

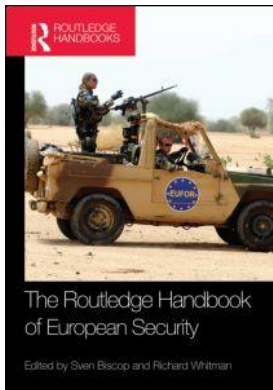
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9

DEFENCE INDUSTRY AND TECHNOLOGY

The base for a more capable Europe

Jan Joel Andersson

The European defence industry and technological base makes a major contribution to the security and defence of Europe. Some of the world's most advanced weaponry and defence technologies are of European origin and give Europe a cutting edge in conflict and war. Areas of European specialty are, for example, radar systems, missiles, conventional submarines, helicopters and armoured vehicles as well as a strong emerging 'homeland security' industry. The ability to develop and produce advanced weaponry and associated technologies not only ensures a degree of political independence but also provides Europe with an important tool for politico-military influence around the world. With some 700,000 people employed and a contribution of around 2 per cent of EU GDP, the economic importance of the security and defence industry to European employment and exports should not be underestimated, either.

The European defence industry and technological base is today highly capable, and in many areas world-leading, but is largely the result of past investments. Since the end of the Cold War, Europe's overall levels of defence expenditure have sharply fallen and with it investment in its defence industrial and technological base. At the same time, the costs and complexity of defence systems have continued to grow and competition in overseas markets has become ever more intense from not only the United States but also from Russia, and countries in Asia and Latin America. Given declining defence budgets in Europe and increasing competition in overseas markets from the USA and other countries' industries, the question is whether the European defence industry can continue to be the base for a more capable Europe in the future.

In this chapter, the European defence industrial and technological base (DITB) will be examined with a focus on the major actors and market trends. The efforts of the European Defence Agency (EDA) and other European institutions to establish a competitive European defence technological and industrial base and an open and transparent European defence equipment market, which are fundamental for underpinning European military capabilities, will be analysed.

The European defence industrial and technological base

Almost all countries in Europe produce arms. For reasons of national security and industrial policy many countries have chosen to support domestic defence industries. Thanks to national requirements, subsidies and protection from common market regulations, national defence industries have been able to survive across Europe. For example, Austria, Belgium and Finland all have long traditions of high-quality arms production and continue to produce arms today. The European ability to develop and produce advanced weaponry is, however, increasingly concentrated in a handful of countries. The most important of these are Britain, France, Germany, Italy, Spain and Sweden. Despite this concentration, the European defence industry and market remains fragmented along national lines, leading to inefficient duplication of programmes. It is therefore increasingly recognized in Europe that a fully adequate defence industry and technological base is no longer sustainable on a strictly national basis. Both within EU institutions and in national defence ministries there is a realization that Europe needs a European DITB that is more than the sum of its national parts.

The 26 EU Member States of the European Defence Agency collectively spent 1.67 per cent of GDP, or €194 billion, on defence in 2009.¹ Of this sum, 21 per cent, or close to €41 billion, went to investment in equipment procurement and research and development (R&D). While this sum may seem large, it is small in comparison to what the United States is spending. In 2009, the United States spent 4.90 per cent of GDP, or the equivalent of €498 billion, on defence. Of this sum, €154.5 billion went to investment on equipment procurement and R&D. The difference between Europe and the USA is even more pronounced if one considers R&D spending separately. In 2009, the EU spent €8.4 billion on R&D while the US spent €57.4 billion. In this central category, the USA outspends the EU by nearly seven to one (EDA, 2010a, 2010b).

To maintain and strengthen the European DITB, more money needs to be spent on procurement and R&D. In the European Security Strategy from 2003, the EU called for more resources for defence (European Council, 2003: 13). The call for more resources was repeated in the follow-up implementation report of the European Security Strategy in 2008. This time the EU specifically underlined that the efforts to increase European key capabilities 'must be supported by a competitive and robust defence industry across Europe, with greater investment in research and development' (European Council, 2008: 10). However, given current national budget difficulties across Europe and existing operational military commitments in Afghanistan and other places, more money for defence procurement and R&D from cash-strapped governments is highly unlikely to appear. The only solution is therefore more European collaboration and integration.

To achieve a stronger European DITB, both sides of the market in Europe need to be more integrated. European governments must align and combine their various needs in shared equipment requirements and the European defence industry must work to consolidate even further to eliminate duplication and achieve economies of scale. It is no longer economically sustainable for any country in Europe to individually set equipment and research requirements, develop them through separate national efforts and procure them through individual national programmes. This approach is also increasingly unacceptable at a time when European forces primarily serve together in multinational operations.

The European defence industry companies

Rapidly increasing costs of research and development in combination with diminished defence spending after the end of the Cold War and stiff competition in overseas export markets have led to a consolidation of the European defence industry. After a series of national mergers, the European defence industry began in the late 1990s and early 2000s an industry-led series of groundbreaking European cross-border mergers and acquisitions restructuring the aerospace and defence sector from the bottom up (Schmitt, 2000; Andersson, 2003).

Today, the European defence industry is increasingly concentrated in a handful of companies. At the highest level, global market leaders such as BAE Systems, EADS, Thales and Finmeccanica are all among the top ten arms producers in the world (SIPRI, 2010). Rapid advances in technological development have also made distinctions between aerospace, land armaments and naval systems less relevant. Defence giant BAE Systems produces the full range of armaments from artillery and fighter jets to nuclear attack submarines. Similarly, EADS produces military aircraft, electronic systems and missiles in several European countries. The exception to this trend of European and international concentration is the armoured vehicle and small arms industry which largely remains fragmented across many programmes and countries (Andersson, 2001).

BAE Systems, formerly known as British Aerospace, became the world's largest arms producer in the Stockholm International Peace Research Institute's (SIPRI) annual ranking in 2008 with arms sales reaching \$32.4 billion and some 107,000 employees. BAE Systems is the result of a long series of domestic mergers and international acquisitions. Legendary names in the defence industry such as Vickers in Britain, United Defense in the USA and Bofors in Sweden have all been acquired by BAE Systems, turning the British defence giant into a global company with equal businesses in Europe and the United States. BAE Systems is currently the fourth largest provider of arms and services to the US Department of Defense and with substantial presence in Australia and South Africa (SIPRI, 2010; BAE Systems, 2010).

The second European defence industry giant is EADS (European Aeronautic Defence and Space Company NV). EADS was formed on 10 July 2000 by the cross-border merger of DaimlerChrysler Aerospace AG (DASA) in Germany, Aérospatiale-Matra in France and Construcciones Aeronáuticas SA (CASA) in Spain. The company's headquarters is in Leiden in the Netherlands and operates under Dutch law. EADS employs some 120,000 people and produces civil and military aircraft, communications systems, and missiles and satellites. Today, EADS is the seventh largest defence industry company in the world with \$17.9 billion in arms sales in 2008. While still a company with a primarily European identity, EADS aims to better balance its European roots and global markets. To gain access to new markets and technology resources, EADS aims to have 20 per cent of employees and 40 per cent of sourcing outside Europe in 2020 (SIPRI, 2010; EADS, 2010).

Finmeccanica of Italy is the third largest European defence company and the eighth largest in the world. With activities in the fields of defence, aerospace, security, automation, transport and energy and with some 77,000 employees, Finmeccanica's arms sales reached \$13 billion in 2008. Beginning in the late 1980s and early 1990s, the Italian defence industry underwent a series of mergers. Companies such as Agusta, Oto Melara, Officine Galileo and Breda passed into the hands of Finmeccanica, which became one of the most important industrial groups in Italy. Today, Finmeccanica has a substantial presence in Italy, the UK, and the USA, with a significant presence in France, Germany and Poland. Previously fully state owned by IRI, Finmeccanica became partly privatized in

1993 but with the Italian government still holding about 30 per cent of the shares (SIPRI, 2010; Finmeccanica, 2010).

Thales of France is Europe's fourth largest and the world's tenth largest defence industry company, with some \$10.76 billion in arms sales in 2008. A result of mergers and acquisitions beginning in the late 1960s in the French defence and electronics industry, Thales is today a world leader in mission-critical information systems for defence and security, aerospace, naval and transportation systems. With operations in 50 countries and 68,000 employees, Thales is a global defence industry actor with home markets in several countries. Thales UK, for example, is Britain's second largest defence contractor, and has been selected by the UK Ministry of Defence for a number of major programmes, including the Royal Navy's future aircraft carriers. Thales was privatized in 1998, but with the French government still holding 27 per cent of the shares (SIPRI, 2010; Thales, 2010).

Behind this group of major arms producers, there are smaller but still important European defence industry companies such as the world-leading British engine maker Rolls Royce, major French naval producer DCNS, Swedish aerospace company SAAB, French fighter producer Dassault and German armoured-vehicle specialists Rheinmetall and Krauss-Maffei Wegmann. Moreover, there are several defence industry companies in Europe owned by US interests. Classic European arms producers such as Steyr-Daimler-Puch Spezialfahrzeug GmbH (STEYR-SSF) in Austria, MOWAG GmbH in Switzerland and Santa Bárbara Sistemas in Spain are all part of General Dynamics European Land Systems (GDELS), a business unit of US defence giant General Dynamics (SIPRI, 2010; General Dynamics, 2010).

In addition to traditional defence industry companies in Europe, there is a burgeoning civil security sector industry focusing on 'homeland security'. These companies typically draw on civil and dual-use technology and employ human capital and sources of innovation in universities, SMEs and companies across Europe not traditionally regarded as part of the 'defence industries'.

Organization on the European level

The European defence industry is organized in national defence industry associations. These organizations are in turn organized in the Aerospace and Defence Industries Association of Europe (ASD). ASD's members are 28 national trade associations in 20 countries across Europe, representing over 2,000 aeronautics, space and defence companies. These companies employ in total around 676,000 employees with a turnover of over €137 billion in 2008. The ASD is the result of a merger in 2004 of AECMA, EDIG and EUROSPACE to reflect the integrated nature of civilian and military technologies and the integration of aerospace and defence. In the defence areas, ASD also took over the role played by the European Defence Industries Group (EDIG) as the industry counterpart to the European national armaments directors (ASD, 2010).

In 1976, EDIG was founded as a body responsive to the National Armaments Directors (NADs) of the Independent European Programme Group (IEPG) nations (see below). The role of EDIG was to bring together and represent the European defence industry's positions vis-à-vis the policy-making bodies at the European level. In 1984, EDIG was formally recognized by the IEPG as 'the designated forum to advise the IEPG on industrial matters' (ASD, 2010). The simultaneous creation by the EU of the European Defence Agency (EDA) in 2004 meant that both the European defence industry and the EU for the first time had a unified contact point for the discussion and exchange of views on defence industrial issues.

European efforts to strengthen the base

The European Security Strategy (ESS) of 2003 made it clear that if the EU was to make a contribution to global security that matches its potential, Europe needed to be more capable. The Implementation Report on the ESS in 2008 underlined the need for key capabilities such as strategic airlift, helicopters, space assets and maritime surveillance and that these efforts had to be supported by ‘a competitive and robust defence industry across Europe, with greater investment in research and development’ (European Council, 2008a: 10).

There is a long history of government initiatives in Europe to promote a stronger European defence industrial and technological base, but with mixed results. In 1976, the European NATO nations established the Independent European Programme Group (IEPG) as a forum for armaments cooperation. IEPG, however, did not achieve much progress. In 1992, IEPG’s functions were transferred to the Western European Union (WEU) and became known as the Western European Armaments Group (WEAG, 2005a).² Despite the transfer to the WEU, an ambitious proposal in 1993 to create a European Armaments Agency ‘conducting the full range of procurement activities on behalf of the WEAG nations’ went nowhere. In its place, but considerably less ambitious, the WEAG nations established in 1996 the Western European Armaments Organisation (WEAO) as a WEU subsidiary body to manage any cooperative armaments activities that WEAG nations would assign to it. In the end, WEAO ended up being only a small research cell managing certain cooperative defence research and technology projects between the Member States (WEAO, 2006).

With little progress in WEAG and increasingly concerned by the state of the European defence industry, the major arms-producing countries in Europe pressed ahead in various smaller ad hoc groupings outside of existing institutional frameworks. In November 1996, the defence ministers of France, Germany, Italy and the UK established the Organisation Conjointe de Coopération en matière d’Armement (OCCAR). Its aim was to provide more effective and efficient arrangements for the management of some existing and future collaborative armament programmes. The four founding governments went on to sign the ‘OCCAR Convention’, a treaty which came into force in January 2001. Belgium joined OCCAR in 2003 and Spain in 2005. Finland, Luxemburg, the Netherlands, Poland, Sweden and Turkey are today participating in OCCAR-managed programmes but without being members of the organization (OCCAR, 2010).

Another ad hoc intergovernmental initiative to promote European armaments collaboration was the signing of a Letter of Intent (LoI) to facilitate cross-border defence-industry restructuring by the six major European arms-producing nations, Britain, France, Germany, Italy, Spain and Sweden, in July 1998. The aim of the LoI group of countries was to remove some of the barriers to European industrial restructuring and improve equipment cooperation in the areas of security of supply, export procedures, security of information, R&T, treatment of technical information and harmonization of military requirements. A final agreement amongst the six was signed in 2000 as the ‘Framework Agreement’ which is a legally binding international treaty outside of the EU (Framework Agreement, 2001).

The EU was for a long time not active in discussions on the defence industry. With the defence-equipment market exempt from internal market rules for national security reasons by Article 296 of the TEC (now Article 346 of the TFEU) there was little for the Commission to do.³ However, increasingly concerned by the deteriorating competitiveness and rapid loss of jobs in the European defence industry in the mid-1990s, the European Commission launched a series of initiatives to bring the defence industry under the internal market. In January 1996, a Commission Communication outlined the challenges facing European

defence-related industries and how the sector could maintain its short-term competitiveness by subjecting it as far as possible to EU law on public procurement, intra-EU trade and the monitoring of competition with particular regard to aid. With little response from the Member States, the Commission issued another Communication in December 1997 calling for urgent restructuring in the EU defence industry and for a single market for defence products to meet increasing competition from US firms (Commission of the European Communities, 1997). These initiatives contributed to the decision by the European Council in Cologne in June 1999 to adopt a common position on the framing of a European armaments policy and strengthening the European defence industrial and technological base.

Initiatives such as OCCAR, the LoI and the communications from the EU increased pressure for more European armaments cooperation in WEAG. In November 1998, WEAG ministers agreed to a 'Masterplan' for a European Armaments Agency and to study and develop the necessary rules and regulations as well as structure and working procedures for such an Agency. By May 2002, WEAG ministers had endorsed the concept of an evolutionary process, envisaging the establishment of a European Armaments Agency as soon as all appropriate conditions were met and political consensus reached (WEAG, 2005b). However, with the increasing transfer of functions from the WEU to the EU and the establishment of the European Defence Agency in 2004, it was recognized that any future European armaments cooperation would take place within the European Union. As a consequence, WEAG ceased its activities on 30 June 2005.

The European Defence Agency (EDA)

The EDA is the central actor for EU discussions on the defence industry. The head of the agency and chairman of the steering board is the High Representative of the Union for Foreign Affairs and Security Policy, Catherine Ashton. The Steering Board acts under the authority and guidelines of the Council and is composed of the defence ministers of the 26 participating Member States and the European Commission. In addition, the Steering Board meets regularly at sub-ministerial levels, such as National Armaments Directors, Capability Directors or R&T Directors. The central role played by the EDA in discussions on the European DITB is underlined by the fact that the Agency's stakeholders are not only the Member States participating in the Agency but also the Council and the Commission as well as third parties such as OCCAR, the LoI group and NATO (EDA, 2010c).

The European Defence Agency's mission is to support the EU Member States and the European Council in their effort to improve European defence capabilities. The central role played by the EDA is pointed out in both the European Security Strategy of 2003 and the Implementation Report on the ESS from 2008. The EDA's functions and tasks are to develop defence capabilities, promote defence research and technology (R&T), promote armaments cooperation and create a competitive European defence equipment market and strengthen the European defence industrial and technological base. These functions aim to improve Europe's defence performance by promoting coherence. The argument is that a more integrated approach to capability development will contribute to future common requirements on which armaments collaboration and R&T can be built. The hope is that more collaboration will not only provide opportunities for industrial restructuring but also promote larger demand and an expanding market (EDA, 2010c).

While EDA is still a rather new agency, there have been some early results. The first major achievement was the approval in November 2005 by the Member States of a voluntary Code of Conduct on defence procurement to cover defence equipment purchases of

more than €1 million where provisions of Article 346 of the TFEU (ex-Article 296 of the TEC) are applicable.⁴ This decision changed the long-established practice of exempting defence procurement from cross-border competition. On 1 July 2006, the Code of Conduct became operational with the participation at that time of 22 of the 24 participating Member States of the EDA. Today, all Member States except Romania participate in the Code of Conduct, as does non-EDA member Norway. The participating Member States now publish their contract opportunities on the so-called Electronic Bulletin Board on EDA's website for suppliers across Europe to bid on. The Code of Conduct is underpinned by a reporting and monitoring system to help ensure that transparency and accountability are maintained among subscribing Member States. Complementing the Code of Conduct regime is a Code of Best Practice in the Supply Chain (CoBPSC) which extends the principle of greater competition through the supply chain to lower-tier companies and small and medium-sized companies who may not be able to bid for contracts directly but could act as subcontractors (EDA, 2008).⁵

On 20 September 2006, the EDA Steering Board also agreed on important new elements to support the development of a truly European Defence Equipment Market, by enhancing Security of Supply and Security of Information across national borders. Member States subscribing to the regime have committed themselves to endeavour to meet requests from fellow Member State for goods and services during an emergency, crisis or armed conflict, including from their own stocks if necessary. Agreed also were rules governing the security of classified and commercially sensitive information relating to defence procurement. Another early result was the approval of a joint R&T investment programme with the aim of developing new technologies helping to provide better protection for European armed forces. Under this programme, 20 European governments pledged a budget of more than €55 million in an effort to follow the European defence ministers' call to 'spend more' and spend 'more together' on defence research and technology. Moreover, in October 2006 the EU defence ministers endorsed EDA's long-term vision (LTV), in which joint European capability and capacity needs are defined in the timeframe 2020–30 to assist in steering European defence R&T and armament collaborations in the long term (EDA, 2006).

In a further effort to strengthen the European defence industrial and technological base, the Ministerial Steering Board of the EDA approved in November 2007 four collective benchmarks for equipment procurement and R&D (including R&T):

- equipment procurement (including R&D/R&T): 20% of total defence spending
- European collaborative equipment procurement: 35% of total equipment spending
- defence research and technology: 2% of total defence spending
- European collaborative defence R&T: 20% of total defence R&T spending.

While sound benchmarks, their practical impact is limited due to the fact that they are collective in that they apply to the total sum spent by all participating EU Member States together, and that they are voluntary since turning them into national targets is optional. Moreover, there are no timelines for realizing these benchmarks.

Collective European spending on defence equipment (including R&D) as a percentage of total defence expenditure in 2009 was 21.1 per cent and, in fact, currently exceeds EDA's benchmark of 20 per cent. However, the greatest part of defence procurement takes place on a national basis, causing inefficient duplication and overhead. Of a total sum of €32.5 billion spent on defence equipment procurement in 2009, nearly 75 per cent, worth some €24.3 billion, was allocated to national programmes.⁶ Only 22 per cent, valued at €7.14 billion,

and far short of the EDA benchmark of 35 per cent was allocated to European collaborative projects. Another 3.3 per cent, worth €1.09 billion, was spent on other collaborative projects.⁷ European spending on defence R&T was even more nationally focused.⁸ Nearly 86 per cent of the European R&T spending in 2009 went to national programmes. Only 12.8 per cent, also far from the EDA benchmark of 20 per cent, was allocated to European collaborative R&T programmes (EDA, 2010b).

The future base

Given the low levels of European investment in defence over the past decades in combination with growing costs and complexity of new systems and competition in overseas export markets, Europe needs to fundamentally reconsider how it manages its defence industrial and technological base in the future. Europe's defence sector remains fragmented at national level with some 25 different customers and regulatory frameworks. This fragmentation is a major obstacle to both intra-European defence industry collaboration and competition. It creates extra costs and inefficiencies, negatively affecting industrial competitiveness as well as the ability of Member States to equip their armed forces. With little prospect for more money for defence, consolidation and integration will be required on both sides of the market.

National governments must begin to align and combine their various needs in shared equipment requirements. These shared equipment requirements must be met by an increasingly integrated European defence industrial and technological base. This base must be able to meet the real operational requirements of future European armed forces while ensuring necessary levels of European and national operational sovereignty. At the same time, industry must be at the forefront of technology and be competitive in both European and overseas export markets. To succeed, such an industrial and technological base needs to integrate, specialize and eliminate duplication at all levels. To succeed, the 'traditional' defence industry must also be more integrated with the broader, European non-defence industrial and technological base. A major challenge for industry is to balance cooperation with, and imports from, overseas defence industries while at the same time ensuring access to foreign markets. The continuing challenge for European companies to gain access to the US defence market and managing a balanced technology exchange across the Atlantic is a reminder that it may be necessary for European countries and companies to cooperate more closely to limit dependence on non-European sources for key defence technologies and to ensure the future of the European base. Another difficult challenge for industry is how to identify centres of excellence while taking into account political requirements for a politically acceptable regional distribution of production and R&D.

The defence industry is a political industry since it depends on governments in their role as regulators, customers and investors. While more certainly can and must be done on the industrial side to further consolidate and integrate the sector, there is a key role for European governments in moving forward towards a truly European defence industrial and technological base. First, European governments need to clarify and communicate their priorities and capability needs to industry in a timely fashion. This includes identifying and agreeing on key technologies and industrial capacities that need to be developed or preserved in Europe. Second, European governments must also consolidate demand by aligning and combining future materiel requirements of their armed forces. This will require a willingness to always consider European collaboration as an option in all procurement and equipment decisions. Third, a truly European defence industrial and technological base will never emerge if EU

Member States cannot be guaranteed that increased mutual dependence for supply of defence goods and services is met by increased mutual assurance of that supply.

Most important for a strong future European DITB, however, is to increase competition in European defence procurement. Traditionally, EU Member States have heavily relied on the ‘national security’ exception in Article 296 of the TEC to procure the majority of their defence needs on a national basis. The decision in November 2005 to introduce a code of conduct on defence procurement that commits the EU Member States to open national defence markets, on a voluntary and reciprocal basis, to suppliers based in other Member States was an important step towards a proper European defence equipment market (EDA, 2005). However, transparency and mutual confidence must be improved if the industry is to be convinced that a level playing field really exists. Much work clearly remains in this area, but several initiatives by the Commission to clarify the conditions for the application of Article 296 (now Article 346 of the TFEU) and the EU’s existing legal framework have been important to promote the process (Commission of the European Communities, 2003, 2004, 2005). These contributions also demonstrate the active and increasing role of the Commission in the area of defence industrial policy.

Nevertheless, as late as an EU defence ministers’ meeting in December 2010, it was reaffirmed that achieving a European defence equipment market and level playing field is ‘a strategic and long-term exercise’ that must overcome strong vested interests in many countries. Sensitive issues such as Member States requiring their defence imports to be ‘offset’ by purchases or investments and/or hidden government subsidies to domestic companies all work against fair competition and a level playing field.

While increased competition is crucial, collaboration may at times be more appropriate. The history of armaments collaboration in Europe is mixed. Some European projects have been very successful while others have been clear failures with too much focus on national defence industrial concerns. National governments should therefore refrain from invoking any principle of *juste retour* (or ‘fair shares’) and let industry find the most efficient collaborative solution. Governments, however, can do more to initiate collaborative efforts by issuing shared requirements early in the process where possible applications of new technologies are explored. R&T collaborations are also easier to achieve than major equipment collaborations and the sums of money involved smaller and therefore may more easily and quickly be made available.

Conclusion

Europe has today a highly capable and, in many cases, world-leading defence industrial and technological base (DITB). The future status of this base is, however, less certain. The USA is outspending Europe nearly seven to one in defence R&D and devotes a far greater share of its much larger defence expenditures to investment in equipment procurement. If the trend continues, Europe will be unable to sustain a DITB which matches the best in the world and the European defence industry may very well be reduced to niche specialists and subcontractors to the US defence industry. While higher investments are necessary to ensure a world-leading DITB, there is little prospect for more money for defence given the state of the European economy. Europe therefore needs to spend its limited defence money more wisely by investing in joint future capability needs rather than maintaining national Cold War programmes and production lines. Europe also needs to eliminate wasteful duplication and reach an economically viable scale of production by integrating its fragmented defence market.

To achieve ‘smarter’ spending, European governments and industry must work together to further consolidate both the demand and supply side of the defence market. The European

defence industry has shown itself ready to do so and is in many cases ahead of national governments in their thinking on the need for reform as well as on how to draw on civil and dual-use technology in their production. National governments and EU institutions must in turn show the political will and courage to make decisions at a European level about joint requirements and determine what technologies and capabilities should be preserved and developed in Europe, and what can be safely procured on the global market. With 'smarter' spending and a political willingness from national governments to follow through on the code of conduct agreement on defence procurement and a level playing field, there is a good possibility the European defence industrial and technological base will continue to serve as the base for a more capable Europe, not only now, but also in the future.

Notes

- 1 Denmark is not a member of the European Defence Agency.
- 2 In November 2000, WEAG defence ministers agreed to the accession of six new nations: Austria, the Czech Republic, Finland, Hungary, Poland and Sweden to full membership in WEAG.
- 3 Article 296 paragraph 1 of the TEC stated that 'any Member State may take such measures as it considers necessary for the protection of the essential interests of its security which are connected with the production of or trade in arms, munitions and war material'.
- 4 Article 296 of the TEC is relabelled Article 346 in the Treaty on the Functioning of the European Union (Lisbon Treaty).
- 5 The Electronic Bulletin Board Industry Contracts (IC) was launched on 29 March 2007 in the same interface for the Defence Contract Opportunities on EDA's website to enable Prime Contractors and other commercial actors to advertise subcontract opportunities.
- 6 Defence equipment procurement expenditure includes expenditure for all major equipment categories.
- 7 European Collaboration is defined as a subset of Collaboration: agreement by at least two EU Member States' ministries of defence for project or programme contracts. Possible non-EU partners' share in such contracts is lower than 50 per cent. Other Collaborations are all collaboration that does not fall under the European Collaboration definition.
- 8 Research and Technology (R&T) is a subset of R&D: expenditure for basic research, applied research and technology demonstration for defence purposes.