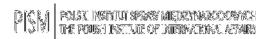
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Restructuring Europe's Armed Forces in Times of Austerity:

The United Kingdom, France, Germany and Poland

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Introduction

How does the financial crisis affect the defence triangle made up of the Armed Forces, government and industry in the United Kingdom, France, Germany and Poland?

This research paper seeks to identify the main trends and compare results for these four countries. It is the companion document to the report "Restructuring the Armed Forces in Times of Austerity: Challenges and Opportunity for Governments and Industry" (SWP-Comments No.28) co-written by SWP, IRIS, RUSI and PISM between September and November 2010 in the wake of the announcement of major cuts in defence spending in the countries under study due to the financial crisis of 2008/2009.

The three axes of analytical concern were

- first, what approaches governments are endorsing to make savings, especially with regard to the restructuring of their Armed Forces and procurement;
- second, how the crisis affects industry and how it reacts;
- Third, how the crisis affects governmentindustry relations.

1. United Kingdom

1.1 Defence Policy Outlook Since 1990

The United Kingdom has regularly adjusted its defence posture since the end of the Cold War in relation to real or perceived changes in the nature of external threats to its territorial integrity, global ambitions or trading interests, or in response to revised Exchequer views of affordability.

The 1998 Strategic Defence Review (SDR) set out the new Labour Government's defence policy. The SDR determined that Britain's Armed Forces must be capable of undertaking a major military effort, similar in size to the first Gulf War, or an overseas deployment of smaller size but longer in timescale, while maintaining the capability of undertaking a second substantial deployment. An additional chapter was added following the 9/11 terrorist attacks on the World Trade Centre with a greater emphasis on lighter forces and measures designed to improve Britain's intelligence and Special Forces capabilities.

Current Budgetary Constraints: Fiscal Austerity Compounded by Over Commitments

Over the last ten years, UK defence planners had sought to meet the demands generated by new interventions despite being provided with only limited increases in their core budget. They have managed to do this, in part, through continuing economies in legacy capabilities, seen as less relevant to the post-Cold War world, whilst also drawing increasingly from the Treasury Reserve to fund the additional costs of operations. In 2004/05, the MoD received £1.1 billion to fund the costs of operations in Afghanistan, Kosovo and Iraq. By 2008/09, this total had risen to £4.5 billion. These measures have ameliorated, but not fully compensated for the fact that the costs of the equipment programme have risen, whilst defence decision-makers have found it increasingly difficult to meet existing commitments. Attempts to delay costs by pushing programmes backwards have allowed temporary savings, while often increasing eventual total costs. The rapidly evolving character of warfare is also generating demands for a wide range of new capabilities, many of which did not even exist in 1998, date of the last UK Strategic Defence Review.

The UK Strategic Defence and Security Review (SDSR) - released on 19 October 2010, a day before the Comprehensive Spending Review outlines the Government's budget - has undoubtedly been overshadowed by the aftershock from the 2008 financial crisis. With Government officials tackling a 2010 fiscal deficit amounting to 11 per cent of GDP, a prolonged period of austerity in public expenditure (including defence) constitutes the current Government's policy over the length of the next parliament.

The SDSR has imposed large cuts in real defence spending with the Ministry of Defence (MoD) facing a reduction in the core defence budget of 8 per cent in real terms between 2010/11 and 2013/14. Over six years, this reduction may however be increased to a 10 per cent cut in real terms, possibly more, as the United Kingdom begins a drawdown of combat troops in Afghanistan from 2015 onwards. With current operations in Afghanistan having somewhat protected the Army from more challenging cuts whilst British troops are on the frontline, the effect of budgetary cuts on the Army is likely to increase in proportion to the Afghan drawdown.

Overall, the figure of 8 per cent constitutes a far less significant reduction than was considered before the SDSR's release as a result of the pressure imposed by the Treasury. With other government departments facing much sharper reductions in their real budgets, it had previously been considered that the MoD could face much more significant cuts of 23 per cent in real defence spending between 2010/11 and 2014/2015.

Notwithstanding the austerity measures imposed by the current Government, these are furthermore compounded by concurrent spending difficulties which were set to affect UK Armed Forces already well before the financial crisis. Indeed, in parallel to the pressures exerted by the crisis, the UK defence budget was already under considerable stress due to an overcommitted defence procurement programme, as well as growing strains on public spending as a result of meeting ongoing operations.

1.2 Restructuring the Armed Forces in Times of Austerity: Current Government Efforts

Effects of the cuts on defence procurement

An examination of the size and shape of the procurement budget has necessarily featured prominently in the SDSR, with the most commonly discussed options for review-related savings having focused on the cancellation, or postponement, of major equipment projects.

Under the latest SDSR, the construction of two new aircraft carriers, HMS Queen Elizabeth and HMS Prince of Wales, will nonetheless go ahead at a cost of more than £5bn in view of the fact that restrictive contractual arrangements would have meant that it would have been more expensive to cancel the projects than to proceed with them. The first carrier is expected to enter service without any fighter aircraft. It will instead be mothballed for either sale or kept in strategic reserve to be fully fitted with systems should the economic environment improve. Arrangements for making the second aircraft carrier more interoperable with US and France fighter jets meanwhile point to the fact that it will be redesigned with a catapult and arresting system that will allow it to deploy fighter aircraft that do not require vertical lift capability. This will therefore lead to the purchase by the UK of conventional F-35 aircraft as opposed to the more expensive short-takeoff, vertical-landing (STOVL) vari-

Delays of up to five years to the replacement of the current Vanguard nuclear submarines are also earmarked, which would postpone the entry into service of the first of four new Trident D5 Missile carrying nuclear submarines until 2027. Construction of the boats was due to begin in 2014, with the first of the new generation submarines coming into service in 2024. The expectation is that this delay would shift the main financial burden of Trident's £20bn replacement programme until well after the next general elections, and into the 2020s.

Gross spending on the eighty-eight aircraft to which the UK was committed as part of the third tranche of the Eurofighter Typhoon project is still uncertain. Although the government has not finally committed to taking the full number, the programme

could still be cut if all the UK's partners agree. With cancellation penalties only coming with a unilateral withdrawal, the UK will no doubt attempt to convince its partners in Europe to review the purchase. If procured, the total amount for Tranche 3 would come to as much as £1 billion per annum during some of the peak procurement years of 2012-16: probably the MoD's biggest single procurement commitment during this period.

Force Structure

The review has also looked at further reductions being made in the numbers and types of aircraft squadrons, naval vessels and/or ground force formations, together with their associated support facilities. These include:

- Early decommissioning of the Royal Navy's Ark Royal aircraft carrier, rather than in 2014, as previously planned, along with its fleet of Harrier jets.
- The navy will lose over 4,000 personnel and its surface fleet will be cut from 24 to 19.
- Squadrons of RAF Tornado jets will for now be maintained until they are gradually phased out with the full entry into service of Eurofighter Typhoons, along with the closure of several air force bases, and the service cut by 8,000 RAF personnel
- The Army will have to cut up to 7,000 personnel over the next five years, and lose 100 tanks and heavy artillery.
- The Ministry of Defence itself will face substantial cuts to its civilian staff.

Key to the examination has been that there are capabilities which need to be increased, both in response to recent operational experience (for example, requirements for tactical and strategic transport) and new technological opportunities (for example, in relation to unmanned aerial vehicles and cyber-warfare).

Yet the debate on the appropriate balance in UK force planning between preparing for major interstate warfare and for fighting intra-state 'wars among the people' will continue to be relevant after the SDSR. Many of the SDSR's critics will point to the disjuncture between the force balance which the SDSR will produce and the risks identified in the UK's National Security Strategy which was published a day before the SDSR on the 18 October.

Notwithstanding such threats as International terrorism or Cyber-warfare, underlined in the NSS, much of the debate in the SDSR has instead concentrated on the military dimension. Influencing this, is the fact that above a certain limited scale of operations (e.g. Sierra Leone), the UK is only likely to be involved in either type of warfare if it is part of an international coalition, usually led by the US. Much of the debate on UK defence priorities, therefore, is fundamentally about how its armed forces can provide the most effective contribution to collective efforts, even if a capability for meeting uniquely national requirements (for example in Northern Ireland) has to be maintained.

While the probability of direct state-led threats may be less than that of complex encounters with non-state actors, the potential damage done to UK interests by hostile states could be much greater. Given the likely resource constraints, a policy of overspecialisation in capabilities for sustained state building and counter-insurgency operations could also risk underinsurance against the exploitation of new technologies (for example, CBRN, cyber-terrorism and nanotechnology) by a wide range of potentially hostile state and non-state actors.

Results of the SDSR

The Strategic Defence and Security Review's focus on having an 'Adaptable' force, and in the process maintain with a reduced spend the current balance between different capabilities, has not seemingly led to any substantial choices having been made in terms of removing the focus of UK defence efforts from specific areas at the expense of others. Instead, the global aspiration level has been maintained, leaving some uncertainty over how the review will actually deliver an effectively balanced force structure.

One of the key tests of whether the 2010 SDSR provides a basis for coherent long-term defence planning is whether it has been based on credible assumptions. One of the reasons for current levels of over commitment is that past defence planners have made unrealistic assumptions. Only experience will tell if this has changed, but if one thing is clear already, it is that the long-term adjustment of UK Armed Forces in this SDSR was more as a result of budgetary pressures than a dispassionate or unencumbered response to changes in the strategic environment. In this respect, the

MoD's ability to produce credible long-term defence plans has been hampered by the economic straights of the UK. It was restricted just as much by the fact that it was not given clear guidance - agreed on by the National Security Council - until very late in the process regarding the assumptions it should make on the level of resources that are likely to be available for defence in the long term. Instead, much of the decision making in this SDSR process has been last minute, with the MoD and Treasury embroiled in bitter contestation.

Yet military power and status should be measured primarily in terms of relative, and not absolute, capability. And the UK has not been falling behind in relation to either France or Germany, generally seen as its most important European foreign policy partners. In specific capability areas, cost-cutting resulting from the 2010 defence review could result in the UK's relative position being eroded, for example compared with France. Yet given the continued pressure on national budgets throughout NATO, these cuts will probably not fundamentally alter the UK's position as one of Europe's two leading military powers, or the broad parity in its capability compared with France. Were much deeper reductions to be made, it could be a different picture.

1.3 The British Defence Industry: Context and First Reactions to the Crisis

The way in which the current fiscal crisis will affect British defence industry should broadly be similar to how it will affect its European neighbours. With reduced defence expenditures as a whole, industry will compete for contracts within a lower demand environment, where the available defence spend is under much tougher competition and value-for-money imperatives. All things considered however, a number of mitigating factors exist in the UK which point to much greater resilience of some in the British defence industrial sector to a downturn in the European market.

Taking the prime manufacturer BAE Systems for example, the company has for several years already ensured that it is less reliant on its UK customer base and developed greater diversity in its market structure. This is perhaps best exemplified by its 'home markets' strategy of inward industrial investment and military sales to 6 so-called 'home-markets': the United States, the UK, Saudi Arabia, South Africa, Australia

and Sweden. This global growth strategy, energetically being pursued in equal measure in India with BAE increasing its market presence there as well as through large military contracts to the Indian Armed Forces, provides the company with sufficient financial strength and diversity that it should be able to handle any stress within one of its single markets.

British defence industry has by and large already had to restructure itself substantially and has driven down costs. It has done so in pursuing diversification strategies, through, for example, acquisitions within the expanding security sector where dual use civilian and military technologies can be reengineered for specific usages. Another approach to diversification has been to concentrate on service provision thanks to a 'through-life' approach - thereby shifting from a purely platform sales orientated model to a readiness and sustainment model which provides longer-term maintenance and servicing contracts to UK industry for existing platforms. By being highly competitive in its home and international markets, this approach, while not preventing it from being negatively impacted by the cancellation of programmes or reduced spend, at least make the British industrial sector more ready than most of its European competitors for these times of austerity.

Ahead of the SDSR, beyond traditional unease regarding its likely impact on particular lines of production and revenue, industrial concerns lie primarily in the potential loss of engineering capabilities or skills within the UK industrial base should the UK Armed forces abandon entire capability areas or divest investment in research and development to such an extent that industry can no longer retain the qualified skills. A minimum investment in these programmes is therefore necessary it is contented, to keep such skills alive. After the SDSR's publication, a consultation period with industry is already earmarked by the MoD which should result in the publication of a new Defence Industry and Technology Policy, expected to be published in April 2011. This White Paper will update the previous Labour government's Defence Industrial Strategy (DIS) published in December 2005.

2. France

2.1 Defence Policy Outlook and Restructuring of the Armed Forces Since 1990

French military forces have been in perpetual transformation since the end of the Cold War. This transformation began in 1989: the "Plan Armées 2000" aimed at increasing combined forces. In 1994, the French government decided to close and gather military bases in order to save money. In 1996, a major reform led to the end of conscription and the gradual introduction of a professional army. This transformation lasted four years (1996 to 2002).

In 2008, the White Paper on Defence and National Security launched a new transformation of French military forces, including a total personnel reduction of 54,000. The reduction of the total number of soldiers will end in 2015. During the 2009-2014 Military Programming Law, the total number of personnel will decrease from 314,000 to 276,000. The objective is to pool logistic and support functions together. In order to do so, a rationalisation of military bases is included (leading to aggregating all the military forces in 75 major military bases). By the end of the process (2015), the objective is to save €1.6 billion per year– although there have been no signs of any savings by the end of 2010¹.

2.2 Armed Forces and Procurement in Times of Austerity: Current Government Efforts

The new defence triennial spending law was unveiled on 29^{th} September. The 2011-2013 defence budget will amount to $\[\in \]$ 91.6 billions, instead of $\[\in \]$ 95,3 billion as

¹ Without the reform, the extra cost would have been 250 millions euros in the 2010 defence budget. See Bernard Cazeneuve, François Cornut-Gentille, Rapport d'information sur la mise en œuvre et le suivi de la réorganisation du ministère de la défense, deuxième rapport d'étape, Commission de la défense nationale et des forces armées, Assemblée nationale, April 2010.

SWP-Berlin Restructuring Europe's Armed Forces November 2010 initially planned in the 2009-2014 Defence Programming Law. 2

In reality, the budget cuts could have been limited to \in 1.5 billion, as the defence budget was supposed to benefit by \in 2.4 billion due to the selling of real estate and military radio frequencies. Yet, the 2009-2014 Defence Programming Law was planning to make those sales in 2009 and 2010, but the Ministry of Defence has not succeeded in doing so to date.³

The Minister of Defence, Hervé Morin, provided some details regarding the diminution of the defence budget during the France's summer "Defence University", on September 14^{th} , in Marseille. He declared that within the next triennial budget planning, the amount dedicated to the equipment budget will be about € 16 billion in 2011, €16.8 billion in 2012 and €17.4 billion in 2013 − instead of €16.7 billions in 2011, €17.2 billions in 2012 and €18 billions in 2013, according to the anticipated corrective inflation rate of 1,5 % from 2010 to 2013. Given the Minister's statement, the real cut within the equipment budget would be about €1.7 billion for the next three years.

That is the reason why the French Ministry of Defence hopes that it can avoid cutting equipment or simply delaying the production. The only certainty is that it will be difficult to launch new programmes in the following years, even if the project of the 2011 defence budget law announces that credits will fund the MUSIS space observation programme and UAVs for the French Air force. But there are still doubts on the future budgetary decisions because of the French economic situation:

- The budget deficit is 8% GNP high
- The debt rate is 80% GNP high

According to some insiders, the Ministry of Economy and Finance as well as the Ministry of Defence worked on a pessimistic scenario, with a $\ensuremath{\in} 5$ billion reduction in three years instead of a $\ensuremath{\in} 3,5$ billion reduction scenario.

Public opinion does not really care about reducing the defence budget. In recent polls, 45% of public

 $^{^2}$ « Le budget de la défense sera réduit de 3,5 milliards d'euros en trois ans », nouvelobs.com, $2^{\rm nd}$ July 2010.

³ Bernard Cazeneuve, François Cornut-Gentille, Rapport d'information sur la mise en œuvre et le suivi de la réorganisation du ministère de la défense, deuxième rapport d'étape, Commission de la défense nationale et des forces armées, Assemblée nationale, April 2010.

 $^{^4}$ The rate base is the bill n°2009-928 on the 2009-2014 Military Programming adopted by the French Parliament on 29^{th} July, 2009.

opinion considered that defence is a sector where money could be saved.⁵

France has decided to promote bilateral dialogue with the UK and Germany in order to find new solutions to the challenge of austerity. In both cases, the possibility of pooling capabilities was mentioned⁶.

On 2 November 2010 during the Franco-British Summit a framework agreement on defence cooperation was signed between the two countries. Apart from the co-operation in nuclear testing, 17 topics for further collaboration were identified. London and Paris agreed to pool logistics and training for the A400M. France will use spare UK air-tanker capabilities and research and technology co-operation will be continued with a joint annual budget of 100 million Euros.

Table 1: French defence budget forecasts (2011-2013)

Figures in billions of euros		2011	2012	2013	2011- 2013
MPL ⁷	Defence budget	30,66	31,86	32,81	95,33
	Extra credit	0,57	0,21	0,11	0,90
	Total with- out the vet- erans	31.23	31,07	32,92	96,22
	Defence budget	30,16	30,52	31,02	91,70
TSL ⁸	Extra credit	1,02	1,17	1,07	3,26
	Total with- out the vet- erans	31,19	31,69	32,09	94,96
	Defence budget	-0,5	-1,34	-1,79	-3,63
	Extra credit	+0,45	+0,96	+0,96	+2,37
	Differential budget law 2011 plan- ning law 2009-2014	-0,05	-0,38	-0,83	-1,26

Source : Projet de loi de finances 2011 budget de la défense

2.3 The French Defence Industry: First Reactions to the Crisis

The turnover of the French defence industry is around €15 billion per year. Around one third is related to export. Different strategies are being used to face the diminishing defence budget.

Political proposals

Restructuring and integration of arms industry

The French procurement agency, the DGA, tried to oblige Sagem and Thales to merge their optronic assets, because the market is too small for two companies. Even though the French State is a shareholder of the two companies, Sagem and Thales have not submitted to the wishes of the French government so far. Recently, French Minister of Defence, Hervé Morin, commanded the DGA to stop ordering R and T studies from the two companies in order to force them to merge their common assets⁹.

At the European level, the Franco-British initiative aims at furthering the integration of MBDA in order to rationalize the localisation of the company sites in the UK and in France within the project "One MBDA".

Paris and London also agreed to co-operate on the next generation of nuclear submarines, mine countermeasures, Satellite Communication, in the missiles sector, as well as on MALE UAVs and on UCAVs. All these co-operation items could lead to industrial consolidation. However, this is not a declared political aim, except for missiles, where the objective is to have further consolidation within the Franco-British-German-Italian company MBDA.

The industrial policy of the French State as a customer of defence products

The Ministry of Defence will order 11 Rafale in 2011 – i.e. earlier than expected (33 aircraft will be ordered during the period instead of 22), in order to maintain production and to offset the lack of export of this combat aircraft. The French Ministry of Defence must find 800 millions euros to cover this new spending. In

 $^{^{5}}$ Pool by IFOP, Fondation pour l'innovation politique, $22^{\rm nd}$ January 2010

⁶ Pooling aircraft carriers capabilities with the UK is not mentioned anymore but Hervé Morin talked about the possibility to pool air transport A 400 M capability and air refuelling capability.

⁷ Military Programming Law

⁸ Triennial Spending Law

⁹ Hervé Morin, Minister of defence, declares at the université de la défense "the managers of Thales and Safran know that soon or later they will have to rectify the perimeter of their companies," 14th September 2010.

order to balance this extra cost, the French Ministry of Defence plans to delay the modernization of Mirage 2000 combat aircraft, some parts of the Scorpion terrestrial system and the purchase of multi-role transport and tanker (MRTT) aircraft. The inter-ministerial budget will be used to fund the extra cost of the A 400 M programme – where 400 million euros are needed to conclude the new contract and to save the programme.

Industry proposals

Developing co-operative programmes

The industry promotes two different types of cooperative programmes. Dassault, the company that produces Rafale, thinks that European mergers to build larger companies are not the best solution and believes that the Franco-German-Spanish company EADS is a failure. Dassault pleads for integrated programmes with share-working based on technological competences. In this model, there is one clear prime contractor. It is the model of the nEUROn co-operative programme, a prototype of UCAV, led by Dassault (more than 50% of the programme). The other partners are Italian (Alenia), Swedish (Saab), Spanish (EADS Casa), Greek (Hellenic aerospace industry), and Swiss (Ruag). But there are no British and German companies involved in the nEUROn programme and it is only a prototype and not an operational platform. Dassault also pleads for there to be a European preference in the defence procurement of EU member states.

As a European company, EADS promotes European co-operative programmes on a multilateral basis. However, EADS faces some issues on the A400M programme (delays and extra-cost). An agreement for a new A 400M contract was reached, taking into account the extra cost and the reduced number of command by ten planes.¹⁰

Moreover, EADS did not succeed in imposing the Talarion UAV as a European programme as there is no common requirement at the European level and diverging interests between companies which have the capabilities to build such equipment. Perhaps the Franco-British agreement could lead to a Franco-British program or even to a European program.

 $^{\rm 10}$ Germany will buy 53 planes instead 60 and UK will buy 22 planes instead 25

SWP-Berlin Restructuring Europe's Armed Forces November 2010 Developing arms exports

Historically, exports represent about 33 percent of the French defence industry's total revenue – i.e. about €5 billion per year. According to the French government, the trend of defence exports has been flat since the beginning of the decade, despite growth in global demand. France has gone from being the third-leading export country, after the United States and the U.K., to fourth (after those countries and Russia). Israel, Italy and even Germany are not far behind. For the past three years, the French government has been trying to improve the French defence industry's export performance. In 2008, it created an inter-ministerial committee to support civil and military export (CIACI), and there is now a "war room" dedicated to this issue at Elysée Palace. The efforts seem to have paid off, as the French Armament Directorate (DGA) stated that export orders for French defence equipment had climbed to around €8 billion in 2009.

Diversifying business in civil and security sectors

Some companies have started diversifying their activities in the sector of the security, such as Sagem and Thales. Those companies produce dual use equipment (in the case of observation, situation awareness, or command control and communication capabilities) or technologies which can be used either for military or security equipment. But equipment is not strictly the same due to the fact that the defence customer and security customers are not identical and they do not have matching requirement. In the previous years, Sagem acquired American companies dealing with the US Department of Homeland Security to provide security equipment (specifically with biometry technology).

Combining the different strategies

DCNS, a naval military company, attempts to work through those three strategies all together. DCNS tries to develop arms export as well as to consolidate the military naval industry at the European level. The German consolidation is favoured for the restructuring of naval industry. DCNS also tries to diversify its activities in the civil sector using its technological competencies in nuclear power assets and in renewable energy.

3. Germany

3.1 Defence Policy Outlook since 1990 and Current Budgetary Constraints

Despite the growing engagement in crisismanagement tasks beyond the Euro-Atlantic since 1990, the Bundeswehr's force structure and rationale for the use of military force remained long geared for territorial defence. A first review process aiming at restructuring the Armed Forces took place in 2000. The Defence Policy Guidelines (DPG) that eventually came out of this review in 2003 stated that the Bundeswehr should now be equipped to participate in operations "anywhere in the world and at short notice and...across the entire mission spectrum [including] high-intensity [combat] operations." Currently, Germany is engaged in the largest structural reform of its armed forces since the end of the Cold War. The twin pressures of the need to enhance deployability brought home especially by the ISAF-operation in Afghanistan- and the financial crisis have resulted in a broad political attempt to redefine the force structure of the Bundeswehr, as well as its capabilities.

In early 2010 the Finance Minister Wolfgang Schäuble asked the MoD to contribute to a drastic budget consolidation made imminent by the constitutionally mandated debt ceiling that will fully apply by 2016. By then, new debt creation (deficit) will have to be restricted to no more than 3,5% of GDP per year. In the timeframe from 2011 to 2014, the defence budget should generate savings of €8,3 billion. Since May 2010, the Bundeswehr and the MoD have engaged a large-scale restructuring effort: In June, the Cabinet tasked both the MoD and a specially convened Commission on Structural Reforms to check the consequences of force reductions of up to 40.000 soldiers, the suspension of conscription as well as ways to streamline administration and rationalise procurement and acquisition. A priority list for programme cuts of up to €9,4 bn. was leaked from the MoD in late June.

3.2 Restructuring the Armed Forces in Times of Austerity: Current Government Efforts

Currently, the Ministry of Defence favours a model according to which conscription would end by mid-2011 and the end-strength of an all-volunteer force would be around 170.000 soldiers. Streamlining reforms are imminent for the command structure of the armed forces too, yielding less overhead and more operative and deployable units.

The Commission on Structural Reforms submitted its report in early November to the Defence Minister. Its central recommendations are to reduce force levels to around 180.000 troops, to suspend conscription and to use pooling and sharing at European level to achieve more savings. Whilst offering options to trim and restructure the MoD as a whole, it also speaks in favour of enhancing the responsibilities of the Chief of Defence.

The MoD will submit proposals for implementing the Commission's recommendations to the Minister by the End of January 2011, who will decide on the precise shape and extent of reforms of the *Bundeswehr* and the MoD on this basis. Drastic cuts in acquisition will be part of the savings effort. The current Chief of Defence advocates fundamental reforms of the acquisition process and speaks in favour of buying more commercial and military off-the-shelf solutions in his report to the Cabinet. He also identifies increased pooling and sharing of capabilities as one way to achieve savings through international cooperation. Yet he cautions about the political challenges involved making such cooperation genuinely effective.

The priority list engages a comprehensive review of programme acquisitions. Most major projects are considered for cuts. It suggests that the number of initially planned NH 90 transport helicopter will be reduced from 122 to only 80 and the attack helicopter Tiger (from 80 to 40). The final tranche (3b) of the Eurofighter will probably be cancelled (37 units less) or sold on the international market, if the contract does not allow for cancellation. Orders for the armoured vehicle Puma might also decrease from 400 to 280 units. Yet, the amount of savings will depend on MoD's negotiations with industry on foregone contracts. The resell of some units may be necessary. Following the recent re-negotiation of the procurement terms for the A400M, Germany will only buy 53 of the initially 60 planned A400M transport aircrafts for the initially agreed price and maintain a €500 million

loan guarantee for EADS should the A400M not export satisfyingly.

Cuts in existing force structure are already being implemented and efforts at modernizing the armed forces are being accelerated. The Navy is modernizing its capabilities, with six 206A submarines being decommissioned before the planned date to allow operating the fleet of more modern 212A Class submarines from currently 4 to 6 units by 2013. Eight Type 122 frigates could also be taken out and be replaced by K130 Corvettes in 2011 and K131 by 2015. A further reduction is planned in the order of three instead of four frigates F125 between 2016 and 2019. The Air Force will retire 15 Transall and reduce flight hours. The retirement of Tornado fighters (from 185 to 85) will take place earlier than planned. The Army will further reduce its heavy armour capabilities, taking out of service around 60 Marder armoured fighting vehicles, as well as armoured anti-air and artillery vehicles.

3.3 The German Defence Industry: First Reactions to the Crisis

Reliable numbers on jobs attributable to the defence industry are not available. Estimates range from 80,000 (AVW, German Industry Association) to 35,000 as some insiders assume. These numbers stand in stark contrast to the highs of the Cold War, when the sector was employing around 280,000 people. Since the mid-1990s, there has been considerable consolidation at the prime contractor level in most sectors. Similar consolidation has not yet affected the subcontractor tiers: Each of the remaining prime contractors maintains its own network of domestic suppliers. Furthermore, the consolidated firms tend to maintain the facilities and product lines of each of the component companies to preserve employment. The German defence industry thus maintains significant overcapacity - with the exception of the military aircraft market.

Economic Situation: A First Assessment

According to SIPRI, German defence related exports grew from around €1.42 bn. in 2005 to €1.87 bn. in 2009. Germany is now the third-largest exporter in the armaments sector after the US and Russia. Its profits are largely made on the basis of big ticket sells (e.g. submarines), that are mainly exported to NATO and EU member states.

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The economic data available on the reaction of individual German defence firms like Rheinmetall, EADS, OHB and Diehl seems to paint a mitigated picture: Most firms are starting to show clear signs of recovery from the peak of the crisis in 2008-2009, but not all recoveries are due to defence-related activities. Firms specialising in systems that are important for current operations have largely profited from the recent government efforts to improve acquisition for ongoing deployments. Rheinmetall's defence business, for instance, has turned into the strongest section of its portfolio, thanks to the strong demand from the MoD whilst suffering from the crisis in the automotive sector. Growth is expected to be higher in 2010 than anticipated (€3.9 bn. as compared to expected €3.7 bn.). EADS is in turn currently seeking to expand its business in the US in the defence and service sectors in order to cushion the cyclical nature of Airbus-related income. Bremen's space technology company OHB, is booking net growth in 2010, and is expanding its international ties, including those to China. Other firms like Diehl are recovering due to their civilian or dual-use activities. Yet, small and medium enterprises in the aerospace sector and those specialising in maintenance work, as well as outfitters or subsystem suppliers are already suffering from the freeze in contract awards imposed by the MoD on Maintenance expenses. Depending on the outcome of the political process sketched above, the crisis affecting the defence sector may only be looming.

Political reactions

German industry is currently reacting to the list of potential cuts leaked in late June and the recommendations of Chief of Defence Volker Wieker. Since July, the labour union (IG Metall) has started paying greater attention to the issue, protesting against upcoming cuts. One of the issues of concern to the Union is the closure of industry locations. Industry representatives further fear that an implementation of Wieker's advocacy for greater reliance on off-the-shelf products will weaken national industry. The lack of resources to maintain industrial know-how and to develop strategically relevant sectors (e.g. MALE UAVs) is also deplored.

Both the national defence industry association and the labour union want to secure the national industrial basis (core capacities) through targeted national orders and through the shortening of administrative delays for exporting defence goods. Without domestic support for R&D and the national endorsement of

products, industry fears its chances to stand on the international market will be reduced as well –with clients such as India, Brazil, the United Arab Emirates or Saudi Arabia becoming ever more demanding about the quality of goods and a maximum technology transfer. Whether the "Industry-Government Agreement on Core Capacities" is helpful on the background of imminent cuts is uncertain, for there are still too many areas considered as national core capacities, and little attention is paid to the wider spectrum of capacities at European level.

4. Poland

4.1 Defence Policy Outlook since 1990 and Current Budgetary Constraints

The Polish defence policy has been completely reoriented since 1990. From being an element of a Soviet military strategy, assuming a large scale war with NATO countries, it moved to a decade-long period of full self-dependence in the 1990s, and finally -with the accession of Poland to NATO in 1999- became firmly anchored in the Euroatlantic security system. This profound shift was reflected by a deep transformation of Polish armed forces, which for most of the last 20 years have been struggling to meet NATO political, organizational and technical standards. The transformation, involving also a decrease of the armed forces' strength from almost 280.000 to app. 130.000, entered a new phase after 2003/4, due to the growing Polish engagement in operations in Iraq and Afghanistan. At that time strategic decisions have been made to strengthen the capacity of the armed forces to take part in multinational military operations by reequipping it with modern weapon systems, increasing the number of professional soldiers and changing training patterns. The gradual implementation of those goals was enabled thanks to a stable defence budget, which -according to domestic legal provisions, in force since 2002- each year must equal to 1,95% of GDP.

The impact of the global economic crisis on the Polish defence budget is currently hard to asses. At the end of 2008 a sudden destabilization of public finances, which was –to a large extent– the result of an unexpected deceleration of the GDP growth pace, forced the MOD to make severe cuts (by approx. 20%) in the 2009 defence budget (see Table 2). Cuts concentrated on investment expenses, reduced by approx. 50%. Most of the long-term procurement contracts were reviewed with the aim to reduce, delay or suspend payments (and deliveries). Only vital deliveries to Polish contingents deployed in the framework of the ISAF mission were not significantly curtailed (as well as its overall cost, making up a growing part of the budget). Furthermore, maintenance and training costs

were reduced by limiting administrative expenses and suspending field exercises.

Despite the global crisis, the Polish economy was in relatively good condition in 2009 and 2010, which allowed the MOD to cease the policy of cuts. The 2010 budget has not been reduced and is being implemented without difficulties, although it does not yet allow the MOD to boost investments (also due to the need to cover contracts renegotiated in 2009). However, the 2011 budget will grow by approx. 7%, including 16% more funds for investments (both in equipment and infrastructure). No particular savings plans are currently being made, other than a further rationalization of expenses through organizational and administrative reforms.

From 2012 onwards, the Polish defence budget may, however, suffer from an emerging public finances crisis. The government has recently proposed to lift the obligation to spend 1,95% of GDP on defence, which would be preserved only in a global, six-year perspective, which could in turn allow an increase in the flexibility of the defence budget and make it more dependent on the overall condition of public finances. In practice, such change is likely to entail a considerable and permanent decrease of the Polish defence spending. Little public and political support for defence-related expenses means it would be hard to increase the defence budget after it has been already been limited. Nevertheless, the decision has not been taken yet.

4.2 Restructuring the Armed Forces

Currently, Polish armed forces are continuing a deep transformation, involving three core elements: technical modernization, professionalisation and administrative reforms. Modernization is aimed at replacing aging post-Soviet equipment and increasing the level of armed forces' interoperability, deployability and sustainability. A long-term investment plan, adopted in 2009 is currently being implemented. It involves a number of relatively big procurements, valued €7,5 billion till 2018 (in current prices and exchange rate), with some of them to be accomplished in only three/four years - e.g. a purchase of 16 fighter-jet trainers, 26 support helicopters and dozens of Patria/'Rosomak' AMVs. The plan foresees also very ambitious procurements, which will be financed after 2018 - e.g. a new aerial and missile defence system or comprehensive improvement of C4ISR capabilities. The

total value of all those procurements is estimated to equal app. €35 bn. In the same period large numbers of old equipment should be withdrawn (e.g. dozens of Sukhoi Su-22 bombers or hundreds of T-72 tanks), although in case new procurements were delayed, life-extension actions are likely.

The professionalisation, decided upon only in 2008, suspended compulsory draft in favor of a completely professional armed force, which has been subsequently reduced by 30% (to approx. 100.000). However, the number of professional soldiers has risen by 25% and, furthermore, a 20.000-strong National Reserve Forces is being established. Administrative reforms, in turn, address the armed forces' organizational structure, maintenance and training systems. One key development is the reorganization of the military procurement system, with a new central body taking over responsibility for contracting military investments from 2011 onward.

Transformation goals assume stable financing of the defence budget and preservation of the 1,95% of GDP on defence indicator. However, potential financial constrains shall be addressed in the on-going Strategic Defence Review, to be accomplished by the end of January 2011. The SDR will identify future capability requirements for the Polish armed forces and propose lines for its further transformation. Yet, there is no mechanism for an automatic implementation of its recommendations.

4.3 The Polish Defence Industry: First Reactions to the Crisis

The Polish defence sector is dominated by statecontrolled companies: a large holding called "Bumar" (incorporating over 27 different corporations) and a few separate but cooperating firms (e.g. WZM Siemianowice - the manufacturer of Patria/'Rosomak' AMV), which are active mostly in the land systems domain. An overarching, governmental strategy for those firms was adopted prior to the crisis and involves further consolidation (within the Bumar group), recapitalization and concentration on core business (e.g. track and wheeled armored platforms, munitions, optoelectronics, radars). So far, the strategy hasn't been updated due to the crisis and is being implemented (in line with it, e.g. Bumar has recently incorporated 7 new companies). Yet the 2009 defence cuts hit those firms severely, since they are almost entirely dependent on the Polish MOD procurements (with exports

being only a periodic source of its revenues). Special financial instruments, mainly governmental guarantees and credits, were needed to save a couple of Bumar companies, suddenly put on a verge of bankruptcy. The situation of Bumar and other state-run companies in 2010 seems to be more stable, but their future depends still on the Polish MOD procurements. Apart from national demand, those companies also badly need inflow of foreign capital and technology, which can be mostly guaranteed by offsets (the "polonization" of the procured equipment is one of the key MOD goals for the coming years), and by partnerships with foreign partners (which are slowly developed, best example being the Bumar's aerial and missile defence system created with MBDA). Yet, in a move to change the proportion between home sales and exports in favor of the latter (and to become less depended from the Polish MOD), Bumar is broadening its portfolio of products (recently by a newly designed light tank), and tries to adjust their features also to meet the needs of foreign customers.

Companies, making up the entirely private part of the Polish defence sector (active mainly in aeronautic domain), are integrated in international production chains as subsidiaries of leading European and US corporations. Thus, they may indirectly feel effects of potential reduction of orders in the global market. Business strategies of such companies are, however, drafted mostly by their parent corporations, dependently on their own financial condition. Thus, at this stage it is hard to identify the impact of the crisis on them. Some of those firms are, however, focused also on the Polish market and offer capabilities, vital for the Polish Air Force (e.g. EADS PZL Ok cie, oraz Sikorsky-owned PZL Mielec) - therefore, it is likely, that they may be seriously affected by potential investment cuts of the Polish MOD.

Table 2: The Polish defence budget (2008-2011)

	2011**	2010**	2009***	2008***
value*	27 500,0	25 719,0	19 489,0	19 233,4
(in mln PLN)			(planned: 24 938,5)	(planned: 22 559,5)
value*	6 860,00	6 415,00	4 503,73	5 469,31
(in mln EUR)			(planned: 5 763,06)	(planned: 6 415,14)

The figures in the table are based on the annual information provided by the Polish Ministry of National Defence, figures in EUR have been obtained with the use of the yearly average exchange rate from the previous year, calculated by the Polish National Bank.

^{**} Estimated value – the 2010 budget is being implemented, the 2011 is a draft only.

^{***} The implemented budget value, according to the Polish Supreme Audit Office.