for NATO as an organization, for member states, and for partners. NASPA ePortal, 'Welcome to Procurement', <https://eportal.nspa.nato.int/eProcurement/RFP/PublicRFPList.aspx>, accessed 31 October 2012.

⁴⁶ NATO Support Agency, 'Procurement', <http://www.nspa.nato.int/en/organization/procurement/procurement.htm#>, accessed 31 October 2012.

⁴⁷ NATO Support Agency, 'Logistics Operations', <http://www.nspa.nato.int/en/organization/Logistics/Logistics.htm>, accessed 31 October 2012.

⁴⁸ A merger of the NATO Consultation, Command and Control Agency (NC3A), the NATO ACCS Management System Services Agency (NCSA), the ALTBMD Programme and elements of NATO HQ NATO Communications and Information Agency, 'Welcome to the NCI Agency', <http://www.ncia.nato.int/Pages/default.aspx>

⁴⁹ NATO Communications and Information Agency, 'Multinational Cooperation Development', <http://www.ncia.nato.int/Opportunities/Pages/Cooperation-Development.aspx>, accessed 31 October 2012.

⁵⁰ NATO Communications and Information Agency, 'Multinational Cooperation Development', <http://www.ncia.nato.int/Opportunities/Pages/Cooperation-Development.aspx>, accessed 31 October 2012.

⁵¹ The NATO Procurement Organisation (NPO) http://www.nato.int/cps/en/natolive/topics_89040.htm

⁵² [http://www.nato.int/cps/en/natolive/topics_49160.htm]

⁵³ *Phased Armaments Programming System (PAPS)*, AAP-20, Edition 2, February 2010, 1–2.

⁵⁴ *Phased Armaments Programming System (PAPS)*, AAP-20, Edition 2, February 2010, 1.

⁵⁵ *Phased Armaments Programming System (PAPS)*, AAP-20, Edition 2, February 2010, 5.

⁵⁶ <http://www.eda.europa.eu/Aboutus/Howweareorganised>, accessed 15 July 2012.

⁵⁷ <http://www.eda.europa.eu/Aboutus/how-we-do-it/coredrivers>, accessed 15 July 2012.

⁵⁸ <http://www.eda.europa.eu/Aboutus/Whatwedo/eda-strategies/Capabilities>, accessed 15 July 2012.

⁵⁹ <http://www.eda.europa.eu/migrate-pages/Howwedo/integratedwayofworking>, accessed 15 July 2012.

⁶⁰ An Integrated Development Team (IDT) is an 'EDA-based group of experts that addresses and develops solutions for military capability needs. It analyses current shortfalls in capability terms, assesses action already in hand and then considers which alternatives are feasible before proposing what and where the effort should be placed.'

<http://www.eda.europa.eu/aboutus/howweareorganised/organisation/capabilitiesdirectorates/workingwithpms>, accessed 15 July 2012. IDTs focus on broad capability areas, such as command, deployment, sustainment, engagement, protection, and information. Specific projects fall within these areas and are staffed by Project Teams (PTs). PTs are led by a representative of a participating member state and they develop 'Common Staff Targets' for projects that express a 'harmonized military need'.

<http://www.eda.europa.eu/Aboutus/Howweareorganised/Workinglevel/IDTsandPTs>, accessed 15 July 2012.

⁶¹ <http://www.eda.europa.eu/aboutus/howwedo/integratedwayofworking>, accessed 15 July 2012.

⁶² <http://www.eda.europa.eu/strategies/capabilities/collaboratedatabase/aim>, accessed 15 July 2012.

⁶³ Traditional approaches to military procurement have relied upon Article 296 of the Treaty of Rome to allow member states to purchase the majority of their equipment from national suppliers. The lack of international competition and opaque processes has hindered competition, increased the costs of military equipment, and likely compromised quality. 'To create openness on defence contract opportunities and to allow for cross-border bidding the EDA launched the "Intergovernmental Regime to Increase Competition in the European Defence Equipment".' Participating member states in the EDA have 'decided, without prejudice to their rights and obligations under the Treaties, to establish a voluntary, non-binding intergovernmental regime aimed at encouraging application of competition in this particular segment of Defence procurement, on a reciprocal basis between those subscribing to the regime.'

<http://www.eda.europa.eu/otheractivities/intergovernmentalregimedefenceprocurement/coc>, accessed 15 July 2012.

⁶⁴ Furthermore, the EDA specifies that all opportunities to bid on contracts will utilize a standard format, will be formulated in terms of function and performance rather than in terms of platform, and will utilize international technical standards as opposed to national standards or company-linked requirements. In addition, to enhance transparency, award criteria must be made clear from the outset and unsuccessful bidders can receive feedback on the quality of their proposal upon request. Norway and Romania did not approve the Code of Conduct. Contracts with a lower value can be added to the EBB on a voluntary basis.

<http://eda.europa.eu/Strategies/Technologicalandindustrialbase/Defenceequipmentmarket>, accessed 15 July 2012.

⁶⁵ <http://www.eda.europa.eu/otheractivities/intergovernmentalregimedefenceprocurement>, accessed 15 July 2012.

⁶⁶ NATO Handbook, 2006, 53.

⁶⁷ Although the EDA is in its infancy compared to NATO, the Alliance should be inspired by the initiatives promulgated by the EDA while leaving those elements aside that do not fit its overall strategic goals. The developments within the EU with regard to the ESDP, the EDA, and related efforts at not only creating a single European market for defence products but also enabling multinational procurement and capabilities through initiatives such as pooling and sharing means that NATO is in some ways playing catch up to the nimbler EDA. Conversely, the weakness of the EU track is that while the paper solutions are strong, there is little to no geopolitical essence in the EU's attempts at establishing itself as a credible strategic actor with external clout and internal unity.

⁶⁸ The ratio should be calculated as the percentage of multinational procurement investments in major weapons programmes compared to the aggregate multinational procurement investments.

⁶⁹ For feasibility reasons, the amounts calculated could be above a certain level, e.g. €25 million.

⁷⁰ 'The NATO Procurement Organisation (NPO)', http://www.nato.int/cps/en/natolive/topics_89040.htm, accessed 24 October 2012.

⁷¹ Morton H. Halperin, *Bureaucratic Politics and Foreign Policy* (Washington: The Brookings Institution, 1974), page 51.

⁷² Furthermore, the NPO could also develop a publicly accessible database of projects and proposals for all member states to access and require member states to post contracting opportunities above a certain value.

⁷³ <http://www.nato.int/structur/niag/introduction.html>, accessed 22 October 2012.

⁷⁴ <http://www.act.nato.int/subpages/ffci>, accessed 22 October 2012.

⁷⁵ DCAF describes role for Parliament for the entire capability life-cycle. 'Parliament's Role in Defence Procurement', DCAF Backgrounder 09/2006, [http://www.dcaf.ch/content/download/35210/525637/file/bg_defence_procurement.pdf].

⁷⁶ 'Summit Declaration on Defence Capabilities: Toward NATO Forces 2020', 20 May 2012, http://www.nato.int/cps/en/natolive/official_texts_87594.htm.

⁷⁷ NATO and the EDA can institutionalise cooperation in defence acquisition in formal and informal ways. NATO's 2010 Strategic Concept recognises that it will be important for NATO and the EU to 'cooperate more fully in capability development, to minimise duplication and maximise cost effectiveness.' Active Engagement, Modern Defence: Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organization, Adopted by Heads of State and Government at the NATO Summit in Lisbon, 19–20 November 2010. Available at: http://www.nato.int/strategic-concept/pdf/Strat_Concept_web_en.pdf, accessed 30 July 2012. NATO and the EU coordinate with one another on capability development issues in the NATO–EU Capability Group. Membership in the group consists of NATO Allies and Non-NATO EU member states that have a security agreement with NATO. Meetings take place at the staff level. The imbalance of the meeting and its low level hampers its effectiveness. Paul Sturm, 'NATO and the EU: Cooperation?' *isis Europe European Security Review* no. 48 (February 2010), page 2.

⁷⁸ For some of the obstacles to transatlantic cooperation in this area, see Jeffrey Becker, 'The Future of Atlantic Defense Procurement', *Defense Analysis* 16, 1 (2000); Andrew D. James, 'European Military Capabilities, the Defense Industry and the Future Shape of armaments Cooperation', *Defense and Security Analysis* 21, 1

(March 2005); Keith Hartley, 'Defence Industrial Policy in a Military Alliance', *Journal of Peace Research* 43, 4 (2006); and Keith Hartley, 'Collaboration and European Defence Industrial Policy', *Defence and Peace Economics* 19, 4 (August 2008).

⁷⁹ Christian Mölling 'Europe Without Defence', SWP Comments, 28 November 2011, [http://www.swp-berlin.org/fileadmin/contents/products/comments/2011C38_mlg_ks.pdf].