

**THE INFLUENCE OF LEGISLATION AND GOVERNMENT POLICY
ON PATTERNS OF
INTERNATIONAL DEFENCE TRADE AND FUTURE MARKETS:
THE CASE OF OFFSET AND DIRECTIVE 2009/81/EC**

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ABSTRACT

This thesis examines comprehensively a complex, but highly strategic issue that could significantly affect Europe's defence posture. The European Union (EU) has indicated, through Directive 2009/81/EC (Directive 81), its intention to eliminate the practice of offset in all member states (MS). Offset is entrenched in the global world of trade, as offset processes reroute procurement funds paid to foreign contractors back into the spending country. This practice makes it possible for governments to require the winning bidder to locate facilities in the purchasing nation, sub-contract with enterprises in the host country, or train citizens of the purchasing country how to use and maintain the equipment being obtained. Many EU MS have appeared reluctant to give up the right to require offset in their contracts, often claiming the national security exemption provided in Article 346 of the Treaty on the Functioning of the European Union (TFEU).

Offset is controversial for various reasons. It is an obvious violation of free-market principles; it requires DCs to sweeten their tenders with forms of assistance attractive to the purchasing country while still trying to maintain profitability; it leads to DCs in one country sharing technology and know-how with other governments that might perhaps come into conflict with the DC's home country at some point. In addition, in the EU context offset tends to cause each MS to build up its own independent defence capacity, which is often technologically incompatible with that of other MS. This process is seen as undermining efforts to maintain and strengthen a unified EU defence posture and Europe's defence and technology industrial base (EDTIB).

Out of concern for sustaining an EU-wide defence capability and encouraging greater consolidation and coordination of defence capacity among its MS, the EU adopted Directive 81 in 2009, with the intention of eliminating offset in EU MS. Among other goals, the banning of offset is envisioned to encourage more cross-border purchases among MS, thereby permitting the development of world-class centres of excellence (CoEs) in various defence-related specialties within the EU. Ironically, Directive 81 never uses the word "offset" and the European Commission (EC) relies on its various guidance notes to Directive 81 to motivate the elimination of offset practices in the EU.

Article 346 TFEU has not been amended in any way, however, and makes it possible for EU MS to exclude EU law when making defence and security procurements that are essential to their national security interests. Many MS have continued to apply this exemption, making the new defence procurement regulations in Directive 81 irrelevant. Some MS transposed Directive 81 into national law or regulation only under EU pressure. The direct effect of the legislation makes it enforceable before national courts, but as of yet no ruling has been given by the European Court of Justice on a case alleging violation of the Directive.

Directive 81 is the EC's first supranational legal act, which explicitly deals with integrating the trade and the production of military and security goods and services in the EU. The new legislation can be interpreted as part of the EU's transformation from a political economy to a supranational policy that may remove EU MS' authority in defence and security matters. Moreover, declining defence budgets across Europe have placed enhanced economic strains on EU-based defence contractors (DCs), forcing them to aggressively seek contracts in other parts of the world. Offset is still a reality outside the Union and DCs in the EU will be called upon increasingly to fulfil offset in non-EU countries—moving production and jobs outside of the EU.

How the new directive is implemented could have broad implications on the defence and economic fronts, as well as for how the EU will handle conflicts between two competing interests: collective decision making and national sovereignty. The purpose of this study was to identify the impact of legislation and government policy on international trade and future markets, assessing the impact of Directive 81 on defence trade and offset management in the EU. The study also sought to determine what benefits the EU stands to lose if offset is abjured, and how unintended consequences may affect the defence markets in the EU and elsewhere. To carry out this purpose, the study applied three primary approaches. One was a comprehensive analysis of Directive 81 and its current and anticipated impact in light of the global defence industry and the defence market, as well as the actions of the EU, its MS and other stakeholders. This analysis can be found in Chapters 3 and 4.

Secondly, in order to determine to what extent the EU would be economically disadvantaged if offset is discarded, the benefits that EU MS stand to lose are

quantified in Chapter 3. The third approach was a questionnaire administered to offset managers—i.e. the employees at DCs and government agencies responsible for constructing tenders that contain offset and for negotiating offset agreements. Of the approximately 130 persons worldwide who are involved with contract negotiations containing offset in the EU, 71 responded to the survey, providing a strongly representative research sample. The questionnaire asked respondents to indicate their level of agreement or disagreement with 30 statements, nine of which were directly aligned with the study's primary research objectives, while the others provided further detail and support information. Chapters 6 and 7 that include the responses to the study and an analysis of findings.

A strong majority (83%) of managers agreed that EU MS should have the exclusive right to decide whether and when they want to apply Article 346 to exempt a defence and security procurement contract from EU law and require offset. A vast majority (78%) believed that the elimination of offset will not result in the EU defence market becoming more competitive; this result suggests that blaming the non-competitiveness of the EU defence industry on offset is a false simplification. Three-quarters of the respondents believed that, until the interpretation of Directive 81 becomes clear, EU MS in need of offset may decide to act outside the scope of Directive 81, completely separating agreements for industrial benefits from the defence procurement contracts. The great majority of respondents (72%) felt that indirect offset (i.e., offset involving items not directly related to the original contract) supports a country's ability to manage defence and security equipment effectively.

These responses from people intimately involved with offset issues, along with their replies to other items on the questionnaire, provide considerable evidence that Directive 81 cannot improve the economic condition of the EU defence market, that it has not changed MS' procurement policies up to this point (partly due to the lingering unclarity surrounding its application), and that MS can be expected to resist any efforts to undermine their right to manage their own defence and security procurement activities. Overall, the survey responses leave a strong impression that, despite the promulgation of Directive 81, not much has changed, and that MS are more likely to take offset underground than to abandon the practice.

Directive 81 does not result in structures that can compete successfully within a European context or on the global stage and does not consider the possible future forms and tasks of the defence market. Procurement in the defence market remains distinct from procurement in commercial markets and is strongly influenced by broader political and industrial considerations that may affect free trade. It is astounding that EU law can expect MS governments to discriminate against their own defence sector, which represents the core of their national security. The level of resistance by MS may determine the final outcome of Directive 81; in the meantime some MS are increasing protectionist measures to bolster their defence and security industries.

Some of the study's conclusions are that:

- The current economic climate in the EU limits growth and will result in fiercer competition, with MS competing feverishly to retain leading positions and therefore resisting EU cooperation.
- While the EC is motivated to eliminate offset, its latest activities aim for some form of EU content that may result in a type of "EU offset".
- The EC is responsible only for ensuring that measures taken by MS to protect their respective industries do not adversely affect the conditions of competition in the common market regarding non-military and non-security products; it has no role in determining how MS go about protecting their national security interests—nevertheless, its guidance notes on Directive 81 are prescriptive.
- In apparent contradiction to the intent of Directive 81, EU law does not oppose offset.
- The competitiveness of DCs in the EU will be judged according to global measures and it is not clear how Directive 81 assists in ensuring that DCs in the EU can stay competitive on the global market.
- In moving defence and security procurements into the commercial domain, indirect offsets should be retained and not eliminated, because dual-use technology and cyber defence requirements—which do not relate to traditional defence domains—make it logical to relate non-defence offset to the subject matter of the procurement and its related technology.

An analysis of future markets, as well as recommendations are found in Chapter 8.

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Thank you to my parents for an inquisitive and probing mind and to defence experts globally who took the time to take part in this study.

DECLARATION

I, Denise (Lee) Furter, do hereby declare that this dissertation is the result of my own investigation and research.

July 2014

Signature

15 July 2014

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LIST OF ABBREVIATIONS

A&D: Aerospace and defence

APCs: aircraft personnel carriers

BIS: Bureau of Industry and Security

BRIC: Brazil, Russia, India and China

BRICK: Brazil, Russia, India, China and South Korea

C4ISR : command, control, communications, computers, intelligence, surveillance and reconnaissance

CAAT: Campaign Against Arms Trade

CAGR: compounded annual growth rate

CBRN: chemical, biological, radiological and nuclear)

CEE: Central and Eastern European

CFSP: Common Foreign and Security Policy

CIRE: The EU Parliamentary Committee on Industry, Research and Energy

COTS: commercial-off-the-shelf

CSDP: Common Security and Defence Policy

civ-mil: civilian and military

Code: EDA's Code of Conduct

CoEs: centres of excellence

CSDP: Common Security and Defence Policy

DALO: Danish Defence Acquisition and Logistics Organisation

DC: defence contractor

DIB: defence industrial base

DISAM: Defence Institute of Security Assistance Management

DoD: Department of Defense

DoS: Department of State

DSCA: Defence Security Cooperation Agency

DSIEP: Defence and Security Industrial Engagement Policy

DTI: Department of Trade and Industry

DTIB: defence technological and industrial base

DTTL: Deloitte Touche Tohmatsu Limited

EBB: Electronic Bulletin Board

EC: European Commission

ECJ: European Court of Justice

ECCO: European Club for Countertrade and Offset
EDA: European Defence Agency
EDEM: European Defence Equipment Market
EDTIB: European Defence Technological and Industrial Base
EEA: European Economic Area
EEPA: Europe External Policy Advisors
EMCC: European Monitoring Centre on Change
EPG: the European Participating Group that includes Belgium, the Netherlands and Norway
ESS: European Security Strategy
ETSI: European Telecommunications Standards Institute
EU: European Union
FAS: Federation of American Scientists
FDI: foreign direct investment
FMS: Foreign military sales
GDP: Gross Domestic Product
GOCA: Global Offset and Countertrade Association
GPA: Government Procurement Agreement
G2G: government-to-government
HG: Headline Goal
IaWG: Interagency Working Group
IC: industrial cooperation
ICT: Intra-Community Transfer
ILS: integrated logistics support
IP : industrial participation
ISR : intelligence, surveillance and reconnaissance
IT: information technologies
ITAR: International Traffic in Arms Regulations
JV: joint venture
KMW: Krauss-Maffei-Wegmann
MANCOSA: Management College of Southern Africa
MEPs: Members of the European Parliament
MER: market exchange rates
MOTS: military-off-the-shelf

MRO: maintenance, repair and overhaul
MoD: Ministry of Defence
MoU: Memorandum of Understanding
MS: member state *or* member states
NATO: North Atlantic Treaty Organisation
NGOs: non-governmental organisations
OEM: original equipment manufacturer
OJEU: Official Journal of the European Union
PPP: public private partnership
R&D: research and development
RfP: Request for proposal
RfQ: Request for quotation
SIPRI: Stockholm International Peace Research Institute
SDI: Strategic Defence Intelligence
SDLC: System Development Life Cycle
SMEs: small and medium-sized enterprises
SoS: security of supply
SoW: statement of work
TED: Tenders Electronic Daily
TEU: Treaty of the European Union
TFEU: Treaty on the Functioning of the European Union
TIVs: Trend Indicator Values
ToL: Treaty of Lisbon
UAE: United Arab Emirates
UK: United Kingdom
UN: United Nations
US: United States
USP: unique selling proposition
USSR: Union of Soviet Socialist Republics
WTO: World Trade Organisation
WWII: World War II

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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

National security is a consequence of foreign and defence policy, economic potential and strategic intelligence (Hittle, 1999:1). Traditionally, the control of arms production and the arms trade is closely linked to the right and power of self-governance (Bailes and Depauw, 2011:4), with security and defence policy constituting the first and last bastion of “national sovereignty” (Howorth, 2011:3). National governments procure defence equipment, ensuring that they have access to equipment that meets their own defence requirements on time and in quantities and qualities that they can afford (Flournoy and Smith, 2005:74). Defence contractors (DCs) supply Ministries of Defence (MoDs) with “monopolies of force” (Bailes and Depauw, 2011:28), providing unique and solely-owned defence equipment that contributes to national sovereignty.

The behaviour of the defence industry does not reflect commercial and economic realities. Government policy, along with other key economic and organisational factors, serves as a clear driver for the defence sector in terms of its composition, structure and subsequent development (Ecorys, 2010:273). Political effects of foreign defence sales have to be grasped and managed in an industry that demands (Korkmaz, 2009:14):

- extensive technology;
- logistical support;
- large levels of investment; and
- secrecy and security.

The extent of state involvement in arms production distinguishes the defence industry from most sectors of the capitalist economy (De Vries, 2011:1). Unlike most manufacturing industries that have become multinational, the global arms industry has remained largely national (European Monitoring Centre on Change [EMCC], 2006:5).

National preference

The military or political argument for reliance on domestic producers of arms is that “a nation dependent on foreign sources of supply is in a vulnerable position during a war”

(Iowa State University, 2012:16). Dependence upon a foreign product or technology creates a weak link in the defence chain.

Security of supply

In abstract terms, security of supply (SoS) explains why countries seek to develop their own arms industries. The rationale behind this security includes the following considerations (Jackson, 2011:1):

- protecting the country from dependence on imports and against risks such as an arms embargo;
- minimising the political consequences attached to weapon purchases from external sources;
- ensuring well-fortified armed forces able to achieve military security;
- the belief that an indigenous arms industry can tip the balance of power in a state's favour and engender prestige and nationalist pride; and
- the fact that the maintenance of arms industries increasingly depends on developing domestically sourced, highly sophisticated arms technology.

Barriers

However, there are barriers to building and sustaining an indigenous arms industry (Jackson, 2011:1). Financial constraints, limited natural resources and absence of particular skills make it impossible for some developing nations to produce the entire spectrum and complement of desired weapons (Tanlixiang, 2011:1). The current level of technological sophistication and its concomitant high costs further prohibit many countries from developing adequate weapon systems, and they seek foreign help in the form of licensed production, joint ventures and/or partnerships (Jackson, 2011:1). The spirit of offset is to enhance domestic preferences in cases where defence contracts are awarded to foreign contractors (Weiner, 2012:17).

Political and economic instruments

Offset requires a country purchasing goods from a foreign company to be given additional goods or economic opportunities, thus *offsetting* the large expenditure of tax money (Furter and Bozas, 2011:1). The compensatory forms of offset include co-production, licensed production, sub-contracting, overseas investment and technology transfer (Trade Port, 2010:2); in addition, the seller may be expected to stimulate

business opportunities, developing non-defence industries in the purchasing country (European Defence Agency [EDA], 2010:5).

To illustrate, suppose that a company in Country A wants to sell equipment related to national security to Country B. Country B, the buying country, can require as a condition of the sale that a portion of the equipment be made in Country B, with materials and/or labour purchased from Country B (Furter and Bozas, 2011:1). Insofar as the activities relate to the equipment being purchased, they can be referred to as direct offset. Offset policy and industrial participation have been used for decades as both political and economic instruments to regulate market access and to compensate for the prospective loss of work within a country's own national defence industrial sector when defence materiel is purchased internationally (EDA, 2010:8).

Indirect offset is not directly related to the defence product but may nevertheless be required. For example, AugustaWestland, a British-Italian multinational helicopter design and manufacturing company, constructed innovative inflatable cages for tuna line fishermen in South Africa so that they could store their catch live while building up stock to meet the considerable international demand for higher-value frozen tuna (Department of Trade and Industry [DTI], South Africa, 2006:20).

Thales, a French multinational company that provides integrated solutions and equipment for government and private-sector customers in the aeronautics, space, transport, defence and security markets, transferred secret technology to the South African company Sumitomo, adding value to South African zirconium by using new technology and chemical processes derived from proprietary knowledge (DTI, 2006:20).

Controversial

Defence offset remains one of the most important, yet one of the most controversial topics within the field of defence economics (EDA's Industry and Market Offset Team, 2010:11). Offset constitutes a contractual obligation that strengthens national security, supports the domestic arms industry, ensures new technologies and jobs, boosts economies, increases investment opportunities, opens new markets and creates export partnerships (Petty, 1999:69). Governments that apply offset strategies ensure that an

ever-higher percentage of its defence equipment budget is spent in the country itself (O'Doherty, 2011:1).

Local content requirements

Local capabilities provide a nation with strategic autonomy and thereby add exponentially to national security (Bhonsle, 2011:1). Once indigenous capability and capacity have been established, local content is prioritised to ensure that the industries stay viable. The requirements for local content are deemed trade barriers that override free trade practices in an effort to protect domestic markets (Carbaugh, 2008:2). With defence exporters expected to transfer work and technology to potential foreign competitors, offset can have a particularly distorting effect on the supply chain's operation. Offset discriminates on the basis of nationality, making it impossible for prime contractors to include the most competitive sub-contractors in their supply chain (Europa, 2008b:26). Some argue that offset makes industries less competitive and that it includes only low-technology work that ceases once the supplier has fulfilled its offset obligation (Martin, 1996). The national security argument for protecting domestic companies is that the protected industry provides invaluable goods during periods of war (Carbaugh, 2008:23).

European defence capabilities

Europe's defence capabilities have been the focus of much deliberation. For years, North Atlantic Treaty Organisation (NATO) chiefs and senior United States (US) officials have pleaded with the nations of the European Union (EU) to stop their collective decline as a military power (*Financial Times*, 2014:1). In 2011, a former US defence secretary warned Europeans of the risk of slashing their military capabilities in response to the economic crisis.

Europe was warned that there would be a dwindling appetite in the US "to expend increasingly precious funds on behalf of nations that are apparently unwilling to be serious and capable partners in their own defence" (*Financial Times*, 2014:4). The Libya operations of 2011 clearly demonstrated that European countries' military forces remain dependent on American capabilities and munitions (Laar, 2012:1). Europe is expected to demonstrate to America that the US contribution to NATO is not taken for granted (*Financial Times*, 2014:3).

Global military powers

The potential conventional war-making capabilities of countries across land, sea, and air have been assessed in an effort to determine the contemporary world's strongest military powers—excluding nuclear capability (Global Firepower, 2012d).

Table 1.1 Ranking global military powers, 2012

(EU MS and Norway highlighted in blue)

1. USA	15. Indonesia	29. North Korea	43. Yemen	57. UAE
2. Russia	16. Iran	30. Spain	44. Denmark	58. Iraq
3. China	17. Japan	31. Philippines	45. Finland	59. Libya
4. India	18. Taiwan	32. Switzerland	46. Kenya	60. Georgia
5. UK	19. Canada	33. Malaysia	47. Singapore	61. Mongolia
6. France	20. Thailand	34. South Africa	48. Afghanistan	62. Paraguay
7. Germany	21. Mexico	35. Argentina	49. Greece	63. Kuwait
8. South Korea	22. Ukraine	36. Nigeria	50. Romania	64. Nepal
9. Italy	23. Australia	37. Austria	51. Serbia	65. Qatar
10. Brazil	24. Poland	38. Algeria	52. Chile	66. Lebanon
11. Turkey	25. Vietnam	39. Syria	53. Belgium	67. Uruguay
12. Pakistan	26. Sweden	40. Venezuela	54. Croatia	68. Panama
13. Israel	27. Saudi Arabia	41. Colombia	55. Portugal	
14. Egypt	28. Ethiopia	42. Norway	56. Jordan	

Source: Global Firepower (2012d).

A total of 13 EU member states (MS) (including Norway as a European Economic Area [EEA] country) are included in the list of 68 countries. The top ten rankings of relative military strength are based on a complex formula using 45 factors, including personnel, land army, air power, resources, naval power, logistics, finances and geography, with totals compiled for each country. The US is in the lead, followed by Russia, China and India (Global Firepower, 2012d). Only four EU MS are included among the top 25.

Consolidation initiative

After the Cold War, as defence budgets on both sides of the Atlantic declined throughout the 1990s, governments confronted the challenge of maintaining adequate industrial and technological capabilities in research, development and production of weaponry and other equipment to meet whatever threats might arise in the coming years (Thornton, 2007:2). The Americans and the Europeans opted for two divergent approaches.

The US used its powers of procurement “to orchestrate a rapid and thorough consolidation” (Thornton, 2007:2) of DCs. By the end of the 1990s, the consolidation

policy had yielded an American defence industrial base (DIB) that was dramatically more concentrated in terms of the number of prime contractors. Mergers in the US left Boeing, Lockheed Martin, Raytheon and Northrop Grumman as the four major defence contractors, resulting in a virtual monopoly of the industry. As full monopolies are prohibited by US law, at this point the US government had to halt further consolidation (EMCC, 2006:5).

In Europe, by contrast, a consolidation initiative was driven not by government as in the US, but by defence industry leaders, who “saw themselves dwarfed in scale and resources by their transatlantic counterparts” (Thornton, 2007:2). This manifestation to resist American dominance prompted a wave of defence industry consolidation both within individual European countries and across borders, yielding much larger and more competent business units than previously existed in these countries (Thornton, 2007:2).

Europe’s political and institutional challenges

The process was more complicated in Europe because restructuring necessarily involved cross-border mergers, which raised political issues, particularly because many defence companies had a percentage of state ownership (EMCC, 2006:6). The industrial restructuring in Europe has not been matched by effective collaboration in the political and institutional realms, especially with respect to procurement policy for weapons and defence budgeting, thereby restraining European firms from realising their full potential (Thornton, 2007:2).

Moreover, during the 1990s Europe was torn between internationalisation and protectionism, with governments finding it difficult to achieve consistency in their own policies, let alone reach agreements among themselves (Walker and Gummett, 1993:3). This conflict in policy extended into the fragmented defence industry, displaying divergent national policies that created red tape, hampered innovation and competitiveness and, ultimately, weakened the European Security and Defence Policy (ESDP) (European Commission [EC], 2007:1).

Figure 1.1 The aim of the CSDP, formerly called the ESDP, and part of the Common Foreign and Security Policy until 2009



Less dependence

The CSDP (Common Security and Defence Policy) aims to create a European Defence Technological and Industrial Base (EDTIB) capable of providing most of the equipment needed by the European armed forces with less dependence on non-European sources for key defence technologies. The goals for the EDTIB, which are referred to as the three C's, indicate that it should be capability-driven, competent and competitive and thus able to sustain the necessary levels of European and national operational sovereignty through the rapid exploitation of the best technologies both within and outside Europe (Secades, 2011:33).

A coherent policy

Achieving a strong defence depends on Europe's ability to implement a coherent European armaments policy. However, this concept still seems highly unlikely given the state of bilateral relations between EU countries, which are characterised by national competition (Defensys, 2010:6). MS are battling to retain sovereignty and thus their political power and capacity. Fiscal and foreign policy remain in the hands of the MS, and this is seen as the reason why the birth of the monetary union was not accompanied by the creation of a European economic union. MS are reluctant to invest their own resources in programmes whose positive effects would strengthen, economically, commercially and industrially, their European partners (Euraction, 2010:2).

Financial crisis

The economy has been a further constraining factor in the defence market. The global financial and economic crisis that began in 2008 started to have a significant impact on world military spending in 2010, with increases in military spending remaining in line with or slower than economic growth rates (Perlo-Freeman, Solmirano et al., 2011:180-1). Between 2008 and 2012, 20 of the 37 countries in Western and Central Europe reduced military spending by more than ten percent in real terms (Perlo-Freeman et al., 2013a:3). The drawdown from Afghanistan and ongoing efforts to reduce budget deficits in the US and Europe will result in a decrease in total global military spending, cutbacks in Europe and the US, and anticipated increases in other parts of the world (Perlo-Freeman et al., 2013a:2).

Powerless

Lack of collaboration on defence and foreign policies within the EU and divergent political goals resulted in Europe's failure to collaborate effectively with the US on defence issues. Combined with the economic crisis in the Euro-zone and the US' "pivot to Asia," which is strategically rebalancing US interests from Europe and the Middle East toward East Asia (Schiavenza, 2013:1), Europe finds itself largely powerless to shape the international politics of the 21st century, and NATO is at risk of fracturing (Kearns, 2012:1).

Exports

Access to foreign markets can be improved only if the European defence industry can match its US competitors in terms of innovation and quality (Europa, 2008a:3). The European defence industry has to be competitive in the global marketplace and the European Commission (EC) argues that that in order to be competitive the industry needs a European market (Europa, 2007b:7). Some argue that there is no chance of Europe's many political systems sustaining European defence collaboration in this political climate (Kearns, 2012:2). Most EU MS appear reluctant to reform and resource their armed forces (Wither, 2005:1) and Europe will remain hopelessly ill-equipped to take more responsibility for its own security (Kearns, 2012:2). To say that the "state of defence in Europe" is in a state of emergency is only a slight exaggeration (Biscop and Coelmon, 2013:4).

In September 2004, the EC issued a Green Paper (a document published to stimulate discussion on given topics at the European level) on defence procurement, containing options to improve the transparency and openness of defence markets among EU MS. Openness is the opposite of protectionism and refers to the elimination of trade barriers. The paper opened a discussion on procurement law that rapidly widened into a general debate on how to move towards a European defence equipment market (EDEM) (Schmitt, 2005:10).

Defence technological and industrial base

At a meeting of the EDA Steering Board in May 2007, MoDs declared that “a strong Defence Technological and Industrial Base (DTIB) is a fundamental underpinning of the CSDP”. Defence Ministers adopted the notion, however vague, that a DTIB is not just a set of entities capable of defence technology generation and production, but an “institution” that needs to be regulated and containing elements that need to be protected (Brzoska, 2007:iii).

In December 2007, the EC submitted a communication to the European Parliament, the European Council, the European Economic and Social Committee and the Committee of the Regions containing arguments for the restructuring of the armaments industry as it exists within EU MS, including a strategy for a stronger and more competitive European defence industry (Europa, 2008a:1). The EU reiterated that a strategy at the European level was crucial to ensure the defence industry sector’s survival. The essential elements of the strategy included common EU standards, fair competition, control of strategic defence assets and protection of sensitive information (Europa, 2008a:1-2).

Cooperation impossible

However, an inadequate policy and legal framework was holding back the sector's performance and competitiveness, making cooperation impossible and resisting openness of the market and the easy transfer of defence equipment among MS (Europa, 2008a:1). Obstacles to the defence sector's competitiveness identified by the EC included the co-existence of different national regulations on procurement, slow licensing procedures for the free movement of defence EU components and goods within the EU and a lack of information sharing (Europa, 2008a:1).

The EC stated that it was in the interest of MS “to coordinate their investments and pool demand in order to create synergies” (Europa, 2008a:1). Further aims included the pooling of research efforts to maximise investments, the sharing of resources at all levels to optimally use available facilities and the strengthening of the position of small and medium-sized enterprises (SMEs) in the sector (Europa, 2008a:2).

Together with the EDA, the EC aimed to encourage better overall coordination among MS, ensuring that the weapons systems needed by European armed forces could be produced cost-effectively and with the highest level of performance (Europa, 2008a:1). The EC set out to support the adjustment and modernisation process in the defence sector by means of policies that would achieve the following goals (Europa, 2008a:3):

- ensuring the competitiveness of the European industry through the opening of foreign markets;
- analysing the competitive challenges and the conditions of access to other markets in emerging economies;
- anticipating and addressing all industry-based structural changes that further market integration in the defence sector could pose; and
- improving European defence industry market governance through the promotion and enhancement of armaments cooperation and optimising synergies among all aspects of policy affecting the defence industry's competitiveness (on this point see Europa, 2007b:7).

Defence Package

In order to create a genuine European market in the defence sector without sacrificing MS' control over their essential defence and security interests, the EC in 2007 proposed a “Defence Package” that included recommendations for fostering the competitiveness of the sector and new legislation in the form of two directives: one on defence procurement and one on intra-EU defence trade (EC, 2008:1). Both directives had to be transposed in 2011. The EC's goals through these two directives are to enhance the openness and competitiveness of defence procurement and to facilitate and simplify intra-EU transfers of defence products (Europa, 2008a:1).

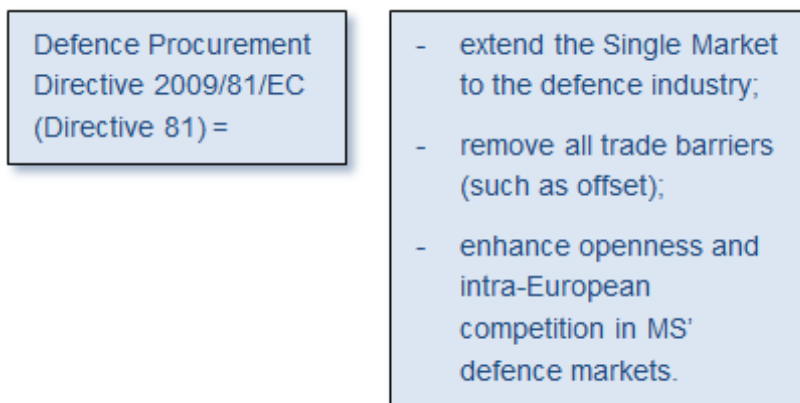
Figure 1.2 Directives 81 and 43



Directive on defence procurement

The new Defence Procurement Directive launched by the EC challenges the way in which MS purchase sensitive military and security equipment (Maelcamp, 2011a:1). In an effort to “open up” the EU defence market, the EC is seeking, through Directive 2009/81/EC (Directive 81), to remove all trade barriers, ensuring that the defence market operates as a purely commercial market (*Single Market News*, 2009:22). This Directive challenges defence offsets and MS may be required to prove that any offset obligations imposed on suppliers are essential to the country’s national security interests. Instead of prioritising local content, EU MS are now required to ensure SoS through EU content.

Figure 1.3 Aims of Directive 2009/81/EC



1.2 BACKGROUND OF THE PROBLEM

Although offset is not favoured by the EC, it is allowed in public procurement trading rules in the form of exemptions, in both civilian and military markets. In the civilian market, offset results in non-military contracts being awarded on the basis of nationality

rather than competitiveness (Europa, 2008b:26). In the military market, quality and price are generally not the sole criteria when nations establish their desired defence procurement outcomes (Kane, 2009:49). Governments prioritise defence capabilities and want to prove to their taxpayers that their defence spending is providing benefits to the national economy.

EU countries agreed in 1958 that European rules on competition and the free movement of goods should not apply to military and security when “essential security interests” are at stake. This provision is referred to as the Article 346 TFEU (Treaty on the Functioning of the European Union) exemption, previously Article 296 of the TEU (Treaty on European Union).

Figure 1.4 Article 346 TFEU



Article 346 allows any MS to “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 materiel” (Eur-Lex, 2012a:149). This right exempts defence products from Single Market trade rules (Flournoy and Smith, 2005:74-75).

Justifying offset

The Article 346 TFEU exemption establishes the justification for offset, resulting in governments requiring compensation (offset) when they procure defence equipment from non-national suppliers (Europa, 2008b:22). This practice has “an adverse effect on the importation of foreign goods by conferring privileged status on national products and companies” (Weiner, 2012:17). The local content requirements ensure SoS (Dent, 2010), limiting the entrance of non-domestic competition (Europa, 2008b:25). Until 2011, most national governments made extensive use of the national security exemption in Article 346 TFEU, resisting non-domestic participation and competition.

The EU views offset as legally highly problematic because it is discriminatory, impeding openness and fair competition in European defence markets (Europa, 2008b:23). The EC views such industrial compensation schemes as violating the principles of the EU Treaty (Export.gov, 2011:1), hobbling the efficiency of the European defence market (Flournoy and Smith, 2005:74-75).

States were dominant entities

However, military power has always been seen as an important symbol of national sovereignty and statehood (Csernaton, 2014:1). Security and defence politics have been largely kept outside the orbit of governance approaches under the pretence that States remain the dominant or only relevant entities in these particular areas (Norheim-Martinsen, 2008:4). Until the enactment of Directive 81 in August 2011, the EDA Code of Conduct on Offset established the only European framework concerning offset (Weiner, 2012:16-17). Most defence-related and other sensitive security equipment was procured in EU on the basis of national rules. The EU stated that this “regulatory patchwork” posed a major obstacle on the way toward an EDEM, opening the door to non-compliance with the treaty’s principles (Europa, 2008b:28).

No impact on security interests

In 2008, in a Commission Staff Working Paper regarding a proposal for a directive on the coordination of procedures for the awarding of public contracts, the EC stated that offset is a separate category from security issues, because it does not concern security interests but economic and financial interests; “whatever the new [EU] rules do with offset, its direct impact on MS’ security interests would be close to zero” (Europa, 2008b:48).

The working paper stated that offset could be dealt with in the following ways: allowing it, prohibiting it, or not mentioning it (Europa, 2008b:48). The EC then recommended that individual MS should be permitted to assess the compatibility of offset with EC law in the light of the Treaty and the Commission's Interpretative Communication (Europa, 2008b:48). However, that recommendation never transpired and the EC chose instead to prohibit offset through amending defence procurement processes.

Part of the Single Market

Directive 81 brings defence purchases “under the rules of the Single Market”, introducing new procedural rules and safeguards that claim to specifically aim to protecting EU MS’ security interests. The Directive also seeks to limit the scope of exemptions that allow trade barriers (Green, 2009:1) and aspires in particular to eliminate indirect and non-military offset in the EU (Maelcamp, 2011a:1). EU MS had two years (until 21 August 2011) to transpose the new Directive into national law. Chapter 2 of this study contains an in-depth discussion on the influence of Directive 81 on offset processes in the EU, while Chapter 4 gives a detailed description of the transposition and implementation of the new legislation.

Offset can be used as a mechanism to increase cooperative relationships among industries, between government and industry, and among States (Dumon, 2012:2). However, it appears that the EU has chosen to ignore these potential benefits and instead pursue a different route toward reaching its cooperation goals. By stating that offset will be accepted only when it can be proven to be in a country’s security interest, while also stating that offset has no direct impact on MS’ security interests, the EC may in fact be trying to ensure that offset is eliminated completely. The current situation calls for resourceful strategies by EU governments that focus on safeguarding the needs of national security interests (Europa, 2010:1).

1.3 STATEMENT OF THE PROBLEM

In the defence sector, over the past years, offset has ensured the sharing of advanced technology and economic benefits that resulted in the establishment and development of private companies (Petty, 1999). EU MS made sovereign decisions about ensuring SoS and protecting their national security interests. Governments that prioritised defence spending were able to ensure a steady flow of industrial and economic benefits by applying national offset policies.

The exporters were expected to fulfil offset, while the importers received offset benefits. The countries with the most developed defence sectors generally acted as the benefactors of offset, while countries developing their defence sectors received the benefits (Shah, 2012b:1). Offset thus ensured that the leading defence companies

developed the defence industry in Europe, as well as in non-European countries (Ilanakiev and Mladenov, 2008:192). Many small and medium-sized defence enterprises were also established in the spirit of compensation (SME Times News Bureau, 2012:1).

However, the a lack of industry consolidation and of harmonisation of government requirements are blamed for the duplication of effort and inefficiencies in spending, with barriers along country borders fostering the continued fragmentation of the European defence market (Hofbauer, Hermann and Raghavan, 2012:52). Directive 81 aims to make the EU defence industry more competitive by bringing an end to the development of separate national defence capabilities in EU MS.

Defence spending

The economic crisis resulted in a decline of total European defence spending. The present procurement programmes in most EU nations' defence sectors are too small to keep their current industrial capacities fully occupied (Bailes and Depauw, 2011:23). EU MS are requested to pool their resources to match the technological innovation of the US (Juergenliemk et al., 2012:13).

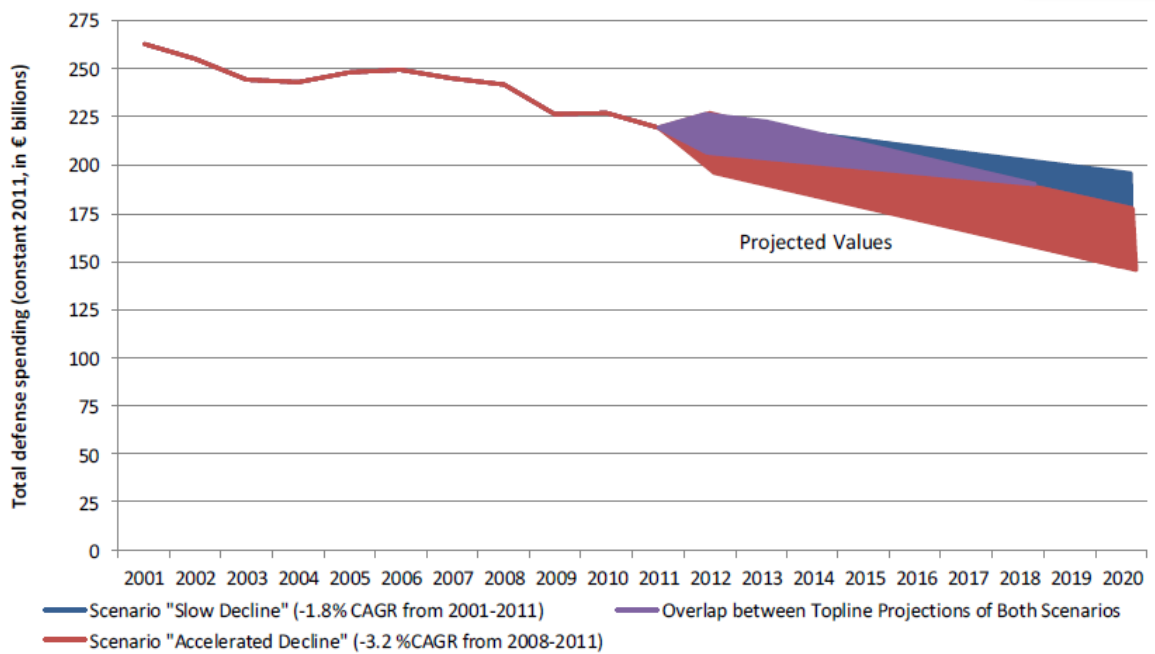
In April 2013, France—Europe's second biggest military spender behind Britain—froze its military spending "for the next several years" (Erlanger, 2013:1). In the same month, a former Prime Minister of the United Kingdom (UK) stated that Europe was becoming a continent of free riders while the US picked up the defence burden. The 26 European member states of NATO increasingly depend on Washington as the ultimate guarantor of their security, with Europe showing "collective military irrelevance" (Blair, 2013:2). The 2010 UK Strategic Defence and Security Review (SDSR) called for eight percent cuts in defence spending until 2014; further cuts after that date are likely (Flanagan, Conley and Scheffler, 2011:viii).

Expectations for 2020

In Europe, it is assumed that sharper cuts will be implemented in light of the continuing economic recession, resulting in a decline of total European defence spending from €263-b as of 2012 to between €147-b and €175-b by 2020 (Berteau et al., 2011:48). This extrapolation of potential spending trajectories for the years 2012-2020 is based on

a continuation of the trends in European defence spending observed during the 2001–2011 timeframe (Berteau et al., 2011:47).

Figure 1.5 Total European defence spending projections, 2012–2020



Source: NATO Defense Expenditures; SIPRI Military Expenditure Database; analysis by CSIS (Center for Strategic and International Studies) Defense-Industrial Initiatives Group, in Berteau et al. (2011:49).

If a moderate annual decline in the compounded annual growth rate (CAGR) in total European defence spending is assumed, the total amount of European defence spending will decline to between €181-b and €195-b (in constant 2011 Euros) by 2020 (Berteau et al., 2011:48). Export success will be decisive for the future of several of the major defence producers in Europe. Some companies will be able to avoid a downturn in sales thanks to state support for export projects (Bailes and Depauw, 2011:23).

Future markets

In contrast to the declining budgets in EU, many developing countries are increasing their defence spending and applying stringent offset requirements that require transfers of technology, expertise, skills and economic benefits to these countries.

China's defence spending is now larger than that of all other Asian nations combined (Cheng, 2012:1). Funded by booming oil and gas profits, Russia will spend US\$650-b over the period 2011-2020 on its equipment upgrade programme (Strategic Defence Intelligence [SDI], 2014:2). Various developing countries' military policies have elements of a desire to attain regional status (Perlo-Freeman, Solmirano et al., 2011:173). A complete assessment of the defence markets and information on future market forecasts can be found in Chapter 3, 3.23 Defence exporters and importers.

Waning influence

The EU will have to face the new reality that its influence in setting global industrial standards, shaping World Trade Organisation (WTO) rules and safeguarding European collective preferences may be eroding and that globalisation is increasingly calibrated according to the will of other countries, including China and India (Csaszi, 2009:41). New threats and a changing security governance system will further require EU MS to deal with a far wider range of issues than military security (Gill, 2011:1).

Relevant topics and challenges have increased because of the following scenarios (Gill, 2011:1):

- the character of world security is more dynamic, complex and transnational, with increased flows of information, people, capital and goods;
- the greater strength and influence of developing countries creates a wider divergence of interests, challenging efforts to achieve consensus on actions within the established security structures;
- shared security problems between states of divergent power pose consensus-building challenges;
- multinational companies or economic entities have greater influence in the security agendas of many States and State-based security institutions; and
- security-related institutions are not changing fast enough to cope with changes, resulting in destabilising events such as violent extremism, cyber attacks, the proliferation of sensitive technologies, unregulated migration, resource scarcity, transnational criminal activity and the illicit transfers of weapons, drugs and money.

Improve competitiveness

Armaments cooperation and optimised synergies are viewed as means to improve the European defence industry's competitiveness (Europa, 2007b:3), while an institutionalised defence and security industry may be a step to politically unify Europe. In 2005, the European Parliament called on the Commission to draft a directive taking particular account of the security interests of MS, further developing the Common Foreign and Security Policy (CFSP), promoting greater European cohesion and preserving the role of the Union as a “civil power” (Europa, 2012e:1).

With Directive 81, the EC set out to establish specific rules adapted to complex and sensitive procurement, creating a balance between security interests and treaty principles, and a single set of rules for defence and sensitive security procurement (Vierlich-Jürcke, 2011a:slide 5). The Treaty of Lisbon (ToL) (2009), which aimed to make the EU more democratic, more efficient and able to address global problems with one voice (Europa, 2012b:1), extended the EC's influence in foreign policy (Civitas, 2011:5). The EC decided to no longer turn a blind eye to defence industry compensation practices and instead became focussed on opening the defence market to competition, creating a harmonised framework for a competitive EDEM and an efficient EDTIB (Vierlich-Jürcke, 2011b:slide 4).

Policy, political will and structures

The EC aims for transparency and good governance, but it is doubtful whether the political will and the structures to impose such processes within the defence sector are in place in the EU (Bailes and Depauw, 2011:28). By design and even necessity, the defence industry has never aimed to be transparent in the usual sense of the word. There is also no common armaments policy in Europe, and the European defence industry does not generally perceive joint multinational projects as a viable alternative and is not actively pursuing such opportunities (Bailes and Depauw, 2011:24).

It is not clear whether the aims of the EDTIB are optimal for the current European defence industry in an era when significant consolidation and globalisation of the industry have already taken place; whether the desired configuration of the EDTIB is at all possible in a globalised world where most European defence companies have some form of foreign ownership; and whether full cooperation is possible in an area that EU

MS clearly still consider a matter of national sovereignty and where they show reluctance to collaborate (Cirlig, 2013:1).

The unwillingness of certain EU countries, such as France and the Netherlands, to ratify the EU Constitutional Treaty demonstrated that the readiness of individual nations to cede parts of critical national decision-making processes to the EU has its limits (Flournoy and Smith, 2005:76). This unwillingness underscored broader public scepticism about the ceding of national authority to the EU (Flournoy and Smith, 2005:98). Defence contracts covered by Directive 81 may become subject to investigation by EU authorities (i.e. the EC) and will come under the jurisdiction of the European Court of Justice (ECJ) (Maelcamp, 2012:1).

When offset is abjured, knowledge of the operation, integration and maintenance of the purchased system may not be shared with the end-user, making the purchaser dependent on the supplier throughout the life cycle of the system and resulting in increases the life-cycle costs for the end-user. EU MS may further be disadvantaged if offset is still a reality outside the Union. While Directive 81 resulted in a re-evaluation of the role of offset in ensuring national security, current scenarios in the EU defence sector demand a critical assessment of the definition of national security interests and its relation to SoS.

Offset management

All these developments have to be interpreted in such a way that offset managers can grasp the rationale and goals of government actions and effectively adapt offset management processes. In meeting the needs of foreign armed forces so as to achieve political objectives, offset managers have to understand discursive dynamics and struggles in the international defence trade, while offering competitive bids that ensure the required form of national security.

Compliance

Offset managers can no longer attain legal compliance simply by adhering to national offset rules within the EU. Directive 81 constitutes a new framework for cross-border defence and security contracts in the EU, yet it is not clear if the EC will overrule MS' decisions on offset requirements, how the concept of security interest will be interpreted

or how extensively Directive 81 will change the industry. The uncertainty surrounding the implementation of Directive 81 has created confusion and, as long as uncertainty and confusion prevail, the offset management process cannot be adapted. Offset managers may well need new mandates or skills to manage the changed scenario, but the exact content of these needed skills cannot be known until the implementation process of Directive 81 is thoroughly described.

The slowdown in defence purchasing in the EU because of dwindling defence budgets, combined with the lack of authoritative information on how Directive 81 will be implemented, leaves offset managers uncertain about how to comply with the new paradigm. Further problems arise from the absence of a legally binding interpretation of national security interests, and from uncertainty as to what measures related to the production or trade of arms and war materiel each MS will deem necessary for the protection of its own essential security interests.

The omission of the word *offset* in the complete directive raised questions about the EC's intentions and about the political framework needed to support the EC's apparent aim of elevating SoS from a national level to an EU level. Depending on the political will of MS, the Directive may bring an end to separate national defence capabilities in the EU and establish one military force for the whole Union.

Many open questions make the outcome of Directive 81 ambivalent, leaving offset managers who manage offset in EU MS uncertain about how to manage their programmes successfully. The unpredictability leaves much room for creativity. This fluid situation poses the potential for clashes between intention and reality that could force offset managers to be prepared to adapt their practices to new developments. The EC will not report back to the EU on the status of the implementation of Directive 81 until 2016. In the meanwhile the EC is monitoring how defence procurement and offset are managed in EU MS.

1.4 PURPOSE OF THE STUDY

Up to this point, offset management in the EU has been rule-based, with the various EU MS each publishing their own detailed offset rules and regulations. Tender documents

served as a secondary source, stipulating specific requirements related to the relevant procurement.

Directive 81 established overarching defence procurement rules for EU MS, requiring all MS to transpose Directive 81 into national law. The Directive further decrees new procurement processes and indicates that a MS may be called upon to prove that offset is in the interest of its national security. Indirect offset is stated to be no longer acceptable. The purpose of this study is to identify the impact of legislation and government policy on international trade and future markets, assessing the impact of Directive 81 on defence trade and offset management in the EU. The study also seeks to determine what benefits the EU stands to lose if offset is abjured, and how unintended consequences may affect the defence markets in the EU and elsewhere.

1.5 OBJECTIVES OF THE STUDY

The research objectives are to investigate offset managers' perceptions of the following statements. The left column lists nine of the 30 statements contained in the questionnaire that was administered to offset managers as part of this study. Other statements are ancillary to these themes, expanding the viewpoints.

	Statement	What the statement sets out to measure
1	The application of Directive 2009/81/EC is clear.	Whether the new EU legislation on defence procurement has been easy to implement and is reaching its intended results.
2	In order to protect its national security interests, every EU MS has the exclusive right to decide whether and when it wants to apply an exemption such as Article 346 TFEU to exempt a defence and security procurement contract from EU law.	Whether EU MS will retain sovereignty in military affairs.
3	The EU defence market will become more competitive when offset is no longer required in the EU.	Whether the removal of all trade barriers in the EU and moving the defence sector into the commercial domain will make the market more competitive.

4	EU MS still purchase most defence equipment from their national suppliers.	Whether there is still a high level of protectionism in the defence and security industry.
5	Directive 81 will increase intra-EU defence trade, ensuring that EU MS purchase more defence equipment from one another.	Whether Directive 81 will increase intra-EU trade in the defence market.
6	Indirect offset is important to purchasing countries, because it develops a country's general infrastructure, skills, know-how and industrial capabilities that eventually ensure national security.	Whether indirect offset can make a contribution to national security.
7	The fact that "national security interests" are not defined makes Directive 81 nearly meaningless, because the gist of the whole Directive is based on such an interpretation.	Whether the intention of the legislation is clear.
8	Until the interpretation of Directive 81 becomes clear, EU MS in need of offset, may decide to act outside of the scope of Directive 81, completely separating agreements for industrial benefits from the defence procurement contracts; the UK's Defence and Security Industrial Engagement Policy (DSIEP) is an example.	Whether MS may find other routes and means to ensure benefits for their defence industries.
9	Directive 81 dramatically changed the daily management of offset in defence companies fulfilling offset in the EU.	Whether the new EU legislation has amended the way in which offset is or will be managed.

1.6 THEORETICAL FRAMEWORK

A thorough review of available literature on the history and rationale of countertrade and offset is presented in Chapter 2, highlighting the fundamentals of the discipline, as well as the stakeholders acting in this arena. Legal frameworks of governments and strategies of DCs found in the literature are described in Chapter 3, so as to indicate the goals and processes of the various participants. The distorting effects of offset as a trade barrier were researched in an effort to balance the protectionist tendencies with the uniqueness of the defence industry.

A collection of presentations made by stakeholders has also been studied, representing both governments and private institutions, in order to obtain information relating to the management of offset and the essence of Directive 81. Both the political and economic

aspects of offset were researched in an effort to portray pre- and post-2011 pictures of offset in the EU and also to give some indication of the role that offset may play in the future.

Models

Various research models were developed that share information on possible new processes and outcomes of Directive 81. The research framework resulted in models that address the following aspects:

- the four elements that have been identified to have the greatest influence on the transformation of the defence industry from a state-owned status (Figure 3.7 Four aspects that influence the defence industry);
- power-sharing in the European defence industry over time (Figure 3.8);
- a summary of the offset process pre-Directive 81 (Figure 4.9);
- offset management changes in the EU after Directive 81 (Table 4.12);
- the changing roles of offset authorities in MS and of offset managers post-Directive 81 (Figure 4.4 Offset moves from the political-economic realm to a sovereign domain governed by the EC);
- comparing offset processes in EU pre- and post-2011 (Figure 4.10);
- how offset as a discipline may change after Directive 81 (Figure 4.11): and
- the basis of exclusions (Figure 8.1 The exclusions regime).

The experience of offset managers in implementing Directive 81 is measured and their opinions on how Directive 81 has changed the offset palette in the EU are discussed. Statistical relationships are assessed, indicating to what extent managers around the world who fulfil offset provisions in the EU agree with the statements put forward in the research questions.

1.7 IMPORTANCE OF THE STUDY

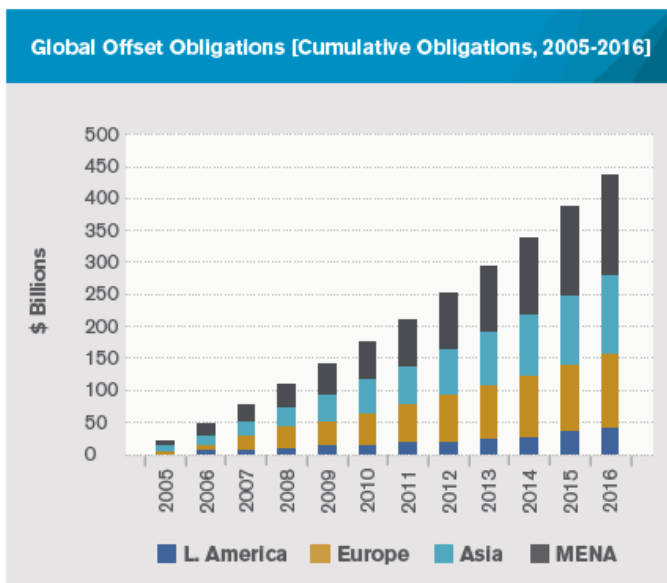
Offset requirements are taxing administrative processes and include specific approval, reporting and claiming procedures (Furter and Bozas, 2011:6). Between 2005 and 2011, total offset obligations generated around the world amounted to about US\$214-b (Barney et al., 2012:2). With the shift in the prominence of the international market in response to stagnant European defence spending, and with sharp defence spending

increases in some developing countries, offset is becoming not only more significant, but also more valuable (Fryer-Biggs, 2012:1).

Record offset obligations

“Driven by pockets of strong spending in the Middle East, Asia and Latin America, and by the proliferation of increasingly complex and demanding offset policies, firms are expected to accumulate an additional [US]\$225-b in Offset obligations on new sales through 2016” (Barney et al., 2012:2). Global offset obligations from 2005-2016 are expected to reach the US\$500-b mark (Barney et al., 2012:1). “The magnitude of Offset obligations and growth in the coming years makes this an area of strategic importance for any global aerospace and defense (A&D) firm looking to expand its international presence in the coming years” (Barney et al., 2012:1).

Figure 1.6 Cumulative global offset obligations reach US\$500-b by 2016



Source: Barney et al. (2012:2).

Lack of existing research

Some offset managers have to fulfil billions of dollars of offset obligations globally. Yet no research has been published on offset management or processes in the EU post-Directive 81. No comparisons have been identified that demonstrate any changes in process strategy or compliance. The status of the transposition of Directive 81 into the various national legal systems of EU MS is an additional area that has featured little transparency among the various MS. Although many MS have transposed the Directive,

few have published new offset policies or regulations, preferring to make decisions on a case-by-case basis. This situation further complicates the management of offset in the EU.

Significance

The successful management of offset ensures a competitive advantage to the DC by optimising profits while minimising commercial risks. It ensures benefits to governments that develop critical infrastructure. This study has significance to offset as a discipline, to offset managers globally, to companies that must successfully navigate the murky waters of offset and to governments aiming to develop offset policies or apply offset. This study further clarifies post-Directive 81 trends and processes.

When offset managers are aware of how their counterparts are approaching the implementation of Directive 81 and how they are managing the transition phase, they can use this knowledge to improve management processes and strategies while offering sustainable solutions for future industrial cooperation in the EU. By identifying the new skills required to effectively manage offset in the EU, companies can ensure that relevant training and other required adaptations take place sooner rather than later.

1.8 SCOPE OF THE STUDY

The study focuses on the changes that Directive 81 has brought about in the offset regime in the EU since 2011. Offset regulations outside the EU have not changed and the rules of the individual countries outside the EU remain valid. While the focus is on legislation, offset management, process and international business, the study also explains offset as a discipline, assesses policy making, analyses defence markets, plots the evolution of the defence industry and captures the essence of Directive 81 and its impact.

Background information offers an insight into defence policy, national security and the sovereignty of EU MS. The implementation of Directive 81 is tracked and possible future outcomes are described. Since offset has a direct impact on procurement, it influences markets. The study makes projections about consequences of Directive 81 that may be amplified because of external forces.

Limitations

This study is limited to EU legislation and the views of 71 offset managers. Offset managers and government officials surveyed in the questionnaire represent 21 countries.

1.9 FORMAT OF THE STUDY

The primary goal of this study is to gather information from offset managers employed by DCs worldwide that do business in the EU, using a questionnaire as the survey instrument. In this way, the general views of offset managers are obtained to determine if and how offset processes and the management of offset by DCs have changed since the implementation of Directive 81.

The study also investigates secondary data, including academic papers, books, presentations and articles published electronically or in hard copy, relating to the main objectives of the study. Corporate presentations by offset managers; advisory and analytical presentations made by consultants in the discipline; and presentations by EU and EC officials and by representatives from EU governments are analysed to monitor reactions to Directive 81 and views on offset, on Directive 81 and on the defence industry in general.

Organisation of chapters

This introductory chapter provides the background of the problem, noting that a change in the focus of an executive body of the EU, together with a decision to harmonise EU law, led to the publication of a new defence procurement directive for the EU. Directive 81 in a sense “reinterprets” Article 346 TFEU without offering a definition of national security interest. It aims to move defence into the commercial domain, but the EC has not been forthcoming regarding how the rules should be applied. Since the implementation of Directive 81 on 21 August 2011, no ruling based on the interpretation of national security interests has been given by the ECJ as of this writing.

Chapter 2 examines literature pertaining to offset as a discipline, including both benefits and liabilities, defining the various elements that constitute compensation practices. Both defence and civil offset are explained, and an overview of rules, trends, successes

and failures sketches a global picture of the offset arena. A comparison of offset rules pre- and post-2011 highlights process changes that have been observed or are expected, while offset trends for the same time periods offer an understanding of the policies and strategies chosen either to set the rules or to ensure compliance.

Chapter 3 contains a comprehensive review of relevant literature and secondary data on the defence industry, defence policy, policy making and defence markets in the EU and emerging countries. Chapter 4 explains the essence of Directive 81, changes to offset processes and possible outcomes of the Directive. It provides a context for the description of the research methodology in Chapter 5 including the sample, data collection method and survey instrument. Chapter 6 states the findings of the study, while Chapter 7 includes an analysis of the survey responses, linking primary and secondary findings.

Chapter 8 contains conclusions and recommendations derived from the findings and applicable to both the discipline and practice of offset management. It assesses outcomes to Directive 81, proposing future business strategies and considers whether the EU will have to develop its defence industries without the benefits of offset.

Research models represent key facets of the study and can be used by offset managers worldwide to assess changes in daily offset management of EU defence and security supply contracts, comparing their own processes to the ones described herein.

Significant standards, charts and models

Significant elements of this study include the derivation of a standard, the Furter National Security Chart© (FNSC©), which, with further testing, can provide a standardised method of quantifying elements that play major roles in a country's national security, including a quantification of the level of national security that various countries may require.

Also, the Furter Factor for International Cooperation© (FFIC©) is used to identify the foreign work-share that DCs can offer so as to assist purchasing governments in protecting their national security interests. This factor divides the Statement of Work (SoW) of a supply contract into two definitive portions:

- the part that contains the company's intellectual property and is part of its unique selling proposition (USP); and
- the part of the contract that can be executed by companies globally.

The first part offers the opportunity to create strategic alliances, while the second part offers the DC an opportunity to identify international partnerships that include the most effective and efficient sub-contracts globally. The work-share is also assessed on the basis of ensuring national security.

The Further Cooperation Model for Innovation© (FCMI©) optimises EU collaboration by searching for synergies between DCs that can expand the market offering and market reach while also improving the product mix.

1.10 RESEARCH QUESTIONS

The research questions are posed from the perspective of offset managers globally who have been implementing offset solutions in EU and in non-EU countries, asking respondents to rate the impact of Directive 81 on the EU defence industry, on offset management in defence companies and on future markets. Each respondent was invited to make recommendations or include comments on the questions or answers. This feedback has been summarised and included in Chapter 7.

1.11 ASSUMPTIONS

It is assumed that the EU MS will implement Directive 81 after transposition. The fact that all EU MS transposed Directive 81 is an indication that it will be implemented. The study details the different routes that EU MS are following in implementing Directive 81, indicating how the EU legislation is being applied and if this application is considered sufficient by the EC.

1.12 CONCLUSION

The origins of the security and defence architecture of Europe can be found in the post-World War II situation (Rehrll and Weissert 2010:11). In the late 1940s a number of initiatives set the stage for increased cooperation across Europe (Rehrll and Weissert

2010:11). In the post-Cold War period, the EU endeavoured to transform into a more present and active security actor (Van Crieking, 2012:1). Literature published between 1992 and 2012 increasingly focused on the EU's changing and evolving role in global and regional security. Scholars of European integration recognised the fundamental links between integration and the rise of a security and defence role for Europe separate from that of NATO (Van Crieking, 2012:1).

Challenges

Armaments cooperation in Europe has traditionally been difficult and especially trying in recent years because of the following factors:

- EU MS' armed forces are different in terms of size and requirements, complicating harmonisation;
- the main European armaments producers are actually competitors in the export market (Schmitt, 2001:2);
- flat or declining European defence budgets do not foster the improvement of European military capabilities (Archick, 2013:7); and
- trade in arms can be exempted from the EU treaties (Europa, 2007a:1), allowing the EU MS to protect their defence industry from market forces.

Common armaments policy

The question of establishing a common armaments policy in Europe has arisen in a number of different contexts, such as the completion of the Single Market and the EU's common industrial and commercial policies. Common armament policy questions have also arisen in the context of foreign policy cooperation in the framework of the Union's CFSP, and in the context of proposals to develop European cooperation in the security and defence fields (National Parliament of Ireland, 2011:28). The implications of this issue have always been complicated, touching directly on some sensitive policy areas for EU MS, "in particular in relation to national security and defence policies, export policies, and economic and employment policies" (National Parliament of Ireland, 2011:28).

A renewed focus on armaments cooperation arose in the late 1990s because of the decline in demand for, and production of, defence equipment throughout the world; an interest in greater European security and defence cooperation; and the EU's growing

profile in the control of arms exports (National Parliament of Ireland, 2011:28). The establishment of an EDTIB has been one step in the process of shaping the CSDP, ensuring less dependence on non-European sources.

Cooperation or competition?

By extending the rules of the EU Single Market to the defence area, the EC has “opened up” the European defence market. However, competition is the opposite of cooperation and Directive 81 is not clear which of the two it prioritises. While governments are expected to cooperate with each other, individual companies that own the actual defence capabilities provided to governments may have to fight for survival (Zetocha, 2010:2). The defence industry of the future may conceivably merge into one global market, controlled purely by demand and supply; on the other hand, political will, sovereignty and national security interest may retain their influence on the market, enforcing relevant demands.

Directive 81 will ideally result in the establishment of an EDEM that can offer worthy competition to US defence industries, but the EU’s first task must be to reconcile internal differences among the various MS (Barysch, 2007:1).

Current scenarios, such as the financial crisis in Europe and the rapid economic and technological development in developing countries have definite implications for the EDTIB, for the national security of EU MS and for the transfer of work, skills and technology out of the EU. Offset as a protectionist practice and an integral element of defence transactions, has to be reassessed. In an effort to find new ways and means to manage their responsibilities and defence contract portfolios, offset managers must fully grasp the requirements and the implications of current policy and political situations. This study will provide information as detailed in the section entitled “Organisation of chapters” above, to help them do so.

CHAPTER 2 OFFSET AS A DISCIPLINE

2.1 INTRODUCTION

Sovereignty and national security have always been key concerns for national governments, which place a high priority on self-reliance and on avoiding dependence on external parties (Goh, 2010:1). However, many countries have to rely on foreign or multinational companies to establish the required national infrastructure in various sectors (European Club for Countertrade and Offset [ECCO], 2011a:1). Government purchases in the defence, energy, transport and telecommunications sectors can amount to major contracts financed by public expenditures (ECCO, 2011a:1).

Markets protected by trade barriers

The government sector of a domestic economy enacts trade barriers, which are policies that discourage foreign imports (Amosweb, 2013:1). Tariffs and barriers employed by governments include specific or *ad valorem* tariffs, licenses, import quotas, voluntary export restraints and local content requirements (Furter and Bozas, 2011:31).

“Barriers are also employed by developed countries to protect certain industries that are deemed strategically important, such as those supporting national security” (Radcliffe, 2010:2). Barriers to trade may also have other roots. For example, Israel’s trade with Turkey, North African nations, the Gulf States, Malaysia and Indonesia is precluded by poor diplomatic relations rather than sanctions (IHS Janes, 2013a:slide 11).

When a government, as a single customer, purchases equipment with the non-economic goal of national security, promoting industrial growth may still be a consideration (Wessner, 1999:128), as the government aims to protect its country’s fundamental interests. In economies where governments have an explicitly developmentalist view of their role in promoting industrial growth, offset can be an element of a national industrial policy. For instance (ECCO, 2011a:1):

- defence and security acquisitions guarantee peace and protect a country’s territory, assets and citizens;
- power plants ensure SoS (security of supply) for electricity;

- telecommunications facilitate crucial exchanges of information; and
- transportation activities (e.g. roads, rails, aeronautics) support trade and the movement of people and goods.

This chapter provides an overview of the discipline of offset, including its rationale, history and types; global trends; offset as a percentage of world trade; its advantages and disadvantages; the countries practicing offset; links between offset and general public procurement; countries practicing offset; offset policies, rules, strategies, solutions, risks and failures; offset in the EU; and the offset management process.

2.2 WHAT IS OFFSET?

Offset refers to a specific kind of contractual obligation that is applied to public procurement markets (ECCO, 2011a:1). The umbrella term for such compensation agreements is “countertrade”, referring to various types of reciprocal arrangements (Furter and Bozas, 2011:1). Offset is a form of industrial compensation required as a purchase condition in commercial or government-to-government (G2G) sales of either military or high-cost civilian hardware. The production of this hardware involves overseas production that results in the creation or expansion of industrial capacity in the importer's country (Trade Port, 2010:2). In a countertrade agreement, the value for a trade item is set artificially based on the needs of the buyer and is not market-driven (Georgariou, 2010:slide 3).

Offset is entrenched in the global world of trade, as offset processes reroute procurement funds paid to foreign contractors back into the spending country (Furter and Bozas, 2011:1). The practice is generally tolerated as a feature of the market rather than enthusiastically embraced (Defence Viewpoints from the UK Defence Forum, 2010:1). Nations have come to both favour and expect offset as they endeavour to ensure improvements in their industrial base positioning and technology. As a result, this anomaly in normal business practices has become routine (Jones, 2001:108).

History of offset

Countertrade, as traditionally understood, is the exchange of goods for goods—a kind of international barter (Wülker-Mirbach, 1990:2). “Countertrade is a way to compete

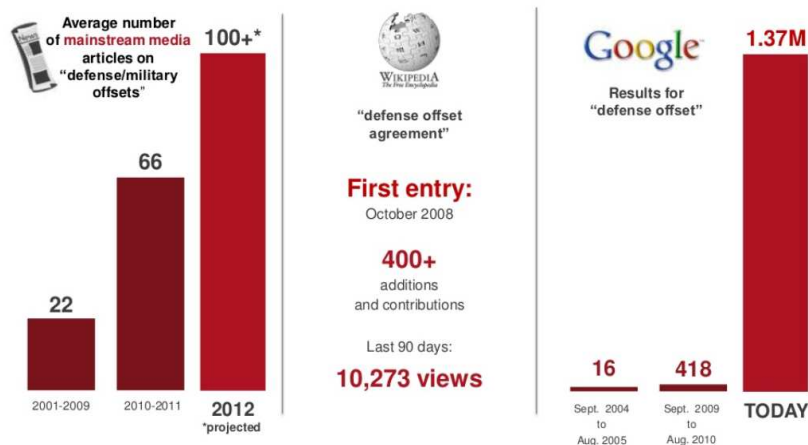
beyond cash; it is a partnership between the buyer and the seller” (Bol, 2000:6). The broader category of countertrade includes, along with offset, the practices of counter-purchase, tolling, barter, buy-back and switch-trading. Offset policies have been used for decades as political and economic instruments to cope with market access barriers and to compensate for the prospective loss of work to national defence industrial sectors (European Defence Agency [EDA], 2010:8).

Aims of offset

When signing a contract with a foreign supplier, purchasing governments wish to achieve the following goals (ECCO, 2011a:1-2):

- retain or recover a share of the economic activity created by the purchase;
- ensure compensation for the significant imports that negatively affect the balance of payments;
- further develop the related industry;
- acquire new technologies that enable the country to limit its reliance on foreign suppliers; and
- justify the major investment to their citizens, ensuring public acceptance.

Figure 2.1 Offset now part of mainstream media



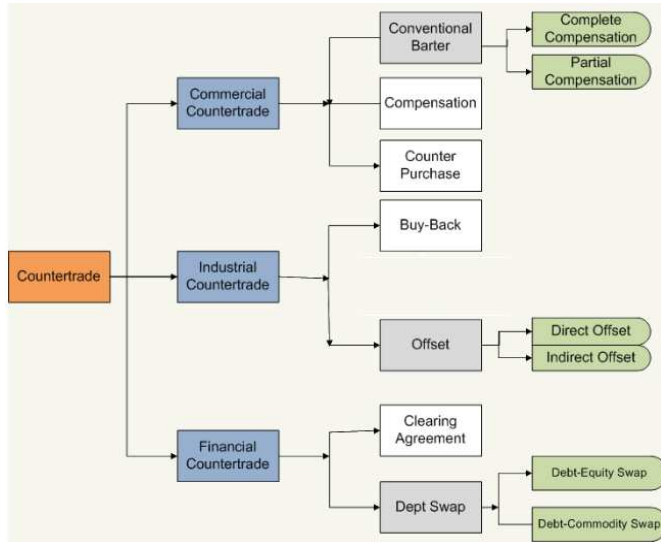
Source: Ganyard, Barney and Thompson (2012:slide 17).

In the last three to four years, the global focus on offset has increased, with the discipline becoming a prominent part of mainstream media coverage and general discourse.

Types of offset

Various other terms are used interchangeably to describe different types of countertrade arrangements, including co-production and compensation (Defence Institute of Security Assistance Management [DISAM], 2007b:19). All offsets can fundamentally be categorised into direct and indirect offset (ECCO, 2011a:2).

Figure 2.2 The basic forms of countertrade



Source: Walter Solutions (2013:1).

Countertrade includes forms of barter that can aim for partial or complete compensation; offset, which is categorised as either direct or indirect; and financial compensation, which can include debt swaps.

Direct and indirect offset

Direct offset ensures benefits directly related to the supplies envisaged under the principal contract, while indirect offset assists the importing country in the development of its exports or in investment requirements unrelated to the principal contract (Verma, 2009:18). Offset is motivated by objectives of strategic independence, such as acquiring independent maintenance and upgrade capabilities (Ilanakiev and Mladenov, 2008:188). Integrated Logistics Support (ILS) is also crucial; this term refers to the technical activities required to influence operational and materiel requirements and design specifications for logistics support (AcqNotes, 2013:1).

Defence offset activities that span non-defence sectors are called indirect or non-defence-related offset (Suman, 2012:2). Indirect military or semi-direct offset involves the provision of equipment and/or services that are very similar to the items covered by the main purchase contract, representing the same technological level as direct participation, with its realisation depending on sales to other markets (Verma, 2009:18).

Barter: arms for sugar

In July 2013, a particularly interesting instance of apparent indirect offset was detected when a North Korean ship carrying Cuban arms was seized in Panama on suspicion of smuggling drugs. Cuba contended that the ship carried 220 000 sacks of sugar for the people of North Korea (Kriel and Adams, 2013:1). The Panamanian authorities also reportedly stated that the ship was sending “obsolete” Soviet-era weapons to be repaired in North Korea, and that the shipment probably had been part of an arms-for-sugar exchange aimed at refurbishing Cuba's aging air defenses (Kriel and Adams, 2013:2). “We understand it was a barter deal, arms for sugar, that's what our intelligence sources are telling us,” said a Panamanian official familiar with the investigation (Kriel and Adams, 2013:2).

Civil and defence markets

Offset is common in civil as well as defence contracts. The benefits required can be described as a compulsory inward investment imposed on foreign defence suppliers by a purchasing government. This investment can take the form of transfer of goods, services or other benefits into a given market to counter the original expenditure (Anderson, 2009:1). Many countries use offset as a tool for defence indigenisation, which is viewed as a crucial element of ensuring national security (Bhonsle, 2011:1).

In Israel, industrial cooperation regulations distinguish between defence-related and civil purchases. The former require that a supplier ensures industrial cooperation equal to at least 50% of foreign content value. Civil purchases from countries that are not party to the Government Procurement Agreement (GPA) are subject to industrial cooperation requirements of 35% of foreign content value, while civil procurements from signatories to the GPA are subject to an industrial cooperation commitment of 20% of foreign content value (Shanson, 2012f:5). In the first quarter of 2012, 159 new recipients were already benefiting from industrial cooperation activities (Shanson, 2012f:5).

To take another example, China fully understood that it could not rely on foreign countries to support its military in the long term, and it instead opted for self-sufficiency. As globalisation had made dual-use technology more accessible than previously, this was the most feasible route for China to develop its own defence industrial capabilities (Ding, 2006:21). Government procurement law in China favours local companies, encouraging foreign bidders to set up joint ventures in order to meet local content requirements. China's participation in the EU's Galileo project was a typical case, as it enabled the Chinese to learn how to manufacture navigation satellites that also have a military application (Ding, 2006:21).

In 2007, Areva, a French multinational group specialising in nuclear and renewable energy, and the China Nuclear Power Engineering Company signed the largest international commercial contract in civil nuclear history. Participation in the construction of two reactors in Taishan, China, was "extensive and deep in all major areas", reflecting China's drive for self-reliance in technology (Andolenko, 2010:11).

Offset compensates for an imperfect market

Countertrade in defence was first initiated in the 1950s when Dwight Eisenhower required West Germany to buy American-made defence equipment to compensate for the cost of stationing US troops in Europe (*The Economist*, 2013:2). Some authors claim that the origin of offset dates back to 1950, when the North Atlantic Treaty Organisation (NATO) was formed (Sköns 2002). The first example of US offset occurred in the early 1960s with the co-production of the F-104 jet fighter and Hawk surface-to-air missile in Western Europe (DISAM, 2007b:19). In a perfectly functioning market offset would not exist, but "today's defence market is not perfect" (EDA, 2011a:2). The small number of sellers or buyers in the defence industry renders it an imperfectly competitive market, and protectionist policies can significantly affect the terms according to which deals are concluded (Wessner, 1999:128).

The defence industry views offset as a counterbalance for trade distortions imposed by government interventions, as well as a tool that provides risk mitigation and access to capital, markets and technologies, enhancing local workforce skills (Mowery, 1999). The benefits of offset to the local economy may be only temporary and may be achieved

efficiently by other means, such as free trade or the normal economic and business development activities that lead to long-term business partnerships (Khan, 2010:140).

However, industrial relations between large DCs (defence contractors) and efficient suppliers frequently do not appear spontaneously, but have to be induced by offset policies (Ilanakiev and Mladenov, 2008:192). The reason may be found in the fact that governments prioritise SoS and defence capabilities that place them in a position to protect their people and assets against attacks that cannot be predicted.

Politically controversial

Offset does not support the spirit of the EU's principle of free movement of goods and services. The EC views offset demands as "politically controversial, economically questionable and legally problematic", while the US government's Department of Commerce describes offset as "market distorting" (Nackman, 2011:517). The general global trend is toward "free market access and a free world market", but at the same time protectionism is growing in times of crisis (Bannwart, 2012:slide 4). Issues of protectionism persist in Europe, especially in the area of strategic technologies, where States seek to prevent the erosion of their domestic DIB (defence industrial base) and promote defence-industrial sustainability (Matthews, 2006:12).

MoDs (Ministries of Defence) prefer to build their own defence systems or heavily modify existing systems to ensure that they get the very best equipment (Raytheon Australia, 2012:3). The classical case for offset has been that governments accept a higher cost in order to build and maintain their national defence technological and industrial base (DTIB) (Sturesson, 2008:27). The success of offset policies as an instrument for overcoming barriers to the establishment of trans-border industrial relations, such as switching costs and uncertainty about quality, resides in the incentives that the policies provide for searching for local partners in the importer's economy (Ilanakiev and Mladenov, 2008:193). However, the desire to obtain the main contract may cause companies to resort to local suppliers who are less efficient than the incumbent ones, inflating production costs and creating duplications in the European industrial base (Ilanakiev and Mladenov, 2008:193-4).

Offset as a global phenomenon

Offset remains a global phenomenon, unlikely to fade away in the near future, as long as defence procurement procedures are restricted and competition in the global defence marketplace is subject to an uneven playing field (EDA, 2010:5). Dropping regulation-induced barriers to trade and industrial cooperation may not be sufficient, given that more barriers are established through other means, such as the following (Ilanakiev and Mladenov, 2008:192):

- waivers;
- imperfect information;
- costs incurred in switching suppliers; and
- the costs of uncertainty that can affect quality and SoS.

Offset benefits

Foreign governments use offset as a means to obtain valuable technology and manufacturing know-how, support domestic employment, expand their defence industries and make the use of national funds for foreign purchases politically more palatable (Schinasi, 2000:1). Access to technology, which drives advanced economies, appears to be a powerful motive encouraging purchasing nations to engage in offset (Petty, 1999:69). Less fully developed countries prioritise indirect offset that helps to create businesses and builds their country's infrastructure (Petty, 1999:69). Developing countries use local content to "shift their manufacturing base from the simple assembly of products into the local manufacture of component parts", as well as "to protect local jobs and industry from foreign competition" (Hill, 2009:208, 211).

In some countries, offset assists in developing DTIBs by ensuring skill development and stimulating work and business opportunities. New partnerships result in long-term relationships that facilitate market access (EDA, 2010:8). In this regard, offset is beneficial in that it enables companies in the buying country to access business networks of the prime defence contractors (Sturesson, 2008:27).

Advantages and disadvantages

Advantages of defence offset include the following (Schinasi, 2000:1):

- facilitation of foreign sales, increasing business on the prime contractor level;

- reduction of unit costs to the local military due to the increased size of production runs;
- ensuring continued employment in the defence industry;
- creation of new and profitable business opportunities for prime contractors and other businesses; and
- creation of an opportunity for the prime contractor to find less costly suppliers.

On the other hand, there are also disadvantages (Schinasi, 2000:1-2):

- supplying companies could be contributing to the development of a future foreign competitor;
- offset-related technology transfer to foreign countries could have an effect on national security and on the intellectual property of the prime contractor;
- the use of foreign sub-contractors by a prime contractor as a result of an offset requirement may lead to decreased business opportunities for the prime contractor and other companies in the supplying country;
- the long-term relationships that prime contractors may develop with foreign suppliers could lead to the loss of capability in the DIB of the supplying country; and
- increased foreign content in local weapon systems could also negatively impact national security and SoS.

Offset forces the US to place work in foreign countries

In the US, offset represents a national security concern that threatens the nation's DIB, especially when major domestic prime DCs replace domestic sub-contractors with foreign ones (Nackman, 2011:529) in an effort to fulfil offset requirements in purchasing countries. According to the US Census Bureau's Annual Survey of Manufacturers data, offset transactions reported in the US between 2009 and 2011 could have created or sustained 32 775 employment opportunities if the work associated with those transactions had been performed in the US (US Department of Commerce, Bureau of Industry and Security [BIS], 2013a:11).

However, US defence procurement practices also require North American content whenever the US acquires defence systems. This protectionist approach is in fact equivalent to an offset policy as it requires contractors to "buy American" (Ilanakiev and Mladenov, 2008:190).

Offset has strategic importance

The magnitude of offset obligations in the coming years creates strategic challenges for any global A&D (aerospace and defence) company seeking to expand its international presence in the coming years (Barney et al., 2012:1). The sheer size of offset obligations, estimated at nearly half a trillion US Dollars (US\$500-b) by 2016 (see 1.7 Importance of the study), and the rapid growth in the complexity of offset policies are fundamentally reshaping the offset landscape (Barney et al., 2012:3). The projected figure for 2016 reflects global offset obligations from 2005 to 2016, cumulative to date, based on a country-by-country analysis and individual companies' projected future sales (Barney et al., 2012:1).

Offset involves diversified, creative, quality-oriented industrial programmes that embody long-term alliances (Ashby, 2003:1). Companies are viewing their offset packages as a potential competitive tool, because offset offerings can make the difference in a competition for a defence contract (Fryer-Biggs, 2012:2).

Offset as a percentage of world trade

Available figures for offset and related forms of countertrade as a percentage of world trade differ, because the figures relate to all forms of countertrade and the definitions accepted by authors may differ slightly: an estimated 5-30% (Francis, 2012:1); 5-40% upward (Albaum and Duerr, 2008:537); 5-40% (Kostecki, 1987:8); 8-20% (Carter and Gagne, 1988); 8-10% (Roosa, 1985); 10-20% (Marin and Schnitzer, 1994); 15-20% is the consensus estimate (Hennart and Anderson, 1993:1); 20% (Bracher, 1984); 20-25% (Okaroafo, 1989); about 30% (Brauer and Dunne, 2004:2); 30% (Hew, 2004:1); and 40% (Vogt, 1985). These figures translate into countertrade being calculated as an average of 23.37% of overall world trade.

2.3 COUNTRIES PRACTICING OFFSET AND COUNTERTRADE

Some EU MS (member states) have no offset requirements but may require it occasionally or may accept offers made by the seller (CTO Data Services, 2013b:125).

Table 2.1 EU MS stating that they have no offset rules or policy, 2013

EU MS	OFFSET REQUIREMENTS	REFERENCE
Latvia	None	CTO Data Services (2013b:125)
Malta	None	CTO Data Services (2013b:125)
Germany	No offset policy, but government is interested in collaboration programmes and work-packages, which constitute a form of offset	Shanson (2013d:7)
France	Wants to discontinue compensation practices	CTO Data Services (2013b:83)
Ireland	Offset does not influence bidding process, but seller can offer offset after selection	CTO Data Services (2013b:125)
Luxembourg	Occasionally for larger procurements	CTO Data Services (2013b:166)

The French government supported measures to discontinue compensation practices and did not have an offset policy (CTO Data Services, 2013a:92); however, it implemented severe protectionist measures in 2014 (Chapter 4, France). After World War II (WWII) Germany leveraged offset to rebuild its local industry but thereafter stated that it no longer accepted offset as a matter of policy (Mawdsley and Brzoska, 2004). However, post-Directive 81 the country welcomes collaboration programmes (Shanson, 2013d:7).

The EC's Directive 81 on defence procurement, launched in August 2011, aims to change the offset regulations in the EU MS, as well as in Norway, which is a member of the EEA (European Economic Area). The EEA comprises the countries of the EU plus Iceland, Liechtenstein and Norway, allowing these three countries to participate in the EU's Single Market without being EU MS.

All EU MS that require offset have officially transposed Directive 81; however, as of nearly three years after the launch of Directive 81, not all MS have established new offset rules. The EC directives related to government procurement apply only to supply and services contracts that exceed about €400 000 and works contracts of more than about €5-m (Maughan, 2012:7-8). See Chapter 4 for a discussion of the current thresholds as of this writing. Chapter 4 will also describe the status of each country's rules.

Table 2.2 Countries requiring offset, pre-2011

In 2009, an estimated 47 countries practised offset, of which 21 are associated with the EU if one counts Norway (Shanson, 2009:1):

1. Australia ¹	13. Estonia	25. Malaysia ³	37. Slovakia
2. Austria	14. Finland	26. Mexico ⁴	38. Slovenia
3. Belgium	15. Greece	27. Netherlands	39. South Africa
4. Brazil	16. Hungary	28. New Zealand	40. Spain
5. Bulgaria	17. India	29. Norway	41. Sweden
6. Canada	18. Israel	30. Oman	42. Switzerland
7. Chile	19. Italy	31. Poland	43. Taiwan
8. China	20. Japan ²	32. Portugal	44. Turkey
9. Colombia	21. South Korea	33. Qatar ⁵	45. UAE
10. Croatia	22. Kuwait	34. Romania	46. UK; and
11. Czech Republic	23. Libya	35. Saudi Arabia	47. US
12. Denmark	24. Lithuania	36. Singapore ⁶	

¹ Australia: Industry Capability Programme.

² Japan is included because co-design programmes lead to indigenous systems under industrial collaboration programmes.

³ Malaysia could be placed in either the offset or the countertrade camp or both.

⁴ Mexico is increasingly asking for benefits in the civil sector as a condition of purchase.

⁵ Qatar has no formal offset policy; however, offset benefits are a key discriminator in the procurement process and benefits are required for civil and defence acquisitions, including oil and gas concessions.

⁶ Singapore does not use the word offset, but it often insists on local support activities and joint programmes that have the same objective as offset (Shanson, 2009:2).

Countries requiring countertrade

Eleven other countries practiced countertrade (Shanson, 2009:1): Bosnia, Cuba, Egypt, Indonesia, Macedonia, Pakistan, the Philippines, Serbia, Uzbekistan, Venezuela and Vietnam (Shanson, 2009:1).

As this thesis will make various references to the European Union (EU), European Economic Area (EEA), European Defence Agency (EDA), North Atlantic Treaty Organisation (NATO), United Nations (UN) Security Council and the GPA, members and signatories are summarised in Table 2.3 to make references and comparisons easier. All the EU MS are listed together, followed by the EEA members. An endeavour has also been made to keep the NATO and GPA members together.

Table 2.3 Member status of some international organisations

COUNTRY	EU MEMBER	EEA MEMBER	EDA MEMBER	NATO MEMBER	UN SECURITY COUNCIL MEMBER	IS THIS COUNTRY A MEMBER TO THE GPA?
	28	31	27 (not DK)		28	10 temporary
Austria	X	X	X			1 January 1996
Belgium	X	X	X	X		1 January 1996
Bulgaria	X	X	X	X		1 January 2007
Croatia	X	X	X	X		1 July 2013
Cyprus	X	X	X			1 May 2004
Czech Republic	X	X	X	X		1 May 2004
Denmark	X	X		X		1 January 1996
Estonia	X	X	X	X		1 May 2004
Finland	X	X	X			1 January 1996
Germany	X	X	X	X	X (2012)	1 January 1996
France	X	X	X	X	X (permanent)	1 January 1996
Greece	X	X	X	X		1 January 1996
Hungary	X	X	X	X		1 May 2004
Ireland	X	X	X			1 January 1996
Italy	X	X	X	X		1 January 1996
Latvia	X	X	X	X		1 May 2004
Lithuania	X	X	X	X		1 May 2004
Luxembourg	X	X	X	X		1 January 1996
Malta	X	X	X			1 May 2004
Netherlands	X	X	X	X		1 January 1996
Poland	X	X	X	X		1 May 2004
Portugal	X	X	X	X	X (2012)	1 January 1996
Romania	X	X	X	X		1 January 2007
Slovakia	X	X	X	X		1 May 2004
Slovenia	X	X	X	X		1 May 2004
Spain	X	X	X	X		1 January 1996
Sweden	X	X	X			1 January 1996
UK	X	X	X	X	X (permanent)	1 January 1996
Iceland		X		X		28 April 2001
Liechtenstein		X				18 September 1997
Norway		X		X		1 January 1996
Switzerland						1 January 1996
Albania				X		
Canada				X		1 January 1996
Turkey				X		
US				X	X (permanent)	1 January 1996
Azerbaijan					X (2013)	
China					X (permanent)	negotiating accession
Colombia					X (2012)	
Guatemala					X (2013)	
India					X (2012)	
Morocco					X (2013)	
Pakistan					X (2013)	
Russian Fed.					X (permanent)	
South Africa					X (2012)	
Togo					X (2013)	

Source: Furter (2014).

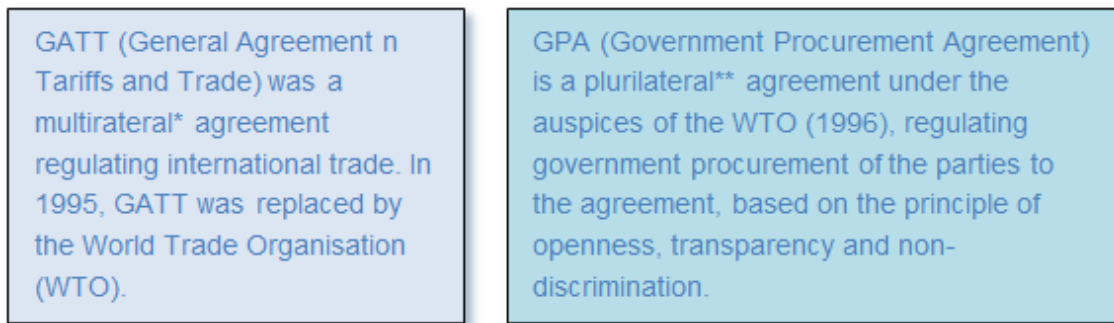
2.4 GENERAL PUBLIC PROCUREMENT (NON-DEFENCE MARKETS)

Civilian offset

In non-defence or civil markets, global organisations view offset as ineffective and inconsistent with free trade (Khan, 2010:4). The GPA is, to date, the only legally binding agreement of the WTO (World Trade Organisation) that focuses on the subject of government procurement (WTO, 2013b:1). The WTO defines offset in government

procurement as “measures used to encourage local development or improve the balance-of-payments accounts by means of domestic content, licensing of technology, investment requirements, countertrade or similar requirements” (Eriksson et al., 2007:24).

Figure 2.3 GATT and the GPA



*In a multilateral agreement all members are party to the agreement.

**Plurilateral refers to the fact that member countries would be given the choice to agree to new rules on a voluntary basis.

WTO: general, non-defence public procurement

A total of 41 WTO members, including the 27 EU MS, are parties to the 1994 GPA, which came into force in 1996 (ECCO, 2011b:1). As a general rule, the GPA forbids parties to the agreement to request offset; however, the GPA acknowledges that offset is permitted for developing countries as a means of qualifying for, but not for awarding contracts (ECCO, 2011b:1).

EU: civilian tenders prioritise local content

In EU secondary law related to civilian government contracts, Directive 2004/17/EC (the Utility Directive, referred to as Directive 17 and subsequently amended by Directive 81), states that “any tender submitted for the award of a supply contract may be rejected where the proportion of the products originating in third countries... exceeds 50% of the total value of the products constituting the tender”, thus allowing direct offset for civil contracts on an EU scale (Sylvain, 2011a:slide 3). In this case, the EU public sector procurement market is (or can be) closed to bidders from outside the EU (Maughan, 2012:11). In civilian markets, none of the EU MS enforce offset requirements (Sylvain 2011a:slide 5).

The GPA supports offset

Article XXIII (1) of the GPA uses a similar phrase to Article 346 TFEU (Treaty on the Functioning of the EU), stipulating that armaments are subject to a special exemption and stating that the agreement does not prevent any party to the agreement from taking any action that it considers necessary for the protection of its essential security interests relating to the procurement of arms, ammunition or war materials or to procurement indispensable for national security or for national defence purposes (Eriksson et al., 2007:24). The WTO thus entitles governments to specifically exempt certain categories of defence procurement, “even with respect to government entities whose purchases are otherwise subject to the GPA” (Cottier, Mavroidis and Schefer, 1998:140). This provision has resulted in a *de facto* categorical exemption of armaments from the GPA and its prohibition of offset (Eriksson et al., 2007:25). In this sense, Article XXIII (1) of the GPA supports offset as a practice.

EU law not opposed to Offset

In EU legislation, neither the provisions of the TFEU nor those of the relevant Directive 2994/18EC (Directive 18) expressly rule out offset (Eriksson et al., 2007:25). Article 19 TFEU applies to both defence and civil public procurement and prohibits discrimination on the grounds of nationality (Eurofound, 2011a:1). However, Article 346 TFEU (formerly Article 296 TEU) allows EU countries to exempt defence and security contracts if the application of European law would undermine their essential security interests (Europa, 2010:1).

2.5 EFFECTS OF OFFSET

A 2008 study on offset (Sturesson, 2008:27) revealed the following effects:

- there is little evidence of cases in which offset has prevented firms from competing at the prime contracting level;
- offset generally does not have a strong effect on contract award, because competitors tend to offer comparable offset packages;
- indirect civil offset is claimed to be beneficial for European prime contractors;
- direct and, to some extent, indirect military offset are seen as more prone to affect participation and contract award, whereas indirect civil offset is least likely to distort markets;

- there is no conclusive evidence that the practise of offset leads to increased defence budgets or to the opening of new markets for prime contracting;
- US legislation limiting technology transfer may give an advantage to European players;
- excessive offset demands by EDA member states and stringent implementation rules may become market inhibitors in the future;
- a lack of transparency and professionalism may lead to corruption; and
- a situation could develop in which offset would be allowed for non-EU firms but prohibited in intra-EU trade.

Direct offset that includes sub-contracting with R&D content was shown to have a particularly strong and positive impact on the DTIB, as was indirect military offset. These relationships create value by developing competencies and integrating European supply chains (Sturesson, 2008:27-8).

2.6 THE ESSENCE OF OFFSET

In building up their armed forces, countries want to ensure SoS (Goh, 2010:1). Foreign suppliers assist in diversifying the economy of the purchasing country, while the offset experience helps local companies to diversify into new business areas (Okay, 2012:slide 3). The seller works directly with domestic companies in the purchasing country to fulfil the offset obligation (Platzgummer, 2012:3).

Offset approaches

Countries use different approaches to offset. In specific countries, one can observe a strategy-adaptation pattern or a market-based approach, linked to local conditions and requirements (Khan, 2010:140). Governments may opt for formal and informal policies based on a mandatory offset component; a flexible, case-by-case assessment based on mutual benefits; or a best-endeavour fulfilment based on a partnership (Matthews, 2004). Mandatory offset provides established criteria to administer and monitor fulfilment (Khan, 2010:140). Companies that fail to deliver the agreed-to benefits or honour best-endeavour approaches are generally barred from participation in any future projects and may even be blacklisted by the contracting authority.

Offset as mandatory

In most cases, offset is mandatory, in effect, because a percentage of the value of the main contract will be deducted as a penalty unless the terms of the offset agreement are met (Khan, 2010:2). Most EU MS require penalties for non-performance (Eriksson et al., 2007:31). Some countries, such as India and the UAE (United Arab Emirates), have adopted mandatory offset, while Australia and New Zealand are more flexible, with offset policies focusing on long-term partnerships, dual-use technology and regional participation (Khan 2010:151).

Examples

Prior to 2011, Poland and Lithuania mandated the provision of offset commitments by local statute. The Netherlands, Belgium, Finland, Denmark and Spain managed offset as an award criterion assessed as a part of the tender evaluation process (Campos et al., 2012:1). In these situations, if the response to the Request for Quotation (RfQ) did not comply with the offset requirements, the tender was generally disqualified (Furter and Bozas, 2011:8).

Offset fundamentals

Although demands vary by country, offset requirements usually include these fundamental components (Furter and Bozas, 2011:8):

- offset equal to a specified percentage of the contract value or the foreign content value;
- a bank guarantee to ensure performance;
- a set period of fulfilment;
- a prescribed process;
- designated authorities and related laws; and
- penalties for non-performance, which may be treated as liquidated damages.

In addition, multipliers for activities that the buying country prioritises may be included, and credit banking or swaps (also called abatements) may be allowed.

Offset agreements and transactions

An offset agreement is implemented by means of one or more offset transactions, with a credit value claimed against the agreement (Eriksson et al., 2007:15). The agreement specifies the offset package related to a specific defence import contract, while each

individual offset transaction is an activity for which the offset supplier claims credit in fulfilment of the agreement. An offset agreement may lead to offset transactions of many different types and categories (Eriksson et al., 2007:3).

Banking

Many countries permit contractors to “bank” offset credits to be used to fulfil offset obligations associated with future sales of defence goods in that country (Schinasi, 2000:3). In offset banking, credits accumulated before the signing of the supply agreement may be used to fulfil the subsequent obligation, or over-fulfilment of offset commitments during a given contract can be counted toward fulfilment of new contracts (Eriksson et al., 2007:15).

Swaps

Offset swapping occurs when Countries A and B buy equipment from each other, and the swap cancels part of the offset obligations that would otherwise have required fulfilment (Eriksson et al., 2007:15-16). Offset credits are intangible assets and may represent a source of future income. However, their acquisition cost is nil, and from an accounting perspective the credits have to be treated similarly to intangible assets created internally, such as brand value and goodwill (Sylvain, 2011b:slide 16).

Multipliers

Purchasing countries’ governments grant multipliers to stimulate a particular type of transaction (Khan, 2010:139). In such cases the contractor can earn, for example, three or five times the monetary value of the transaction in offset credits. Where multipliers are included, the credited value of an offset is different from the actual value of the offset transaction (Eriksson et al., 2007:15), and therefore offset values recorded for a specific defence procurement may in actual fact have a lower associated monetary value. Multipliers help sellers to fulfil high offset percentages. For example, when 60% direct offset is required for a procurement worth US\$100-m, the foreign DC may be able to transfer to the buying country defence technology that directly relates to the equipment being purchased, is worth US\$20-m, and has a multiplier of three. In this case the DC would fulfil the direct offset requirement with far less than the stipulated percentage of dollar value.

It is generally accepted that 100% direct offset cannot be fulfilled without multipliers unless the prime contractor is a local company and is able to use only local content. The common requirement for use of parts from the original equipment manufacturer (OEM) further demonstrates why 100% direct offset is improbable. In some cases the seller of the defence equipment is required to purchase items such as engines for tanks or aircraft from the OEM. In these instances the seller of the engines is a supplier and not a sub-contractor and sells the items as commercial-off-the-shelf (COTS) or military-off-the-shelf (MOTS) items without being willing to commit to any offset obligation.

The prime contractor may also find that a sub-contractor selling a crucial subsystem of the defence equipment is a small company that refuses to commit to offset. Such a scenario leaves the prime contractor with a greater (by percentage) direct offset requirement than that associated with the value of its contract.

Causality and additionality

Government authorities are very explicit about what activities can count as offset transactions. Only business activity created as a direct result of the government's defence procurement contract and that represents additional business volume or value added in the purchasing country will be eligible for offset. Imported items or services do not count as fulfilment (Eriksson et al., 2007:15).

Moreover, business transactions that would have been conducted in the purchasing country in any case, and are in no way motivated by the offset obligations resulting from the defence procurement, cannot earn offset credits. Chile's offset regulations, for example, state that a project intended as part of an offset offer has to demonstrate both causality and additionality, for instance, by ensuring a new market for existing Chilean products or by including new, innovative technology transfer (CTO Data Services, 2013c:52) that will expand the market offering of a Chilean company.

2.7 OFFSET SOLUTIONS

Offset obligations are discharged through different kinds of transactions, including co-production, sub-contracting, licensed production, training, technology transfers and other investments in the importer's economy (Ilanakiev and Mladenov, 2008:185). While

technology transfer, training, credit assistance and overseas investment offset transactions do not directly involve foreign production of goods and services, these transactions can enhance the manufacturing and competitiveness of foreign industry and can be categorised as either direct or indirect (US Department of Commerce, BIS, 2007b:5-15). Eligible activities can include mandatory technology transfer, countertrade and foreign investment (Jones, 2001:1), as well as in-country procurements, marketing for export and financial assistance and joint ventures (Schinasi, 2000:1).

In fulfilling offset in non-European countries, a mix of all types of offset possibilities is popular, while some countries may require a high level of technology transfer to a local joint venture (Vidal, 2011:slide 12). Within European countries, offset obligations are fulfilled in the following ways (Vidal, 2011:slide 12):

- balancing obligations with exports from the group's production centres in the buying country;
- procuring in the buying country;
- transfer of technology or production; and
- requiring high-tech indirect offset.

Influence on economic performance

Among the types of offset solutions that have different short- and long-term potential to influence the economic performance of the purchasing country, one can distinguish between co-production, licensed production and sub-contracting (Martin, 1996). Co-production occurs when defence companies located in purchasing countries receive contracts to assemble, build or produce articles for the defence system (Schinasi, 1998:5). Sub-contracting, on the other hand, occurs when a DC procures defence-related components and subsystems for export from suppliers in countries where the contractor has offset obligations (Yilmazkaya, 2010:slide 3).

Sub-contractors typically realise that the success of the prime contractor will directly affect the success of the project and support the foreign prime contractor in fulfilling offset by accepting offset obligations commensurate with their sub-contracts. In many cases, the sub-contractors in the purchasing country become long-term suppliers to the DC (Yilmazkaya, 2010:slide 4).

Licensed production refers to foreign production of a defence article based upon transfer of technical information under direct commercial arrangements between the manufacturer and a foreign government or producer. It generally involves the manufacturing of a component for a defence system, rather than a complete system. Licensed production transactions can be either direct or indirect (BIS, 2013:2).

Technology transfer

Transfer of technology generally forms part of an offset solution, ensuring that value created goes beyond just financial transfers (Vats, Zuazua and De Clerq, 2013:5). Countries with a highly skilled workforce, public-private enterprises and developed international business relationships are better positioned to absorb the transfer of defence technology than countries without these attributes (Khan 2010:151).

When analysing examples of import-export trends between countries (SIPRI [Stockholm International Peace Research Institute], 2012e:5, Tables 6A.3 and 6A.4), it becomes evident how defence technology becomes distributed around the world through offset fulfilment:

- South Korea imports from the US, Germany and France and requires offset; it then exports to Indonesia and Turkey (2005-2009), resulting in the redistribution of US and EU technology to these countries as well; or
- Turkey imports from Germany, Israel and the US and then exports to Iraq and Pakistan (2005-2009), similarly redistributing defence technology.

Intellectual property within national defence R&D organisations must therefore be protected and managed effectively (Gupta, 2008:318).

Offset transaction activity

Between 1993 and 2006, indirect offset transactions recorded in the US represented 59.7% of the value of offset transactions, with direct offset at 39.6% (US Department of Commerce, BIS, 2007b:5-1).

Table 2.4 Offset transactions analysis: direct and percentages, 1993-2006

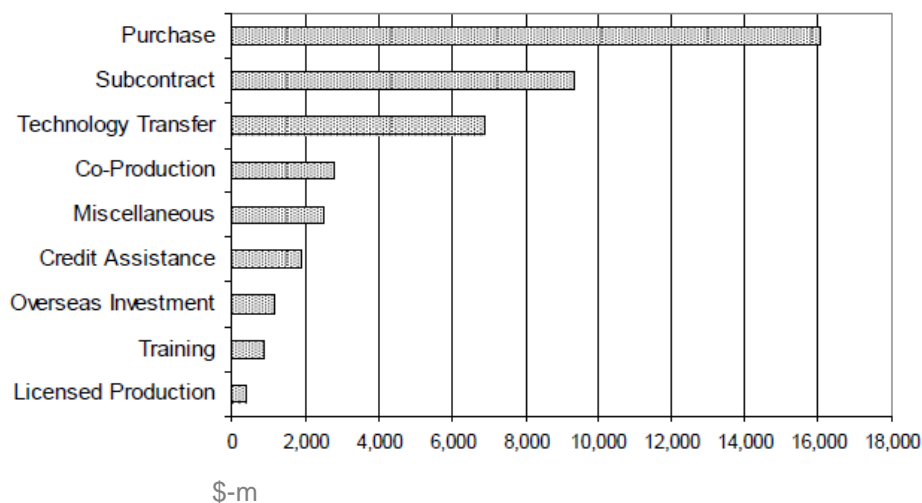
Offset Transaction Comparisons	
Data Element	All Transactions
Total Value	\$41,967,650,233
Direct Offsets	\$16,635,418,323
Indirect Offsets	\$25,068,526,735
Unspecified Offsets	\$263,705,175
Percent Distribution	
Direct Offsets	39.6%
Indirect Offsets	59.7%
Unspecified Offsets	0.6%

Source: BIS Offsets Database (US Department of Commerce, BIS, 2007b:5-1).

Most popular offset transactions by category

Three transaction categories—namely, purchases, sub-contracts and technology transfer—accounted for the majority of offset activity in the US for the 14-year period of 1993-2006, representing 76.9% of the total value of offset transactions (US Department of Commerce, BIS, 2007b:5-12).

Figure 2.4 Offset transactions by categories, 1993-2006



Source: BIS Offsets Database (US Department of Commerce, BIS, 2007b:5-13).

In 2010, the same three transaction categories represented 81.59% of all offset transactions reported in the US (US Department of Commerce, BIS, 2012:5).

Table 2.5 Number of offset transactions between 1993-2011, by category and type and with multipliers

Transaction Category	Number of Transactions, 1993-2011				Number of Transactions with Multipliers Greater than 1
	Total	Direct	Indirect	Unspecified	
Co-production	558	558	-	-	27
Credit Assistance	165	14	151	-	26
Investment	269	34	230	5	94
Licensed Production	194	123	69	2	20
Other	746	167	571	8	194
Purchase	5,765	-	5,763	2	423
Subcontracting	2,654	2,654	-	-	201
Technology Transfer	1,397	633	745	19	329
Training	352	163	184	5	134
Total	12,100	4,346	7,713	41	1,448

Source: US Department of Commerce, BIS (2013a:21).

During 1993-2011, the transaction categories most frequently included in offset transactions by US firms did not change and were still purchasing (indirect), sub-contracting and technology transfer (US Department of Commerce, BIS, 2013:21).

Indirect offset percentages

A discernible shift toward indirect offset has been evident in recent years as buyer countries have realised its immense economic and social potential (Suman, 2012:2). In 2003, indirect offset represented up to two-thirds of all offset obligations (Ashby, 2003:1). In 2007, direct offset represented 40% of total offsets in Europe, while indirect defence offsets accounted for 35% and indirect civilian offset the remaining 25% (Eriksson et al., 2007:4). In 2012, indirect offset again outnumbered direct offset by two to one in dollar value (Suman, 2012:2). Indirect offset investments typically prioritise computing and information technologies (IT), communication technologies and infrastructure, bio-technology, electronics, renewable energy, education, health and social activities and aerospace and defence manufacturing (Anderson, 2009:6).

In 2011, direct offset accounted for 48.7% of the actual value of reported US offset transactions (US Department of Commerce, BIS, 2013:5). In general, the global split between direct and indirect offset, respectively, appears to fluctuate in a range from 50-50 to 40-60. Saudi Arabia allows 50% indirect offset fulfilment if the solutions represent any non-defence projects approved by its Offset Committee (CTO Data Services, 2013b:243). Switzerland generally aims at a 40-60 split between direct and indirect

offset, respectively, though it is open to proposals for fully indirect programmes (CTO Data Services, 2013b:243). In Kuwait, direct offset is encouraged, but foreign companies may satisfy their offset obligations by proposing direct and indirect projects or by selecting a local partner, who may or may not be involved in the project (CTO Data Services, 2013b:149).

Dual-use items

However, the defence arena has seen a growing contribution from potential dual-use sectors, such as electronics and software, which thus blur the distinction between defence-related (i.e. direct) and indirect offset (Ilanakiev and Mladenov, 2008:189). Examples of dual-use items include software and hardware that use encryption, optical switches, optical fibre, digital video camera technology with more than four mega pixels, and “heads-up display” technology (DeRose et al., 2012:1-2). As a specific example, consider a laser rangefinder designed to classify and track moving targets. The product has civilian applications for airports and can also be used in remote weapon stations (Saab, 2013:1-2).

Dual-use technology makes it possible for indirect solutions to provide the means for defence projects as well as indirect non-defence assistance to take place simultaneously, resulting in economies of scale (Shanson, 2009:4). The growing use of dual-use technologies by defence ministries is resulting in more opportunities for consumer countries to participate in future cooperative programmes (Cassier, 2010:22). The new EC directive, however, aims to phase out any indirect offset.

2.8 OFFSET SHOWS A GROWING TREND

Reciprocal trade practices have increased dramatically in importance (Carter and Gagne, 1988). During 1996-2006, Europe as a region recorded an average offset demand of 98.4%, staying ahead of North and South America (97%), the Middle East and Africa (44%) and the Asia-Pacific region (39.1%) (Behera, 2009:2).

In spite of the restrictions envisaged by the EC, the 17th Annual Report to the US Congress on the Impact of Offsets recorded the highest-ever number of countries involved in offset in 2011 (Shanson, 2013b:1). In 2010, the 16th Annual Report revealed

a decline in both the number and value of offset contracts with US contractors, but the 17th Annual Report showed an astonishing rebound in the number of offset agreements concluded by US DCs (Shanson, 2013b:1).

Although the worldwide economic decline depressed arms sales during recent years, increasing tensions with Iran drove the Persian Gulf nations of Saudi Arabia, the UAE and Oman to purchase American weapons at record levels (Shanker, 2012:1). Overall, the data for 2011 show an increase over 2010 of 145% in the number of new offset agreements, 125% in the number of countries participating in those agreements, and 96% in total value.

In 2011, overseas weapon sales by the US tripled, reaching US\$66.3-b and representing more than three-quarters of the global arms market of US\$85.3-b (Shanker, 2012:1). The value of US merchandise exports cannot be directly compared with the value of defence export sales contracts and offset agreements because export data reflect actual shipments made during the calendar year and there is usually a delay of several years between the conclusion of a contract for a defence sale and the beginning of shipments (US Department of Commerce, BIS, 2013:5-6). Defence-related merchandise exports in 2011 totalled US\$14.9-b and the US industry reported entering into offset-related defence export sales worth US\$10.8-b, representing 72% of total US defence exports (US Department of Commerce, BIS, 2013:6).

The ten countries involved in new offset agreements with the US during 2002-2011 are not identified in the 2011 report for commercial reasons, making it impossible to assess the impact, if any, of Directive 81 on offset agreements through this source (Shanson, 2013b:1).

2.9 OFFSET IN THE EU

The use of offset within the EU has been widespread (Campos et al., 2012:1). In 2003, offset averaged 96% of primary contract value (Ashby, 2003:1). During 1993-2006, Europe required an average offset quota of 90.89% (US Department of Commerce, BIS, 2007b:13). The regional total for Europe between 1993 and 2006 was 98.4%, or more than double the total for the Asia-Pacific region. The figures for South America are not

mentioned, making it difficult to compare the European total with those regions (US Department of Commerce, BIS, 2007b:13).

Table 2.6 Offset percentages by country and groups, 1993-2006

EUROPE		NORTH AND SOUTH AMERICA	
Country, Groups	% Offsets	Country	% Offsets
Austria	172.2%	Brazil	W
Belgium	80.1%	Canada	97.0%
Bulgaria	100.0%	Chile	W
Czech Republic	20.0%	Region Total	97.0%
EPG	100.0%		
Denmark	27.8%	MIDDLE EAST AND AFRICA	
Finland	100.0%	Country	% Offsets
France	84.6%	Egypt	N/R
Germany	100.0%	Israel	48.3%
Greece	114.2%	Kuwait	32.7%
Hungary	100.0%	Saudi Arabia	W
Italy	93.8%	South Africa	116.0%
Lithuania	100.0%	Turkey	46.6%
NATO	55.8%	UAE	57.8%
The Netherlands	117.3%	Region Total	44.0%
Norway	101.8%		
Poland	167.7%	ASIA-PACIFIC	
Portugal	48.3%	Country	% Offsets
Romania	87.1%	Australia	45.8%
Slovakia	89.0%	Indonesia	N/R
Slovenia	58.6%	Malaysia	37.3%
Spain	89.2%	New Zealand	W
Sweden	103.9%	Philippines	100.0%
Switzerland	78.9%	Singapore	W
United Kingdom	82.0%	Republic of Korea	58.5%
Region Total	98.4%	Taiwan*	22.0%
		Thailand	26.6%
		Region Total	39.1%

N/A=Not Applicable; N/R=None Reported; W=Withheld to protect company proprietary information

* For the purposes of this report, when “country” is mentioned and Taiwan is included in the discussion, “country” refers to both countries and economies.

Source: BIS Offsets Database (US Department of Commerce, BIS, 2007b:13).

The 1993-2005 table (US Department of Commerce, BIS, 2007a:2-13, Table 2-5) recorded the percentage of offset for Denmark as 100% and for the EPG as 27.8%, which may indicate that the percentage for Denmark in Table 2.6 should be 100%.

France and Germany have announced that they no longer accept offset, a fact that influenced the regional total for Europe (Eriksson et al., 2007:3). After former French president Jacques Chirac’s reforms of defence procurement in 1996, France declared that it would stop requiring offset (Eliassen, 2002:11), and the last official offset for

France was apparently recorded in 1995 with the procurement of Hawkeyes from Northrop Grumman in the US, requesting a mix of 100% direct and indirect offset. France reversed its offset trend drastically after the launch of Directive 81 (see the discussion of France in Chapter 4).

The case of Germany is more complicated, because historically Germany does not have any recent tradition of a defence industrial policy, instead strongly advocating for more European integration regarding defence procurement (Eliassen and Skriver, 2002:5). Germany appears to have made an official announcement when the EDA established its offset portal in 2005, but has not updated this statement. About 70% of Germany's major arms purchases come from international cooperative agreements of various sorts, and Germany has shown preferences for solutions prioritising "global balance" instead of traditional offset. It is therefore stated that Germany has a "slightly more limited use of Offset" (Eliassen and Skriver, 2002:6). Since the launch of Directive 81, Germany stated that it retains certain rights related to offset (see Chapter 4).

Exceeding a 100% offset quota

During 2000-2004, European countries received offset equal to 107% of the value of export contracts for US military equipment (Hawkins, 2006:1). The average offset obligation among EU MS from 2000-2006 was as high as 135% of contract value (Eriksson et al., 2007:4). In 2003 the offset required by foreign governments represented 122% of the value of US defence exports (Hawkins, 2006:1). To fulfil such high quotas of offset, the sellers had to either negotiate high multipliers or ensure that the manufacturing costs in the purchasing country were far below their national level, unless they relied on differences in exchange rates to overvalue their offset contributions. The sellers also had to be sure that they had enough other projects to keep their own workforce employed.

If the indirect offset requirement was high, sellers could also implement marketing and sales support programmes for non-defence products being manufactured in the buying country. For example, appointing two sales and marketing experts in the US to market and sell Bulgarian products could bring an economic benefit to Bulgaria far surpassing the cost of employing the two persons. The seller could thus have earned offset credits for every hour of marketing and every US dollar that flowed into Bulgaria.

100% cap on Offset quota

In 2008 the EDA issued a Code of Conduct on Offset for its 26 EDA participating members (pMS), establishing a cap of 100% of the contract value for offset (EDA, 2012c; Campos et al., 2012:1). Until 2009 the offset quota in Bulgaria, for instance, was for 110% of the value of the purchase contract (CTO Data Services, 2009a:35) Other countries that required offset in excess of 100% included Austria, Greece, Hungary, Poland, the Czech Republic and Romania. They were all reluctant to accept the EDA's 100% cap, arguing that they did not have the industrial capacity enjoyed by larger European countries (Shanson, 2008:3).

EDA's non-binding voluntary code of practice, with no legal enforcement mechanisms, took effect in July 2009 (Campos et al., 2012:1). The Code aimed to ensure the more transparent use of offset that can assist in shaping the EDTIB, eventually reducing reliance on offset (EDA, 2010:9, 16-7). It opened all defence procurement opportunities of €1-million or more in pMS to suppliers with a technological and/or industrial base in each other's territories (EDA, 2005:1).

All pMS subscribed to the non-binding Code except Romania, while non-EDA member Norway did subscribe (US Department of Commerce, BIS, 2012:35). Currently, the Code applies when a pMS invokes Article 346 TFEU, resulting in Directive 81 becoming not applicable (US Department of Commerce, BIS, 2012:35). In 2009 in the EU, offset percentage returns demanded were at 92.38% on average across the trading bloc (Anderson, 2009:4).

2.10 OFFSET POLICIES

Offset should primarily be used to strengthen the niches that constitute the strategic benefits of the defence industry (Ajaxon, 2006:slide 14). The countries requiring offset use it as an economic policy, a national security policy or even a public-private partnership programme (Nackman, 2011:517). Offset approaches of nations reflect and support the overall economic and industrial priorities contained in their defence industrial strategy (Kane, 2009:50).

Three tiers of defence development

Local emphasis varies according to the status of domestic industries (Anderson, 2009:4). Countries with advanced weapon-producing facilities generally dominate the global arms market with large defence industries and already possess highly advanced defence technology (Confer, 2008:1).

Industrially advanced countries with smaller defence industries can demonstrate a level of sophistication in niche areas. These countries rely on offset as a means of helping their own defence industry to achieve a great leap forward in capability and capacity (Confer, 2008:1-2).

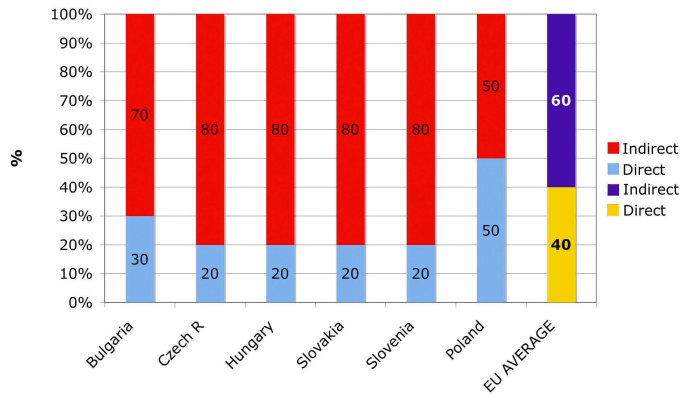
Countries with limited and technologically insufficient defence industries (e.g. Pakistan and Egypt) are unable to compete in the global arms market, yet they do sometimes export low-grade arms to Third World countries (Confer, 2008:1). These countries favour local production programmes through joint ventures, countertrade and compensation trade (buy-back offset); in this way they can also diversify portfolios of partners, approaching subsidiaries and smaller independent suppliers (CTO Data Services, 2013b:78, 204).

European government attitudes pre-2011

When we compare offset demands in the Central and Eastern European (CEE) markets with those in the EU, we find regional differences, as well as variations between nations (Anderson, 2009:6). The CEE region generally looks towards indirect offset to ensure wider economic growth and social infrastructure products, also prioritising employment and longer-term development in high-technology (Anderson, 2009:13, 6).

Western European States, which include sixteen EU MS, prioritise defence industrial participation and domestic military industrial capabilities (Anderson, 2009:1, 3).

Figure 2.5 Comparison of offset in Central and Eastern European and in EU markets



Source: Anderson (2009:6).

Where a preference was expressed, CEE nations generally insisted on direct programme participation of between 20% and 30% (26.6% on average) (see Figure 2.5), which is somewhat below the 40% overall EU average for direct offset (Eriksson et al., 2007:4).

Developing nations

Most developing powers seek global or regional status in economic, political and diplomatic terms and want a strong and modern military that can project their influence (SIPRI, 2012g:1). The development of domestic arms industries that reduce the dependence on imports for modernisation is a priority for all BRIC countries, plus South Africa and Turkey. BRIC is the acronym for Brazil, Russia, India and China, a group of four advanced or emerging countries with large populations and territories, abundant strategic resources and strongly growing gross domestic product (GDP) and global market share (Setti, 2011:3). The ambitious offset policies of developing nations may result in the ability to develop military hardware, but generally still offer no guarantee “that an indigenous defence sector will advance from the global periphery” (Dempsey and Ashby, 2011:5).

Asia

During 2001-2016, an estimated US\$122-b worth of offset obligations are expected to be recorded in Asia (Barney et al., 2012:3). South Korea has sought to use offset to develop local production, strengthen exports and expand its supplier base so as to

lessen its dependence on the US (SIPRI, 2012i:1). Over the past decade, South Korea's "dual procurement" policy promoted local growth in technological expertise, focusing on aerospace and electronics components for export (SIPRI, 2012i:1). This policy contributed to increasing the number of firms involved in activities related to arms production (Jackson, 2011).

Other prominent Asian countries with growing offset demands include Singapore, Malaysia and Taiwan (Baskaran, 2004:246). Singapore's ambitious offset policies resulted in the ability to develop military hardware, guaranteeing that its indigenous defence sector could attain global status (Dempsey and Ashby, 2011:5). "Singapore's defence industry appears to be thriving, largely because of its core competencies/niche production business strategy" (Bitzinger, 2004:264). Azerbaijan, whose defence industry was founded only in 2005, has produced an informal policy that requires many basic defence procurements to demand domestic industrial participation (CTO Data Services, 2013a:18).

The Middle East and North Africa

The UAE and Saudi Arabia have developed sophisticated offset policies that emphasise the attainment of advanced technologies while also benefiting social and economic interests and requiring joint ventures (Barney et al., 2012:2). In the UAE, the offset requirement is equivalent to 60% of the supply contract value and offset projects are expected to add economic and commercial value to the buying nation (Furter and Bozas, 2011:93). The defined level of obligation does not directly correspond to investments made in an offset venture, but to the value created by an offset venture in terms of contributions and profits generated over time. DCs must partner with the local private sector in commercially viable ventures, establishing a joint venture in the UAE, with the DC holding a minority share.

Offset credits are granted only when this joint venture makes a profit (Furter and Bozas, 2011:94). The UAE's revamped offset guidelines emphasise profits from newly formed offset ventures, job creation for Emirati nationals and the transfer of exportable technologies and capabilities (Barney et al., 2012:2). The focus of the requirements is about 80% on defence and defence-related projects, and 20% on high-tech, dual-use technologies suited to the UAE's requirements (CTO Data Services, 2012b:316). Africa

has shown an upward trend in requiring offset for public procurement from foreign sellers. Morocco is increasingly inserting industrial participation (i.e. offset) clauses into international tenders for both military and civil purchases (CTO Data Services, 2013c:189). In 2007, the Tunisian government stepped tentatively into offset in the domestic aerospace sector and auto industry, but it has not adopted offset policy in any other sectors (CTO Data Services, 2013a:300).

Equity requirement

When offset rules require the seller to establish a joint venture (JV) in the buying country, an increased effort is required to manage this JV in a foreign country, while shareholding requirements amplify the financial commitments involved (Furter and Bozas, 2011:94). In Saudi Arabia, JVs with 50% ownership by the foreign partners are encouraged. The investment may take the form of cash or capital equipment. In Kuwait, foreign ownership of JVs may be up to 49% of equity (CTO Data Services, 2013a:163). Obligor need to submit a five-year business plan in compliance with Kuwait's laws on JV partnerships. The foreign partner is responsible for managing the JV, employing and training local manpower, appointing an external auditor and submitting monthly reports highlighting work progress (CTO Data Services, 2013a:161).

2.11 OFFSET MANAGEMENT

Establishing offset knowledge and know-how is a decisive factor in a firm's success on the global stage (Sylvain, 2011b:slide 13). The offset department of a DC normally takes the lead in offset management, but other departments within the DC have to understand the offset process and commit to the effective management of activities that fall in their domains (Furter and Bozas, 2011:24).

Offset managers must be optimally placed in the company hierarchy, receive the necessary support from functional departments and have the required skills and business networks to ensure success. An offset manager requires many of the same skills as a manager of a global enterprise, including marketing and business development capacities plus legal, financial and management acumen (Furter and Bozas, 2011:38, 59).

Five stages of management by government

From a government perspective, the management of the offset process entails five stages (Kane, 2009:50):

- policy stage: formulate a national offset policy, clearly articulating the objectives to be achieved;
- planning stage: consider the nature of what is being procured and the capabilities possessed by likely bidders that can enhance domestic capability and technology;
- negotiation stage: receive bids and begin sole-source negotiations;
- implementation, monitoring and reporting stage: measure the fulfilment of a contractor's obligations and take corrective action in the case of non-fulfilment; and
- review stage: initiate a thorough review of the entire offset policy to assess the achievement of objectives and whether improvements are needed.

From the negotiation phase onward, governments interact with DCs as suppliers.

Five phases of defence contractor management

From a DC's perspective, offset management can be categorised into five phases: the pre-sales (marketing and intelligence) phase; the RfQ (tender) phase; the negotiation phase; the implementation phase; and the international cooperation and business development phase (Furter and Bozas, 2011:7).

Even in the pre-sales phase, the DCs have to start contemplating the requirements of the offset rules, ensuring that the supplier is ready to commit to the obligations and risks (Furter and Bozas, 2011:69). The tender phase (pre-contract) may result in a formal offset contract that is usually separate from the main contract, including negotiations with customers who are usually different from the main contract customer (Bell and Black, 2010:slide 12). The implementation phase (post-contract) constitutes the most difficult and riskiest phase for the DC, as it involves fulfilment of the offset commitment (Bell and Black, 2010:slide 12).

The fulfilment of the complete offset obligation is the responsibility of the prime contractor, who further has to submit the complete offset business plan, ensure that its

sub-contractors meet deadlines and fulfil offset activities as agreed upon in the legal agreements, and report on the fulfilment to the relevant offset authority.

Offset skills

Only contracts with foreign governments contain offset clauses. Four scenarios related to offset are possible, requiring a variety of skills from the offset personnel:

- no offset: the DC does not sell to any government that requires offset, and thus in-house offset expertise is not required;
- indirect or non-military offset: the DC sells to governments that are interested in developing their general infrastructure or non-defence industries, and the offset manager needs a wide range of general business skills and experience, as well as a solid general knowledge of various industries;
- a combination of direct and indirect offset: the DC sells to governments that require both direct and indirect offset, in which case the offset manager needs the necessary defence industry experience, as well as general business acumen to identify, propose and manage direct and indirect solutions; and
- direct offset: the DC sells to governments that require only direct offset and the offset manager will work closely with foreign sub-contractors and all departments in the DC to fulfil the offset obligation.

If a DC focuses on only a small number of markets, the requisite skills of the offset manager may be substantially determined by the countries to which the DC sells.

Inbound and outbound offset

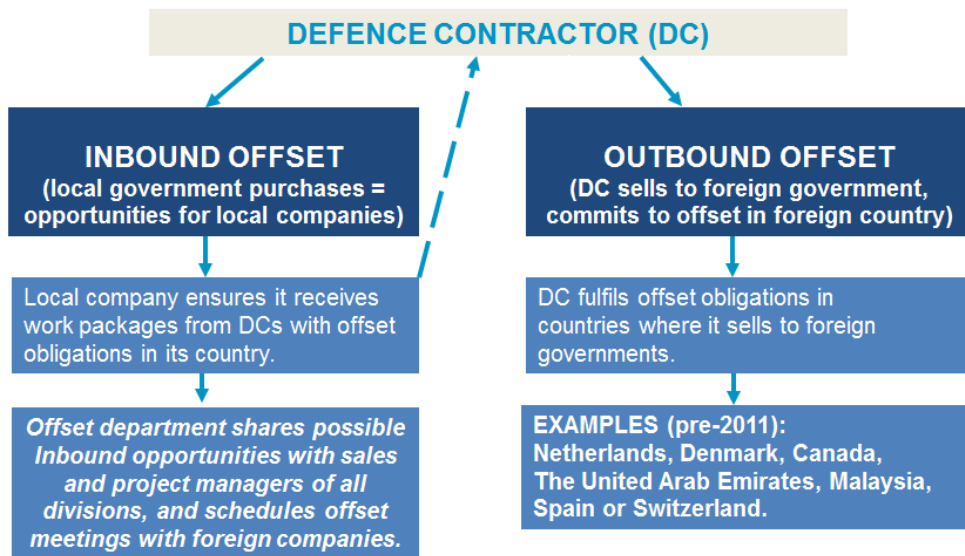
DCs that commit to offset obligations globally may be in line for returning benefits when foreign prime contractors sell defence equipment to the DC's government. In November 2011, Switzerland announced its selection of the Gripen E/F to replace its Northrop F-5E/F fighters, with Saab from Sweden beating rival offers by Dassault Rafale and Eurofighter Typhoon (Hoyle, 2012:2).

It was reported that all three bidders had provided good offset packages, essentially equivalent to 100% of the value of the deal. The industrial participation packages also were attractive across the board, the Swiss stated (Wall, 2011:1). This procurement made it possible for Swiss DCs to act as local sub-contractors to Saab, ensuring inbound offset benefits.

In May 2014 the national referendum narrowly rejected the government's planned procurement (Shanson, 2014f:7). Swissmem, the trade association that administrates offset for Armasuisse, stated that the no-vote will deprive the Swiss economy of CHF2-b of orders. In cases where the prime contractor (Saab) awarded contracts to various foreign sub-contractors, the purchasing country would have received an array of offset benefits from companies in various countries (Platzgummer, 2013:9).

Saab has no legal obligation to deliver industrial cooperation to Switzerland as the Gripen contract was never signed (Shanson, 2014g:6). However, the company meanwhile promised that it will continue working with Swiss companies and contracts placed will be honoured, subject to their terms and conditions. Before the referendum Saab had signed direct and indirect compensatory deals with Swiss companies worth CHF 400-m (US\$448-m).

Figure 2.6 Inbound and outbound offset focus



Source: Furter, 2014.

DCs interested in winning defence sub-contracts in their own country (inbound offset) need to market themselves as sub-contractors to foreign prime contractors. In this case an offset manager with a general knowledge of marketing, a wide global network, good negotiation skills and the ability to identify synergies across companies can add value.

Offset stakeholders

From the DC's perspective, offset stakeholders include the following (Furter and Bozas, 2011:69; Bell and Black, 2010:slide 12):

- offset authorities in foreign and local countries;
- offset policy makers and defence associations;
- offset institutions and forums;
- development agents appointed by foreign governments;
- academic and research institutions;
- DCs executive committees (management team);
- internal and external legal experts;
- internal programme finance experts;
- international treasuries (for performance guarantees);
- all departments and divisions in the DC;
- all relevant project managers; and
- foreign and local sub-contractors.

Summary of the offset process

The offset process for a DC can be described as including the interpretation of offset requirements, identifying suitable offset solutions, sourcing sub-contractors or partners, negotiating the offset contract, liaising with the offset authority and implementing and monitoring the programme.

Offset pre-2011

Prior to 2011, before the launch of Directive 81, offset in the EU was managed according to established national thresholds, with most governments requiring 100% offset. Offset plans had to comply with published and official rules drafted and managed by the relevant ministry in each MS. Requirements included a combination of direct and indirect offset or, in some countries, direct and indirect military (semi-direct) offset activities. Non-performance resulted in penalties or, in some cases, blacklisting. Governments exercised sovereignty to manage their defence and security matters and determine the process of offset fulfilment. The goal of the process was to leave the end-user in a position to independently use and maintain its defence equipment.

Table 2.7 Offset management activities in the various project phases

PROJECT	OFFSET MANAGEMENT
PRE-SALES	Offset manager proactively shares information on countries where company wants to sell; assesses players and possibilities.
TENDER	Sales team receives RfQ/RfP; shares it with offset manager.
	For 'go' meeting where DC decides whether it will make an offer: summarises project and opportunities. Offset manager assesses solutions according to national offset policy in purchasing country; drafts initial budget and initial risk assessment.
	When the DC is interested in the contract, an official project introduction meeting follows; project manager invites offset manager who presents a summary of the offset requirements.
	Offset manager together with project manager and sales staff summarises vital aspects and logistics of the contract, as well as the SoW, and links these to the offset requirements in the purchasing country.
	Offset manager and project manager list possible direct offset activities according to offset policy in purchasing country.
	Offset manager lists possible indirect offset solutions.
	Offset manager submits offset budget and risk mitigation plan, using official templates.
	Project manager submits detailed SoW; offset manager drafts offset concept that aligns with offset requirements and DC strategy.
	Procurement and offset manager identify subcontractors and suppliers; offset manager drafts subcontractor organigram.
	Offset manager submits summary of offset requirements to procurement to include in the RfQ to possible subcontractors, detailing their commitments.
	Top management approves offer.
NEGOTIATION	Offset manager negotiates offset agreement with offset authority in purchasing government.
	The DC's tender includes an offset proposal that complies with purchasing country's national requirements.
	When the tender is successful, an in-house offset meeting follows.
	Offset manager obtains approval for offset solutions from offset authority in purchasing country.
	Offset manager plans offset milestones with project team.
IMPLEMENTATION	Offset manager implement offset monitors and records activities, manages, reports and gives feedback to stakeholders.
INTERNATIONAL COOPERATION / BUSINESS DEVELOPMENT	Offset manager synergises offset solutions across all divisions in the group, and also ensures that the DC is awarded inbound offset contracts. Offset cooperation can offer new, global, long-term partnerships, serving as the first step to internationalisation.

Source: Furter 2014.

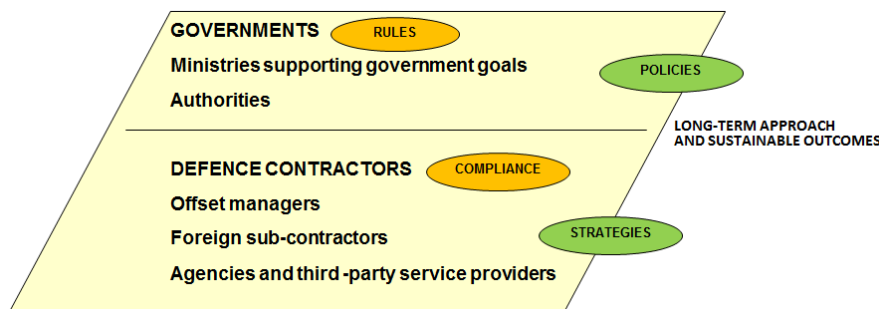
Activities of the offset manager in the various project phases are described in Table 2.7.

2.12 OFFSET STRATEGY

In an offset relationship, the participating government and the DC have divergent goals and strategies, with the government focusing on compliance with its national rules and the DC aiming to fulfil its corporate strategy. Governments that adopt an accounting approach and focus only on the rules may not embrace the future business value of offset benefits. DCs frequently tend to treat each offset obligation as a stand-alone event. Such disjointed and *ad hoc* efforts are expensive and pose undue risk. As DCs look abroad to ensure future income, a coherent offset strategy will become a critical enabler of success (Barney et al., 2012:3-4). “Offset strategy goes deeper than legal compulsion to accomplish specified offset targets across a prescribed time period”; it also encompasses industry and technology policy (Matthews, 2004:92).

Figure 2.7 Offset goals of governments and defence contractors

Governments and DCs have to adopt a long-term approach to ensure sustainable outcomes.



Source: Furter, 2014.

Authorities should link offset rules to policy outcomes, while DCs should link offset fulfilment to future strategies and sustainable business opportunities. In negotiating offset solutions, governments have to ensure that local benefits are not too dispersed to offer a significant local benefit and that the technology being transferred is current and valuable and can lead to new opportunities.

Government strategies

Foreign countries typically perceive multiple benefits from requiring offset, not the least of which is economic (Nackman, 2011:514). For example, Saudi Arabia’s “Al-Yamamah” contracts with the UK included an offset provision that aimed to develop locally a Tate &

Lyle sugar processing complex, a Glaxo pharmaceutical plant and commercial computer training facilities (Transparency International, 2010:8). Kuwait used offset to develop SMEs in the civilian sector, Malaysia's offset programmes ensured the development of its higher education sector through investments in universities, and Oman directed investments toward air traffic control colleges and commercial training (Transparency International, 2010:8).

The strategies of both China and India, as major defence spenders, serve to further merge defence and civilian capabilities, increasing the use of dual-use items in defence. A strategy of import-oriented industrialisation and neoliberal economic policies assisted Singapore, Malaysia, Thailand and Indonesia in developing conventional armed forces that could be sustained by their existing defence economies (Cruz de Castro, 2006:13).

Singapore's successes prove that offset strategies can work if pursued tenaciously and backed by sensible indigenous investment (Dempsey and Ashby, 2011:5). A strategic approach to accruing long-term benefits and a highly targeted approach to industrialisation, investment and technology transfer served Poland well (Anderson et al., 2013:56). "It is virtually certain that Poland will not abandon offset in the wake of Directive 81, which is likely to test the tolerance of the EC" (Anderson et al., 2013:56).

In 2014, Israel's Industrial Cooperation Authority published details of its offset activity in the past five years (2009-2013), showing that its policy had achieved more than five times the value of the obligations (Shanson, 2014e:4).

Offset in the US: Buy American

A vital segment of the US defence industrial base can be weakened when large prime US defence contractors agree to offset as part of large defence procurements with foreign countries (Hawkins, 2006:3). Various "buy American" provisions require that a European firm must locate at least some of its operations in the US if it expects to place a credible bid on a military project (Hawkins, 2006:2). However, the trend in America has been to waive these requirements of US content (Hawkins, 2006:3).

Although significant export control restrictions limit US DCs' participation in the international market (Nackman, 2011:513), offset is one of the many factors contributing

to the globalisation of the US industrial base (Schinasi, 2000:1). The DCs fulfil offset to ensure export sales and the positive effects that exports provide for the US economy and defence industrial base (Schinasi, 2000:2). US prime contractors consider offset an unavoidable cost of doing business overseas.

In fulfilling offset in the EU, the US defence industry has been viewed as a precious source of investment through co-production arrangements and as an essential factor in the development of local industrial capabilities (Maelcamp, 2011a:3). However, in 2010 US Department of Defense (DoD) prime contracts with foreign entities amounted to only US\$4.34-b, accounting for about 4.07% of total contract value (US Department of Commerce, BIS, 2012:15). In the same year, DoD prime contractors used foreign sources for only 5.5% (US\$7.75-b) of all manufactured goods purchased (US Department of Commerce, BIS, 2012:15). The US does gain various political, military and economic advantages when it and its allies use the same military equipment (DISAM, 2007a:1). The US DoD therefore aims for allies and friendly nations to purchase US rather than foreign systems (DISAM, 2007a:1).

Foreign military sales

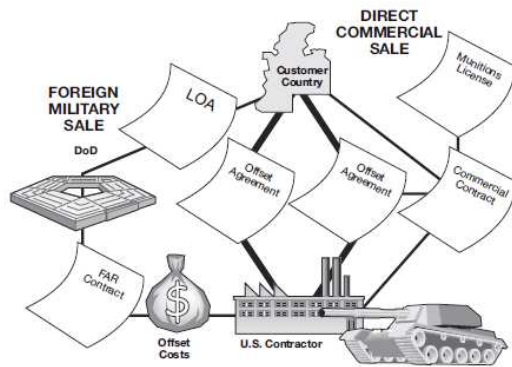
Foreign governments may obtain US defence articles and services through direct commercial sales or through foreign military sales (FMS) (Defence Security Cooperation Agency [DSCA], 2011:2). A commercial acquisition allows a US contractor and a foreign government to enter into a direct contract in accordance with US law and regulations and provisions of international commercial law (DISAM, 2007b:14). G2G agreements with the US government as one party are referred to as FMS contracts.

Through FMS, the US government is able to transfer defence articles, services and training to other sovereign nations and international organisations (DSCA, 2011a:2). FMS sales are seen as indirect sales of weapons produced by one or more US contractors, with the DSCA acting as the prime contractor's agent in promoting and selling US-manufactured weapons to foreign countries (Wikipedia, 2012:8).

About 160 countries are eligible to participate in FMS (DSCA, 2011:2). With the US being the world's biggest exporter of defence equipment, the country entering the FMS contract with the US can gain the benefits of higher order quantities, lower prices,

established processes and a competitive source selection (DISAM, 2007b:22). Offset is permissible under FMS; however, the US government is not a party to the agreement (DISAM, 2007b:19-20). Offset benefits that form a part of both DCS and FMS are fulfilled by US contractors.

Figure 2.8 US offset relationships



Source: DISAM (2007b:21).

Offset is permitted in association with FMS only when the customer pays with its own national funds or settles the purchase through repayable credit. If the purchase is paid for with US government grant funds or government-sponsored assistance programmes, the contractor is not allowed to claim offset costs (DISAM, 2007b:22).

No commercial export licenses

FMS agreements are also concluded when the US industry is prohibited from selling defence material commercially to foreign countries due to secrecy and/or security reasons. The Department of State (DoS) will not issue a commercial export license for sales restricted to FMS (DISAM, 2007a:1-2). In such cases, the US government acts as the seller to a foreign government. This practice can be seen as circumventing a trade barrier.

Nevertheless, all offsets are ultimately disclosed to the US government as part of an annual reporting requirement to the US Department of Commerce’s BIS. “Thus, the department of defence turns a blind eye to defense trade offsets in FMS and, in so doing, implicitly endorses the practice despite the official US government position

against offsets” (Nackman, 2011:527). However, if it prohibited US companies from participation in offset through regulation, the US government would cripple the international defence trade market—rather a global prohibition is needed (Nackman, 2011:528).

There are also G2G agreements, which occur when governments procure jointly, purchasing the same defence material and with the same configuration, so as to profit from ordering greater quantities at lower prices. G2G agreements represent one exemption to Directive 81, as will be discussed later.

2.13 OFFSET SUCCESSES

Offset in itself is a means, but its impact and effect are determined by the way in which it is implemented and managed. For that reason, the results of offset policy can vary widely between countries. “In the main, governments do view Offset as a win-win situation” (Matthews, 2004:90).

Offset successes can be found in a wide variety of industries including defence and aerospace, electronics, consumer products and shipbuilding, while also relating to maintenance, repair and overhaul (MRO) requirements in these industries. Some offset projects have resulted in effective transfers of advanced technology, high value added, significant training and export opportunities, and development of long-term, stable businesses (Georgariou, 2010:slide 7). Offset agreements that apply good business practices create economic value and benefits far beyond the offset commitment amount or period of performance (Georgariou, 2010:slide 5).

However, the varying levels of technological and industrial infrastructure often affect whether the technological developments are integrated into domestic arms production and whether the integration has the potential to lead to indigenous technological sophistication (Jackson, 2012a:1). Offset can support industrialisation if governmental, organisational and cultural factors contribute to, rather than hindering successful outcomes (Matthews, 2004:100). Brazil can point to the aircraft manufacturer Embraer as a prominent example of what can be achieved through offset. Nevertheless, Brazil's approach to offset has come at a cost. Despite being a world leader in the civil jet

market, Embraer has been extensively subsidised by government money (Dempsey and Ashby, 2011:2).

To ensure that offset will contribute to sustainable technological development, recipient countries have to construct appropriate Offset policies, provide the conditions for effective technology absorption to occur and foster a business environment conducive to promoting competitiveness (Matthews, 2004:100).

Offset success stories

In 2010, offset investments in commercial, industrial, financial and educational projects in the UAE created more than 40 commercially viable, profitable and sustainable joint ventures, attracting foreign investment in excess of AED8-b (US\$2.2-b), including four public joint stock companies listed on the UAE stock market (Industrial Development Program, 2012:1). More than 300 000 UAE nationals are shareholders in these public joint stock companies.

Singapore has used offset since the mid-1980s to facilitate technology transfers that allowed for the local production of components and involvement in R&D. The country's defence industries are niche specialists, and Singapore has adapted its offset strategies by investing 2.5% of its GDP in intellectual property as a national development objective (Dempsey and Ashby, 2011:4).

A leading aerospace company implemented an offset project in Chile to ramp up local entrepreneurs for global competitiveness (Georgariou, 2012:slide 8). An 18-month programme focused on establishing technology enterprises for international business development. Eight projects were selected for final business development and five project teams signed agreements with US clients.

The success story of Kale Aero in Turkey all started with a US\$50 000 offset offer (Yilmazkaya, 2010:slide 12). Kale Aero supported US Lockheed Martin Missiles and Fire Control (LMMFC) in the fulfilment of its offset obligations. In aerospace, Kale Aero developed into a manufacturer of complex mechanical parts, doing complex structural sub-assemblies (Yilmazkaya, 2010:slide 37). The cooperation led to a long-term partnership, ensuring valuable projects in Turkey via job creation, investments, and

technology and knowledge transfer along with several other value-added programmes that benefitted the Turkish economy (Yilmazkaya, 2010:slide 12).

Between 2006 and 2011, an offset project that focused on global technology commercialisation in India generated more than US\$75-m in sales for a wide spectrum of innovations (Georgariou, 2012:slide 9). An independent study of revenues generated by participating ventures calculated total benefit of over US\$110-m (Georgariou, 2012:slide 10).

Offset has contributed significantly to the development of defence industrial capabilities in Poland. The country has signed 16 offset contracts, worth more than US\$8-b by the end of 2010. Offset agreements made it possible for the Polish companies to boost their profits, expand product portfolios and take advantage of advanced technology transfers (Shanson, 2011f:7). Firms such as WSK-PZL Rzeszow won access to new markets because of cooperation with contractors such as Sikorsky and Hamilton (Shanson, 2011f:7).

Eurofighter

The Eurofighter offers a good example of compensation practices even in tight financial times. Different parts of the aircraft were built in Italy, Spain, Germany and the UK, with each partner country assembling its own aircraft using parts built all over the EU. This approach resulted in duplicated manufacturing facilities across the EU; however, it allowed each nation to receive a fair financial return from its investment in the project (Edwards, 2011:6).

2.14 OFFSET RISKS

A SWOT analysis evaluating the strengths, weaknesses, opportunities and threats of Swiss offset found that, while offset is a “door opener” and assists in the procurement of manufacturing process certification, sustainability is left to the companies receiving the offset benefits, and the degree of transfer of high technology may be limited (Rapaz, 2004:86-87).

Table 2.8 Offset strengths and weaknesses

Strengths	Weaknesses
<ul style="list-style-type: none">• Door opener• Management knowledge transfer• Increase company image• Procurement of manufacturing process certification	<ul style="list-style-type: none">• Sustainability of business is left to companies' responsibility• Large dispersion of the indirect participation across the Swiss industry• Restrictive duration of the agreement• Accounting approach of the offset controls• Limited transfer of high technology

Source: Rapaz (2004:87).

Some limitations of traditional offset include the following (Georgariou, 2010:slide 5):

- participation by local industries is typically limited to a specific period and linked to the acquisition contract;
- offset sometimes results only in short-term benefits;
- local industries may believe that they are entitled to participation, influencing their business approach; and
- offset projects can fail to make good business sense when parties focus only on complying with the rules.

In meeting the government's offset objectives, such as reducing financial outflows, ensuring national economic transformation and enhancing skills and employment, the DC may face the following risks (Anderson, 2012:slide 6):

- intellectual property may be misappropriated;
- the DC may create competition that may decrease the future viability of the DCs products; and
- the sub-contractors in the purchasing country may not be sufficiently experienced to optimise the benefits.

Risk management

Offset risks should be identified before the decision is made to respond to a RfQ (Furter and Bozas, 2011:90). From the DC's perspective, the top five offset risks have been identified as follows (Furter and Bozas, 2011:90):

- not understanding the offset rules and regulations in the buying country;

- non-performance, leading to the blacklisting of the DC;
- not finding suitable offset projects in the buying country;
- unforeseen costs of offset; and
- creating competitor companies in other countries through the transfer of technology and knowledge.

The uncertainty around the implementation of Directive 81 is currently engendering confusion about offset requirements in EU that could result in non-performance.

Risk checklist

Offset managers can use the Furter Offset Screening Checklist© when managing offset projects (Figure 2.9). Compliance with each point increases the chances that the risks will be alleviated.

Figure 2.9 Furter Offset Screening Checklist©

FURTER OFFSET SCREENING CHECKLIST©

1. Have the risks been fully assessed before the RFQ is submitted?
2. Has a clear ruling on the management of intellectual property of the defence contractor been obtained?
3. Is there adequate knowledge of the offset process in the purchasing country?
4. Have all stakeholders been made aware of the offset requirements and risks; what constitutes compliance; and what the implications of offset are?
5. Is there adequate knowledge of, and contact with, industries in the purchasing country, as well as an understanding of their needs and capabilities?
6. Has a detailed analysis of the offset costs and a budget to cover the expenditure been finalised?
7. Have all related trade regulations been complied with?
8. Has the best position with the offset authority been negotiated?
9. Have pre-approvals/swaps for offset activities been secured where possible?
10. Has the offset business plan been shared with all relevant departments and stakeholders, and have milestones been clearly communicated?
11. Have legal agreements been signed with all sub-contractors and service providers, and are processes in place for close and strict monitoring of offset projects?
12. Are there effective networks of experts, financiers and insurers?

Source: Furter and Bozas (2011:87)

Costs of offset participation

Inexperienced companies often underestimate the costs and the difficulties of offset and fail to make sufficient allowance for them, sometimes making projects unprofitable (Bulgin, 2006:9). An international survey of offset managers in 2010 indicated that the largest number estimated the cost of direct offset as three percent, with six percent as a close second choice. The estimated cost of indirect offset was agreed upon as being six percent (Furter and Bozas, 2011:63).

2.15 OFFSET FAILURES

In other cases, offset has been inefficient, unnecessarily duplicative and a source of market distortion (EDA, 2010:8). Given its imperfect environment, it is not surprising that offset projects do not always make good business sense for either party. In some cases the focus has been on fulfilment of an obligation and not on finding sustainable business synergies (PriceWaterhouseCoopers, 2009:74).

Offset agreements can be views as a honeymoon; without the right strategy and support, they will not necessarily result in the emergence of major new participants in the defence industry (Dempsey and Ashby, 2011:3). Offset benefits may dwindle before a country is able to optimise its benefits. However, in cases where offset does not create much expansion, employment and/or foreign capital, countries may still sustain the practice in order to become self-reliant, ensuring SoS.

The continuation of government subsidies in Brazil shows that, despite the best efforts of its offset policies, the country remains far short of attaining financial self-reliance in the manufacturing of aircraft of any type (Dempsey and Ashby, 2011:3). India's offset rules were designed to ensure development of the country's financial and technological capabilities, yet as of 2009 the Indian defence industry could fulfil only 30% of the armed forces' equipment needs, leaving the nation still heavily dependent on imports of military hardware (Dempsey and Ashby, 2011:3).

Barriers to entry often a cause

When considering offset failures, the bigger picture has to be considered. Barriers to entry into the global defence marketplace remain substantial, with brand loyalty and

prior combat success representing formidable obstacles to the acceptance of new products, while personal contacts and networking are also crucial (Dempsey and Ashby, 2011:4). A lack of political will creates further obstacles.

Europe's fighter aircraft

In Europe, the lack of joint political will and the dominance of national ambitions in developing a European fighter aircraft have led to the creation of multiple programmes (Gripen, Eurofighter, Rafale) and the diffusion of R&D spending (Bergstrom et al., 2008:41). Failure to ensure European cooperation resulted in increased programme costs, slipping deadlines, difficulties with export sales, and potential loss of skills for the countries that engaged in a commercially non-viable programme; moreover, it facilitated the emergence of a US combat aircraft programme, the F-35 (Bergstrom et al., 2008:41).

2.16 OFFSET TRENDS

By 2000 countries were becoming increasingly sophisticated in their use of offset to achieve regional industrial and employment goals (Schinasi, 2000:3). Trends as of 2010 included the following (Georgariou, 2010:slide 8):

- fewer offset credits for higher levels of technology, i.e., a reduction in value or elimination or reduction of multipliers;
- non-negotiable, onerous terms and conditions;
- increased reliance on penalties and performance guarantees;
- reduced periods of performance;
- fewer credits awarded for offset performed; and
- increases in minimum offset percentages.

Longer-term coherent strategies

In 2012, despite criticisms from the US and ambivalence within the UK, the emergence of global offset policies kept shifting from vague practise recommendations to more coherent long-term strategies. Outside the EU, the scope of offset obligations is increasing in terms of both the quota required by the buyer and the range of contractors obligated (Defence Viewpoints from the UK Defence Forum, 2010:1-2). The means by which obligors can discharge offset are becoming more challenging, and paying

penalties rather than fulfilling obligations is no longer an option in many countries (Barney et al., 2012:3-4).

Objectives behind the reform of offset procedures have been relatively consistent across emerging defence markets (Anderson, 2012:slide 6). International trends in 2012 included the following (Anderson, 2012:slide 4):

- lower offset thresholds;
- increased quota demands;
- greater emphasis on export facilitation;
- greater emphasis on transfer of technology (ToT);
- offset banking opportunities;
- higher penalty percentages or a shift from liquidated damages—where payment of a penalty absolves the DC from fulfilling the non-performed percentage—to penalties under which the liability for the outstanding obligations remains;
- greater tolerance of indirect military offset; and
- growing alignment of offset protocols with broader national economic transformation strategies.

The EU views the role of offset as transitional and aims to create a Single Market for defence, develop the EDEM (European Defence Equipment Market) and ensure a solid EDTIB (European Defence Technological and Industrial Base). The EU's policies are moving closer to free trade capitalism, aiming to treat offset as an exception rather than the rule. Europe-wide sourcing is supposed to diminish in magnitude the positive market-opening role of offset and increase its market-impeding role (Sturesson, 2008:28).

Article 346

Article 346 TFEU stipulates that MS 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”, provided that certain conditions are met (Andresen, 2011:1). The application of this exemption potentially permits MS to procure defence material without adhering to the EU treaties or secondary legislation (Andresen, 2011:1).

Single Market

The Single Market is seen as the greatest success of the EU, with the free movement of people, goods, services and capital leading to lower prices and an increase in trade (Edwards, 2011:3). Offset is viewed as representing a violation of such fundamental freedoms, also discriminating on grounds of nationality (Eriksson et al., 2007:25). However, in both cases offset seems to be justified by Article 346, as national security interests should take priority above commercial trade rules.

The EC has struggled to impose these basic economic freedoms on the EU defence industry, which remains highly fragmented and is developed with national aims. Defence procurement in the EU has remained unaffected by European Community law because of the extensive reliance on exceptions permitted under Article 346 TFEU (Ilanakiev and Mladenov, 2008:191). A total of 75% of defence equipment in the EU was procured within national boundaries in 2009 (Edwards, 2011:3). MS have applied the Article 346 exception for almost all defence procurements. The ECJ (European Court of Justice) and the EC state that the exception related to national security does not provide a general exception in relation to defence procurement. "Derogations need to be narrowly interpreted and justified on a case-by-case base" (Ilanakiev and Mladenov, 2008:191).

The abolition of exemptions to EU law is expected to result in an EDEM comparable to the Single Market (Hartley, 2011:111). The EC aims to establish new instruments that would ensure the liberalisation and efficient management of markets in order to ensure that the EDEM provides equal opportunity for participation to companies from all MS, without consideration of their size, nationality, history or current involvement (Ilanakiev and Mladenov, 2008:194). The EU founded the EDA to develop European defence capabilities that will minimise the role of the security exception contained in Article 346 (De Vries, 2011:3).

Defence Package

In providing legal instruments aimed at liberalising the EDEM, the EC adopted a more active role in defence procurement. The EC's Defence Package includes the Directive on Defence Procurement (Directive 81), focusing on the award procedures for defence and security contracts, and the Directive on the Transfer of Defence-related Products

within the EU (Directive 43), which targets licensing for the transfer of defence and security goods among MS (Ilanakiev and Mladenov, 2008:192).

Directive 81 aims to achieve a common European defence market by reducing the widespread reliance on Article 346 TFEU as an automatic exemption to the EU rules on procurement (Andresen, 2011:3). The article provides that measures to protect a country's essential security interests "shall not adversely affect the conditions of competition in the common market regarding products which are not intended for specifically military purposes", making it more difficult to justify indirect civil offset (Eriksson et al., 2007:27). However, the changing dynamics of the defence industry, its merging with the security industry and the increase use of dual-use items and technology may all serve to elevate the position of indirect offset in the future.

Capacity to compete

If the prevalence of offset is reduced in the EU but the rest of the world continues to demand industrial and economic compensation in contract negotiations, the European defence industrial base will lose competitive ground (Onugha, 2010:21). Defence budget cuts are further delaying procurement programmes, with some being cancelled. With Directive 81 endeavouring to narrow the military offset practise among MS, it is expected that countries such as Poland, which have opted for notable defence modernisation programmes, will at least partially cover military offset requirements under indigenisation strategies designed to enhance their self-reliance (Kimla, 2013:slide 19).

2.17 CONCLUSION

Chapter 2 has explained offset as a concept and discipline, analysing its various forms of protectionism. While the focus of the study is on defence offset, civil offset has also been explained. Various policies and strategies disclose the aims that governments hope to achieve by requiring offset, along with the methods applied by DCs to comply with these provisions. Offset trends show that the discipline has been favoured by more than 45 countries to ensure defence capabilities, with varying results. Country requirements reflect roughly equal preferences for direct and indirect offset, with some variations by continent or region.

Until August 2011, offset has been solely the responsibility of individual governments, exercising their sovereignty in defence matters. Since 2011, within the EU, the EC has endeavoured to overrule defence procurement decisions, specifically with reference to Offset. Directive 81 reinterprets Art 346 TFEU, dictating a new defence procurement process for EU MS. All MS have transposed the Directive into national law; however, nearly three years after the implementation of the Directive, most MS still claim the right to call upon Article 346 to protect their essential security interests.

Security of supply is national

The EU approach to defence procurement has created challenges because no specific definition for “national security” is given. The scenario in each MS is unique, dictated by geographic position, diplomacy, political and economic power, power projection and security threats. The dawdling and diffident implementation of the new legislation pertaining to defence procurement in the EU suggests that many member governments view the seat of SoS as national.

Nearly three years after the implementation of Directive 81, it is still not clear exactly what percentage of offset benefits EU MS are forfeiting by implementing the Directive. As long as offset is a global practice, the EU cannot gain by aiming to eliminate offset.

The next chapter will present a comprehensive review of the literature related to defence, procurement, and offset policy; the defence industry and market; the essence of Directive 81; and military consolidation in the EU.

CHAPTER 3

GOVERNMENT POLICY, THE DEFENCE INDUSTRY, AND THE DEFENCE MARKET

3.1 INTRODUCTION

This chapter draws on available literature to provide essential background on topics relevant to the future of offset in the EU defence industry. Defence policy defines military scope, alliances and national security, and various global statutes and economic issues have influence on the EU defence industry. To narrow the focus, this chapter covers the most relevant considerations in the following topic areas:

- EU defence policy, especially with regard to government policy, procurement, offset, and development of the EDTIB (European Defence Technological and Industrial Base);
- the defence industry, particularly the history of efforts to consolidate the EU defence industry and its relationship with the US defence industry, EU-US transatlantic relationship, and defence industrial bases (DIBs);
- the defence market generally as it impacts the EU defence industry, arms transfers, and the revolution in the market;
- Directive 81 and its implementation; and
- expectations and possible scenarios for the future.

The scope of the literature review includes academic works, policy papers, proceedings of offset-related conferences, and media reports. Literature related to Directive 81 has more of a political characteristic than operational defence matters. However, with the defence industry requiring a high level of confidentiality, information on tenders, offers and defence strategies is still not common knowledge.

3.2 THE EU: ITS STRUCTURE AND DEFENCE POLICY

Many analysts argue that Europe's relevance in world affairs depends increasingly on its ability to speak and act as one (Mix, 2013:i). The EU was established to advance European integration and implement a CFSP (Common Foreign and Security Policy) (OJEU, 2009a:16), giving the EU a single voice in the area of foreign policy and security (Civitas, 2012:1). The EU has developed into a political community with comprehensive regulatory powers, and EU membership serves as a proper mechanism of territorially

defined exclusion and inclusion (Börzel and Risse, 2000:1). The EU may act only within the limits of the competencies conferred upon it by the MS in the two core functional treaties: the TFEU (Treaty on the Functioning of the European Union) and the TEU (Treaty on European Union) (Eur-Lex, 2012a:41). As an institution, the EU possesses sovereignty rights in a wide variety of policy sectors “reaching from exclusive jurisdiction in the area of economic and monetary union to far-reaching regulatory competences in sectors such as transport, energy, environment, consumer protection, health and social security” (Börzel and Risse, 2000:1). These EU rights are increasingly penetrating the core of traditional State responsibilities, such as internal security. However, in the past, the penetration of state responsibilities by EU sovereign rights has been less evident in foreign and security policy (Börzel and Risse, 2000:1).

Development of the Single Market

The EU has developed the Single Market (also known as the Internal Market) through a standardised system of laws that apply in all MS (Fontaine, 2006:29). An integrated market for financial services has been completed and tax barriers have been reduced. As a result of directives covering services, supplies and works in many sectors, including water, energy and telecommunications, public contracts awarded by national, regional or local authorities are open to bidders from anywhere in the EU. With regard to technical barriers, EU countries mutually recognise national rules for the majority of products, and any product legally manufactured and sold in one MS must be allowed to be placed on the market in all others (Fontaine, 2006:30).

Competition policy

The creation of the Single Market, even though it officially excludes defence, had a major effect on the commercial strategies of European defence companies involved in both civilian and military production (Serfati, 2001:174). The EU’s robust competition policy that guarantees free trade within the Single Market (Fontaine, 2006:31) is implemented by the EC and enforced by the ECJ (European Court of Justice). The policy aims to prevent any agreement between businesses, any aid from public authorities, or any unfair monopoly from distorting free competition within the Single Market (Fontaine, 2006:31; 4.4 Competition law).

While the MS have control over their essential defence and security interests, the EU aims to establish a stronger European defence industry that is more competitive (Europa, 2008a:1). As a supranational power, the EU uses various instruments to steer outcomes in a certain direction, and one of its important stated aims is to ensure an effective defence. The EU believes that the sector's performance and competitiveness are being held back by an inadequate policy and legal framework (Europa, 2008a:1).

However, past institutional arrangements have often failed to coordinate the EU's full range of resources (Mix, 2013:i). The EU's foreign policy machinery has been stymied by internal differences and an unsettled identity (Risse, 2012:43). The foreign policy discourse of the EU is more inward-looking, and the differences among national identities prevent Europe from speaking with one voice in foreign policy matters. It is unclear if a more coherent EU foreign policy practise can emerge even if the UK exits the Union (Risse, 2012:43).

Common policy

The European Political Cooperation (EPC) was established in 1970 in response to calls by heads of state and MS governments to consult on foreign policy issues (Europa, 2012f:2). Military defence never formed a part of the EPC (Fink-Hooijer, 1994:197-8). The CFSP, established by the Maastricht Treaty of 1993 as a replacement for the EPC, expressed the EU's will to assert its identity on the international scene (Europa, 2012f:2). The CFSP's aims include the progressive framing of a common security and defence policy (CSDP), which may eventually lead to a "common defence" (OJEU, 2009c:6).

Common defence

The ToL (Treaty of Lisbon) describes the CSDP as 'integral' to Europe's foreign policy (Witney, 2013:1). In order to establish a more robust CSDP, EU MS have been exploring ways to increase their military capabilities and promote greater defence integration. The TEU (1993) sets out similar ambitions for an expanded role by the EU in defence, carrying forward the proposal from the draft Constitution for a group of states to set up "permanent structured cooperation" of their military capabilities under the auspices of the EU, as stated by Article 42(6) of the treaty (OJEU, 2009c:27).

Intergovernmentalism maintained

The TEU provided the EU with the necessary framework to combine efforts in the economic, political and security fields (Fink-Hooijer, 1994:197-8). Article 24(1) TEU states that the EU's competence in matters of CFSP shall cover all areas of foreign policy and all questions relating to the Union's security (OJEU, 2009c:20). However, Title V of the TEU, which relates to the EU's external actions and constituted a modified institutional and legal framework, maintained intergovernmentalism, meaning that objectives would continue to be entirely dependent on the political will of the MS involved (Fink-Hooijer, 1994:173). In comparison with other areas of national sovereignty, where responsibilities and common instruments are increasingly being shared, the CFSP demonstrates a lower level of integration (Wessels, in press:20). The inability of MS governments to reach consensus in this regard results in shortcomings in the EU's external policies. Some critics assert that on the whole, the EU remains an economic power only, with its foreign and security policies having little global impact (Mix, 2013:i).

Split identity

Defence procurement pertains partly to the Single Market—where the EC has considerable authority—and partly to foreign and security policy, where the MS largely dictate policy in a structure defined by intergovernmentalism (Eliassen and Sitter, 2002:8). The ToL gave the *unelected* EC greater authority over foreign policy and home affairs, challenging the principle that sovereign States should have control over these important policy areas (Civitas, 2011:5). The EC insists that equal competition and free intra-EU trade would stimulate a rationalised production process and create opportunities for a competitive European defence industry (Bailes and Depauw, 2011:5-6). From a strategic and economic point of view, the EU perceived a need to integrate national DIBs over the longer term (Fiott, 2013:2). “There is no MS consensus in favour of this”, and there has been enough opposition to prevent the creation of a Single Armaments Market under common procurement rules (Eliassen and Sitter, 2002:11).

In order to make the Single Armaments Market a reality, there appeared to be a need to move beyond legislation and harmonisation of rules and apply a wider range of policy tools (Mellár, 2009:79). The desire to institutionalise defence resulted in two new EC directives (2009/81 and 2009/43) that are central to the present study.

The EDTIB emerged as a response to challenges in Europe’s defence industry, but establishment of common arms procurement rules requires MS support, as well as a degree of integration with the CSDP (Eliassen and Sitter, 2002:11). The resulting discord has influenced various matters related to the CFSP, civilian crisis management, the Middle East peace process, terrorism and nuclear safety. It has been suggested that European nations may be sensing the development of “a perfect storm” (Jones, 2013:1) with regard to Europe’s ability to meet its defence and security commitments.

3.3 EU LAW

The EC, as the EU’s executive arm, drafts and implements EU legislation (EU, 2013b:1). EU rule of law is founded on treaties that have been approved—voluntarily and democratically—by all EU MS, constituting a binding agreement. If a policy area is not cited in either the TEU or the TFEU (previously called the EC Treaty), the EC cannot propose a law in that area (EU, 2013a:1). The MS remain the “masters” of the treaties and have the exclusive power to amend or change the constitutive treaties of the EU (Börzel and Risse, 2000:1).

Figure 3.1 The EU institutions



Source: Swedish Institute (2009:1).

Institutions that defend national interests are the European Council, the Council of the Ministers and the Committee of Permanent Representatives (COREPER), made up of ambassadors from EU MS and based in Brussels (Acepublishers, 2009:7). To exercise the Union’s competences, the institutions adopt regulations, directives, decisions, recommendations and opinions (Naglic and Papadopoulou, 2012:1).

Guardian of the treaties

The EC, as “guardian of the treaties”, holds wide powers to manage the EU’s common policies, such as research and technology, overseas aid and regional development (Fontaine, 2006:20). In this role, along with proposing legislation at the Union level, implementing policies and regulating the Single Market, the EC practices a phenomenon called decoupling—meaning that the EC buffers its formal structures from the actual work activities and handles the conflicting demands of the formal EU pillar structure and its practical activities as two processes (Mörth, 1999:16). The term refers to the organisational arrangements that define how the various bodies within the EU governance structure relate to each other. Through decoupling, the EC can handle the dilemma of being both the guardian of the pillar structure, on the one hand, and responsible for developing and changing that pillar structure, on the other (Mörth, 1999:16). The EC is a body independent of EU governments that upholds the collective European interest and should not take instructions from any national EU government (Fontaine, 2006:20).

The treaties form the primary level of EU legislation and the basis for a large body of secondary legislation that has a direct impact on the daily lives of EU citizens (Fontaine, 2006:17). Secondary legislation—which includes regulations, decisions and directives—is derived from the principles and objectives set out in the treaties and adopted by the EU institutions (EC, 2013a:1). The sources of EU law include (Naglic and Papadopoulou, 2012:1):

- the TEU and the TFEU;
- secondary acts of Union law, such as directives;
- general principles of EU law; and
- international treaties.

The rationale of directives

Within the context of EU law, a directive is a legislative act setting forth a goal that all EU countries must achieve (Europa, 2013b:1). Most EU law on employment and industrial relations is contained in EU directives (Eurofound, 2011a:1). Directives are used to align different national laws and are particularly common in matters affecting the operation of the Single Market (EC, 2012a:1). MS are bound only by the objectives (end results) laid down in directives and have some discretion in transposing them into

national law, taking account of specific national circumstances (Naglic and Papadopoulou, 2012:3). The working time directive, for instance, stipulates that too much overtime work is illegal, setting out minimum rest periods and a maximum number of working hours; each country may devise its own laws on how to implement this directive (Europa, 2013b:1). Even though EU law prevails in its MS, the Union depends on national courts and enforcement agencies to implement it (Pearson Education, 2010:58).

3.4 INTERGOVERNMENTALISM AND SUPRANATIONALISM

Defence still intergovernmental

In establishing the EU, the ToL abolished the pillar structure, resulting in decisions in the EU being taken in accordance with a procedure of common law, called the “ordinary legislative procedure” (Europa, 2011a:1). Almost all policy areas of justice and home affairs are ruled under the community method, prioritising qualified-majority voting and co-decision (Donnelly, 2008:1). The intergovernmental approach to political science attributes a central role to EU MS (Gehring, 1996:252).

While intergovernmentalism may be viewed as the basis for cooperative arrangement, it is a State-centred and static approach to institutions and therefore cannot cope with integration as a process of development over time (Gehring, 1996:225). This means that intergovernmentalism may at some point evolve toward institutionalism. In the meantime, important policy issues such as defence, foreign policy and taxation remain intergovernmental and the sole prerogatives of the States (Papic, 2011:2). Decision-making rules in the European Council appropriately reflect this reality, remaining strictly intergovernmental in the defence realm (Peters, 2011:23).

EU nations have had major internal disagreements on foreign policy issues such as the 1990 Gulf War, the 2003 Iraq invasion and the dissolution of Yugoslavia. “An EU defence policy that goes beyond strict intergovernmentalism would thus require a significant communicative effort to be justified and become accepted in several EU MS” (Peters, 2011:1). In contrast to other European policy fields such as trade, the EU’s institutional framework in security and defence (the CFSP and CSDP) currently requires unanimity among EU MS to decide on action in foreign and defence matters.

Cooperation is possible only if every MS agrees to participate, which notably complicates agreement (Acepublishers, 2009:16). The CFSP and CSDP are also completely excluded from supervision by the ECJ.

This exclusion results in a scenario where the compatibility of European foreign policy with the EU treaties cannot be controlled and where EU institutions cannot take legal action against MS that do not respect EU measures related to the CFSP and CSDP (Acepublishers, 2009:14). Neo-functionalists argue that the CSDP represents a sleeping supranationalism (Cassier, 2010:8), but the intergovernmental method continues to apply to the CFSP, giving the intergovernmental Council and not the “supranational Commission” the final word on the subject (Papadopoulou, 2007:4).

The limited authority of the European Parliament in the area of CFSP has the consequence of a lack of legitimacy (Acepublishers, 2009:15). Meanwhile, Europeans “have no organised foreign policy to speak of” (Speck, 2013:2). There is also little motivation or appetite among NATO supporters to develop an EU-based common defence and little indication that the EU will replace NATO as the European security organisation in the foreseeable future (Löden, 2012:277-8).

Equal confidence in security of supply

In defence procurement, the EU’s ultimate aim is “the achievement of equal confidence in SoS from any part of Europe”, including the long-term willingness of partner governments to facilitate supply and the survival of sources of key technologies (EDA, 2007b:3-4). The goal is to move defence procurement into the commercial domain, allowing the market to be dictated by supply and demand. In such case, exceptions to Single Market rules have to be managed clearly to restrain their use.

Exceptions

The GPA (Government Procurement Agreement) relating to general public procurement globally, as well as the TFEU and Public Sector Directive 2004/18 (Directive 18), make it possible to exempt applicable law to protect national security interests, as well as other essential interests.

Figure 3.2 Exceptions that allow offset



Source: Furter, 2014.

Policy options dealing with exceptions

In managing the use of exceptions the EC could either take no action, propose a non-legislative measure, or introduce a legislative measure (Europa, 2008b:32-3). Without amendments to procurement policies, the only instruments in the field of defence procurement available to ensure SoS would have been Directive 18, the EDA Code of Conduct for defence contracts (which includes the Article 346 TFEU exemption), and the Interpretative Communication on the use of Article 346 (Europa, 2008b:32). Non-legislative measures could have included an interpretive communication on the use of Article 14 of Directive 18; a more proactive infringement policy; and training of national contracting authorities and EC staff in the assessment of possible exemptions (Europa, 2008b:32-3).

When it opted for legislative measures, the EC could have composed a regulation, drafted a sector-specific directive applying to all contracts awarded by contracting authorities operating in the field of defence and security, or created a directive introducing into EU law new rules tailored specifically to defence and sensitive security contracts, by way of either an amendment to Directive 18 or a stand-alone directive (Europa, 2008b:3).

Legislative measure

Directive 2009/81/EC, which followed the third of these three options, was officially approved in July 2009 and launched on 21 August 2011, extending the rules of the EU Single Market to the defence area (Export.gov, 2011:2). Directive 81 reformed European acquisition procedures, with the EC guidance notes setting the conditions that

need to apply in order to exempt a procurement from EU law (Export.gov, 2011:2). Directive 81 stipulates rules for the opening up of the defence market to competition, requiring MS to publicly announce tenders for defence equipment and to avoid national preferences in allowing companies from several nationalities to tender (Liberti, 2011:30). The new law does not tell governments *what* to purchase, but *how* to purchase (Export.gov, 2011:3).

3.5 DEFENCE POLICY

A nation achieves national security by protecting its territorial integrity and sovereignty (Krause, 2007:1). Security and defence policy can be considered the first and last bastion of “national sovereignty” (Howorth, 2011:3). Governments need to ensure the continuing supply of defence materiel and/or services to their armed forces, without regard to external circumstances such as war, international unrest, shifts in alliances or disruptions of the supply chain (Heuninckx, 2011:30).

Europe has discovered that in order to maintain a credible and sustainable defence force, it needs the industrial and technological means to develop and produce military capabilities that are affordable and effective and that offer a strategic edge (Fiott, 2013:2). Offset is one instrument that governments have used to develop national defence industries that can, in turn, provide the state with defence material and eliminate reliance on other states for armament supplies (i.e. SoS) (Bailes and Depauw, 2011:4). The extent of state involvement marks the fact that the defence industry is not a normal sector of the capitalist economy. “Arms production is a case of national interest more than just an economic activity” (De Vries, 2011:1).

Delicate balance

A country’s independent assessment of its security environment is reflected in its defence policy (McCully et al., 2007:11), which deals with international security and the military. Defence policy determines the available means in the event of military aggression against a country, as well as the ways and means by which those ends are to be achieved (Tagarev, 2006:17). Foreign policy defines how a state should interact strategically to ensure peace and stability regionally or globally (Hualupmomi, 2012:1). Foreign and defence policy closely link to national security, addressing threats including

terrorism, wars, poverty, organised crime, corruption, irregular immigration and natural and man-made disasters (EC, 2011b:10). There is a delicate balance between security ambitions and economic aspirations in a policy area where both economic and security interests are at stake and where one may all too easily jeopardise the other (Bailes and Depauw, 2011:6).

The major factors affecting the formulation of a defence policy include (Hittle, 1999:2):

- geo-political settings, determined by geographic location and relations with neighbouring countries;
- global and regional security environments, determining the interest of influential nations in the area and regional conflicts;
- the country's own resources and designs, including the state of the economy, population and technological growth and the allocation of resources according to national security goals; and
- political structures and diplomacy, as a stable political system and well-conceived diplomacy ward off threats, shaping a conducive but tacit defence policy.

Geo-political trends can have a substantial impact upon security policy issues.

Examples include the breakup of Yugoslavia and the Balkan Wars at the end of the Cold War and the attacks of September 11, 2001 that led to the US invasion of Afghanistan and Iraq (Quille, 2009:14).

National policies integrating

Defence policy has traditionally been developed independently within a government. However, with defence markets opening up to competition and dual-use technology becoming increasingly important, involving more companies from the civil sector in the supply chain, defence and general industry policies have become more integrated at the national level (Ecorys, 2010:44).

3.6 PROCUREMENT POLICY

Public procurement affects a substantial share of world trade flows. In 2011, the total expenditure of EU governments, the public sector and utility service providers on works, goods and services was estimated at €2.4-b, representing 19% of EU GDP. Public procurement is identified as a means to promote innovation, stimulate SMEs, open up

markets in third countries for European businesses, and promote social inclusion, fair trade and environmental protection (Beuter, 2011:37).

In the EU, public procurement represents an essential lever for growth (EC, 2012e:1). There is potential for significant further competition in procurement markets because direct cross-border procurement remains low, accounting for only 3.5% of total contract values in 2011 (Ramboll Management Consulting, 2011:36). SMEs are important participants in the EU economy, employing almost 70% of the EU work force and generating nearly 60% of the EU GDP (Ecorys, 2012:9). However, “the variety of legal and tax systems in the different MS makes it time-consuming and expensive for SMEs to expand beyond their home country” (Mellár, 2009:78).

Defence procurement

Defence markets represent a close link to national security and sovereignty and traditionally have been among the most protected of any industrial sectors (EDA, 2012a:2). Armaments cooperation in Europe has proven to be difficult because of the following scenarios (Heuninckx, 2011:33):

- trade in arms can be exempted from the EU treaties (Article 346 TFEU), allowing the EU MS to protect their national defence industries from market forces;
- EU MS armed forces are quite different in terms of size and requirements, which complicates harmonisation; and
- the main European armaments producers are actually competitors on the export market, which is the one aspect that the EC wants to avoid.

The ability of defence-related companies in the EU to rationalise and consolidate their business through mergers and sales across borders is further restricted by some governments’ resistance to the cross-border restructuring of the defence-related industry. These governments believe that such restructuring would compromise the national SoS for crucial defence equipment and either reduce significantly the national DIB, or result in it becoming very specialised (Commission of the European Communities, 1996:9).

Despite the rhetoric about the need for competition and a common defence market, defence production in Europe is still an example of governments practising policies that

favour domestic companies (Bailes and Depauw, 2011:23). More than 50% of defence equipment procurement performed by the EU MS has been performed outside the framework of the EU rules on public procurement. From 2006 to 2008, for example, the Italian government awarded 60% of its new defence contracts to Italian firms, while 56% of new German defence programmes went to German suppliers (O'Donnell, 2010b:2). National awards are still the trend in the defence sector (see Table 4.8). As a result, procurement in the defence market remains quite different from procurement in commercial markets and is strongly influenced by broader political and industrial considerations that affect the "level playing field" of the EDEM (EDA, 2012a:2).

Toward a European Defence Equipment Market

In March 2003, the EC identified procurement law as one area for action toward the establishment of an EDEM (Eur-Lex, 2006:3). Further consultations confirmed that the existing legislative framework for defence procurement was not functioning properly, because the application of Article 346 TFEU remained problematic and varied considerably among MS (Eur-Lex, 2006:3). According to the ECJ, the use of the Article 346 exemption should be limited to clearly defined and exceptional cases and interpreted in a restrictive way (Europa, 2010:2).

The EC was convinced that important benefits could be derived by the defence community from applying "procurement procedures largely inspired by those applied in the EU's civil sector" (Commission of the European Communities, 1996:17). Using consensus as a policy, the EU started institutionalising defence and MS were requested to work together to address global challenges and pool civil and military capabilities (De Vries, 2011:3). "Such an integration of the armament market could be one of the biggest challenges that the EU has to face in order to achieve the CSDP" (Cassier, 2010:4).

The EC maintains that collaborative procurement can reduce costs and increase standardisation and therefore interoperability, which is a requirement of multinational operations (Heuninckx, 2011:32). By way of comparison, US political leadership and its armed forces are extremely reluctant to rely to any extent on foreign suppliers (Becher, 2004:21-22). The country protects its national defence companies via provisions such as the Buy American Act, indicating the minimum percentage of components made on US soil (Liberti, 2011:28).

The Pentagon awards around 98% of its procurement budget to US companies (O'Donnell, 2010b:1), strictly determining the ownership of technologies developed locally through International Traffic in Arms Regulations (ITAR) legislation that controls armaments exports (Liberti, 2011:28). ITAR jurisdiction is extraterritorial, requiring prior US State Department approval in order to send or take any ITAR-controlled commodity or related data out of the US. Subsequent transfers of the commodity or data outside of the US are subject to similar approval (Ordway, 2007:1). Once equipment enters the US domain, it becomes subject to US government decision. The US uses its political, diplomatic and military muscle to support defence equipment exporting activity by its national companies (Liberti, 2011:29).

3.7 INDUSTRIAL POLICY

The development of industries rely on *inter alia* industrial policy, skilled workers, effective governance and technological factors (Ecorys, 2010:19). An MoD requiring major weapon systems can procure them from the national industry only if that industry is able to design and produce a broad range of complex military equipment (Heuninckx, 2011:31). Smaller states purchase from foreign suppliers and rely on offset to develop or consolidate a defence equipment capability on national soil (Heuninckx, 2011:31). Licensed production can also be included in offset requirements, requiring less industrial capacity than the development of an entirely new weapon system, while still ensuring the existence of a local industrial base to support the national armed forces (Heuninckx, 2011:31).

Nationally oriented industrial policies restrict foreign companies from entering the domestic market and spare national companies the effort to compete against possibly more efficient producers from abroad (Bailes and Depauw, 2011:25). Offset makes it possible for local companies to become integrated with the global defence industry, prioritising access to regional markets and growing their technological capabilities (Varoğlu, 2011:32). Various defence industrial policy strategies aim to advance the national defence industries. Brazil and Russia prioritise export markets; India, China and South Korea focus on indigenous content and development; and China also prioritises dual-use technological development (Ecorys, 2010:19) as a means by which to enter the defence market.

EU MS, on the other hand, feature a range of industrial policies that are not fully compatible, either with each other or with the Single Market (Eliassen and Sitter, 2002).

European defence industrial policy is based on three components (Hartley, 2011:95):

- a traditional focus on collaborative defence equipment programmes (for example, the multinational Eurofighter Typhoon and Airbus A400M airlifter programmes);
- the 2005 initiative to create a single EDEM; and
- the 2007 initiative to maintain a strong EDTIB.

Three agencies are involved in implementing the European defence industrial policy. The Organisation for Joint Armaments Cooperation (OCCAR) is responsible for managing European collaborative equipment programmes. The EC is responsible for achieving the EDEM (Single Market), while the EDA is responsible for the EDTIB (Hartley, 2011:95).

The EDEM is seen as a step toward an industrial restructuring at the European level, as well as the “enlargement of the natural market of EU defence industries” (Simon, 2011:slide 5). The case for the EDTIB, meanwhile, is based in the proposition that “a fully adequate EDTIB is no longer sustainable on a national basis”, but should represent something more than the sum of its national parts (Hartley, 2011:95). However, it makes little sense to address something as sensitive and delicate as an EDTIB policy before Europe has a true CSDP (EDA, 2007a:12) and a CFSP that includes the correct aspects and players to reach a common position.

The EC states that its defence industrial policy is designed to provide a strong industrial base for the CSDP by promoting competition and innovation and supporting SMEs (EC, 2013d:1). The EC’s Defence Package, which includes two new EC directives (2009/81 and 2009/43 [Directive 43]), is at the heart of this policy, offering a legislative framework to improve competitiveness, ensure greater transparency and streamline relevant processes. Directive 43 introduced general export licenses and other instruments to accelerate and simplify intra-EU transfers of defence and military equipment and systems (see 3.19 Intra-EU transfers and Directive 43; 4.6 Security of supply, heading “Directive 43: Intra-EU exports”; and 4.25.3 Intra-EU trade).

3.8 OFFSET POLICY

Offset policy is a key aspect of trade and cooperation in the defence market, connecting national procurement to industrial development (Ecorys, 2010:44). Offset is a political and economic instrument that benefits local industry. Barriers to market access serve to compensate national defence industrial sectors for the prospective loss of work when foreign companies receive contract awards (EDA, 2012a:2). Whereas offset has been used in the past to promote the establishment of a level playing field in an imperfect market, the EC now wants to reduce offset in an effort to ensure a more competitive EDEM.

In the past, a total of 21 MS (including EEA member Norway, which is also required to transpose Directive 81) maintained offset policies, requiring compensation from non-national suppliers when procuring defence equipment abroad (Shanson 2009:1; see also Table 2.2). Figure 3.3 also includes MS Germany, which often has required bilateral work agreements, bringing the total number of MS to 22. Many MS normally requested offset equal to 100% of the contract value. Percentage returns demanded were generally 92.38% on average across the trading bloc, compared to the global offset average percentage of 63.5% (Anderson, 2009.4).

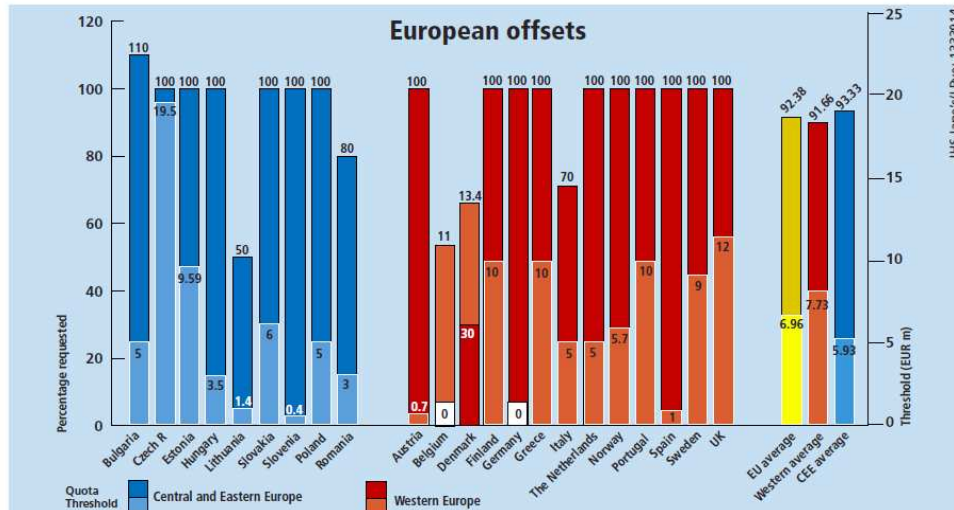
The following MS proclaimed that they resisted offset practice:

- Germany: no offset regulations; however, the German Federal Office of Defence Technology and Procurements (BWB) did negotiate bilateral work-share agreements in some cases (CTO Data Services, 2011a:85) and announced in 2013 that although the MoD does not request offset from foreign suppliers, in cooperative programmes it reserves the right to ask for direct offset, including work-share (CTO Data Services, 2013b:84);
- France: no formal countertrade and offset policy, but major acquisitions from overseas suppliers have occasionally been subjected to offset requirements (CTO Data Services, 2011a:84);
- Ireland: no offset policy, yet in 2007 the government asked for technology transfer and R&D projects between Irish companies and foreign institutions (CTO Data Services, 2012a:135);
- Luxembourg: decides on a case-by-case basis and may request offset for larger defence procurements (CTO Data Services, 2013b:166); and

- Latvia, Malta and Cyprus have no offset policies at all.

In contrast, non-EU countries have long histories of participation in barter, countertrade and offset and still generally demand 100% offset in defence deals.

Figure 3.3 Offset quotas and EU offset averages, 2009



Offset ratios represent typical minimum values. In practice, typical offset quotas have to date been higher. Belgium: offset percentage not stated by government; contractor should propose. Germany: offset threshold not stated.

Source: EDA/Jane's, in Anderson (2009.3).

Figure 3.3 shows that only Bulgaria still requested offset in excess of 100% in 2009, with four countries (Lithuania, Belgium, Denmark and Italy) requesting quotas below 100% (Anderson, 2009.4). Other sources indicate that Lithuania did request offset equal to 100% of purchase contract value (CTO Data Services, 2009d:159), as did Belgium (CTO Data Services, 2009d:18) and Denmark (CTO Data Services, 2009d:71). However, when an obligor in Denmark fulfilled 65% of the offset obligation within four years, it resulted in the discharge of the full obligation.

Policies in the BRIC nations (Brazil, Russia, India and China), South Africa and Turkey

Russia has concluded clearing account programmes with countries such as China and Vietnam, either to settle historic debt to Russia or to compensate for new purchases in, for example, the defence, energy and agricultural sectors (CTO Data Services, 2009b:216). In the late 1980s, direct offset demands from Third World countries could

not be ignored and the Soviets transferred manufacturing technology for spare parts and small arms to a large number of States (Kramer, 2011:66). The widespread diffusion of Soviet arms manufacturing technology concerned Moscow, which was reluctant to compromise Soviet technology. Former president Gorbachev came under national pressure to not grant co-production rights or major arms to additional Third World countries (Kramer, 2011:65-6); however, like all other defence exporters, Russia had to accept offset as a precondition to the sale. Today, Russia prioritises domestically developed programmes with technology transfer (CTO Data Services, 2013c:246).

In the 1980s, numerous less-developed countries exchanged local commodities for Soviet weapons (Kramer, 2011:65). India favoured triangular agreements and was transferring, for instance, technology and grain to the Soviet Union, including transshipments of American wheat during the US grain embargo in 1980 (Kramer, 2011:65). In Brazil, the offset quota is for 100% of foreign content value, though less may be accepted. The government intends to extend its offset policy to cover significant civil-sector acquisitions from foreign suppliers, requesting industrial participation and counter-purchase (CTO Data Services, 2012a:29).

China does not have an official offset or industrial participation (IP) policy; however, the country's first experiments with offset took place in the mid-1980s (CTO Data Services, 2009b:49). The government encourages countertrade to finance projects and to stop foreign-exchange outflows resulting from the purchase of machinery and equipment from abroad. Countertrade practices ensure an exchange of products, decreasing competition in goods that China traditionally exports (CTO Data Services, 2009b:50). The government procurement law of 2009 favours local companies and may effectively "encourage" foreign bidders to set up joint ventures in order to meet local content requirements (CTO Data Services, 2012a:49).

Offset is one of the main instruments used by the Undersecretariat for Defence Industries (SSM) in Turkey to engineer durable collaborations between Turkish and foreign defence industry companies. The SSM favours an ambitious offset policy that stimulates indigenous defence production and ensures technology and know-how transfer (Hakura, 2011:13). In 2009, 58.4% of civil aviation exports and 41.3% of

defence exports were generated as a result of the offset obligations of foreign contractors (Hakura, 2011:13).

The Middle East

Diversification remains a long-standing strategy for Saudi Arabia and the UAE in order to balance their economies, gaining greater economic growth in industries not related to oil (Anderson, 2009:17). Foreign defence firms seeking Saudi Arabia's business will face comparable challenges in the years ahead as the country aims to gain technology and increase import substitution and exports. The UAE seeks to channel defence-related investments into profitable projects in various sectors to help in diversifying its UAE economy (Anderson, 2009:17-8).

Central and South America

In Central and South America, it was expected that offset would become a more sophisticated component in internationally competitive equipment programmes for aircraft (Brazil) and ship (Chile) competitions (Anderson, 2009:18). Certain countries may still opt for countertrade or buy-back agreements as a form of economic stimulus.

3.9 THE EUROPEAN DEFENCE TECHNOLOGICAL AND INDUSTRIAL BASE

Article 42(3) of the ToL states that EU MS "shall make military capabilities available to the Union" for the implementation of the CSDP. The case for the EDTIB starts from the proposition that "a fully adequate DTIB (Defence Technological and Industrial Base) is no longer sustainable on a national basis" and that a truly European DTIB should be something more than the sum of its national parts (Hartley, 2011:95).

In the mid-1990s international (notably American) competition forced European defence companies to privatise in order to survive. A process of mergers and acquisitions resulted in international joint ventures and consortia (De Vries, 2011:1). Current conditions as of 2014 point to a possible new wave of privatisation, driven largely by the severe fiscal pressures and intensifying global competition facing European governments and industry, respectively (Balis, 2013:1). Privatisation, alongside industry consolidation and restructuring, will continue and may even briefly accelerate in the coming years, resulting in a dramatically changed DIB in Europe (Balis, 2013:2).

More integrated

At the EU level, MS have a range of defence industries with varying degrees of capability, competence and competitiveness (the three Cs), providing the basis for an EDTIB (Hartley, 2011:109). The EDTIB; however, needs to be more integrated, less duplicative and more interdependent with increased specialisation at all levels of the supply chain. A collective defence R&D effort is crucial, as is an accurate database on the EU's defence industries and their supply chains that takes cognisance of appropriate sovereignty and SoS issues (Hartley, 2011:109). The EDTIB Strategy (EDA, 2007b:2-4) sets the roadmap and highlights the critical enablers that can help to achieve the aspired objectives through:

- prioritising military capability needs by identifying the key technologies and key industrial capabilities that need to be preserved or developed in Europe;
- consolidating demand;
- increasing investments;
- ensuring SoS; and
- increasing competition and cooperation.

State ownership

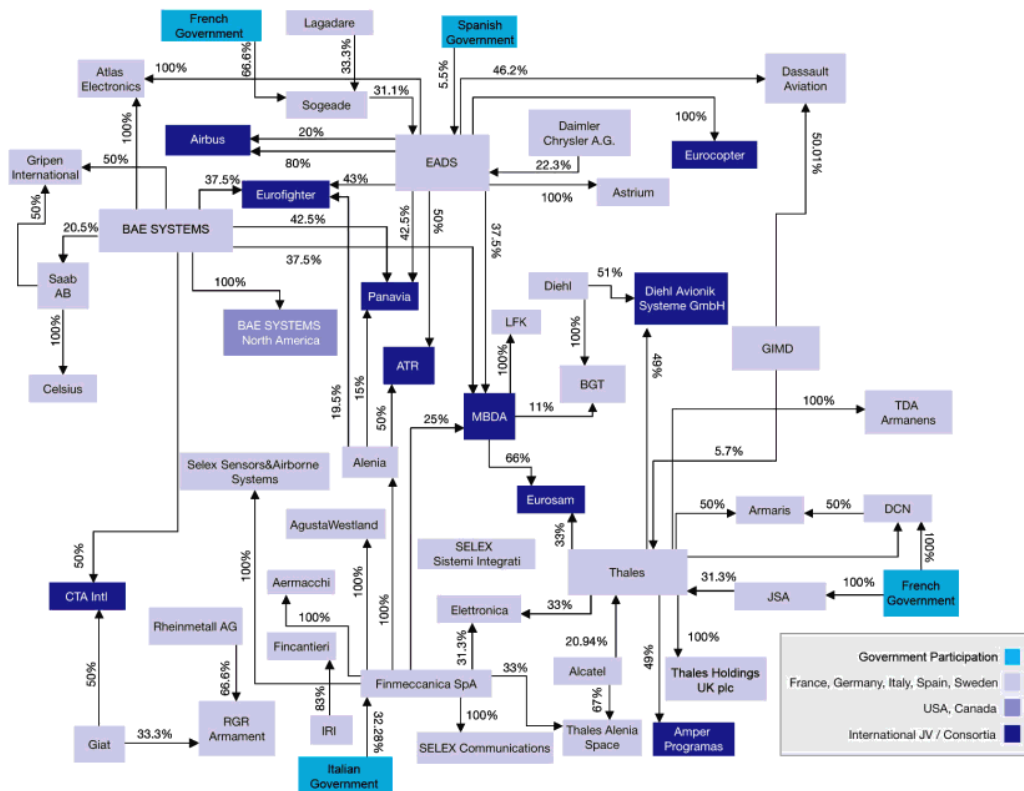
The state is still the sole or predominant stakeholder in a quarter of Europe's top defence companies, exercising majority voting rights and as such controlling key strategic decisions (Balis, 2013:2). An examination of all European companies generating more than €400-m in defence sales in 2011 revealed that governments owned some 20% of a combined value of €84-b (Balis, 2013:2). In the UK, Germany and Sweden, state ownership of defence companies has long become obsolete, with EADS Germany constituting a special case given the ownership structure of its larger European parent (Balis, 2013:2). Finmeccanica in Italy is more than 30% state-owned and Thales is 27% French state-owned; BAE Systems is privately owned, although one source contends that the company can count on strong UK government support, including export promotion and sales financing (De Vries, 2011:1).

Foreign ownership

A truly EDTIB that is destined to be the backbone of the CSDP needs to take into account the risks of foreign ownership of crucial defence industrial capabilities, as well as of the most commercially successful companies in Europe (Brzoska, 2007:1).

Figure 3.4 Major European aerospace and defence cross-holdings

(The dark blue blocks in the graphic represent international joint ventures or consortia).



Source: The Society of British Aerospace Companies, adapted by Kuschel (2010:33).

In Europe, the A&D (aerospace and defence) industry is based on a few cross-holdings that form the primary web of the whole industry and include government ownership to various degrees. The major EU exporters—BAE Systems, EADS (now Cassidian), Thales and Finmeccanica—form the main nodes of this web, indicating a complex collection of shareholders in companies established in France, Germany, Italy, Spain and Sweden.

Protecting the EDTIB

MS have been reducing defence spending and highly indebted countries have privatised and sold defence industrial infrastructure to the extent that such States no longer own the industrial capacity required to produce defence capabilities (Fiott, 2012:2). If governments once seemed indispensable for the promotion and continued health of nationally based industries, “this has long ceased to be true in Europe” (Balis, 2013:5). All national industries are challenged by modest or declining domestic defence budgets, rising costs of technologically complex weapon systems procured in ever

smaller quantities, and growing international competition. “Even the usual arguments about the need to protect local jobs and technological know-how fall flat against the evidence” (Balis, 2013:5).

Not only is the European defence base fragmented, but big percentages of the companies have passed into the hands of non-EU owners. If maintaining a critical defence infrastructure is the bedrock upon which to build an efficient and effective EDEM, “selling-off critical defence infrastructure in one MS has a European-wide security impact” (Fiott, 2013:3).

Overall inflow of inbound foreign direct investment (FDI) into the EU has decreased since 2007; however, it has been estimated that in 2011 China’s assets in the EU included US\$253-m in aerospace, defence and space and US\$1.35-b in communications, equipment and services linked to the defence sector (Fiott, 2013:2).

Protection of the EDTIB is challenged by the lack of competitiveness resulting from the fragmentation of both defence markets and the technology-generation and production base in Europe, and also because core capabilities and capacities have already been “creamed off” by foreign owners (Brzoska, 2007:7). Certain elements of defence technology-generation and production capacity operating inside Europe are controlled by non-European investors, whether financial or corporate (Brzoska, 2007:1).

Crucial assets

Major US companies have acquired important European defence technology-generating and technology-producing companies (Brzoska, 2007:2). There is a lack of coordination among the EU MS on the process of privatisation and any future selloffs to non-European states should receive greater scrutiny (Fiott, 2012:3-4). The current focus on improving competitiveness should be balanced by the development of a policy and instruments for the protection of crucial assets (Fiott, 2012:4).

Declining research and development

Technological innovation is equally under threat because of declining national R&D budgets and, indirectly, because of companies’ shrinking operations, which make them

less competitive in international markets and limit their ability to generate sufficient export proceeds that can be invested back into the business (Balis, 2013:5).

Unless the company is privately owned, as is still the case with Germany's family-run Krauss-Maffei Wegmann and Diehl Group and, to a certain extent, France's Dassault, "shareholder pressure will ultimately force management to divest, or significantly restructure chronic underperformers within their portfolio" (Balis, 2013:5).

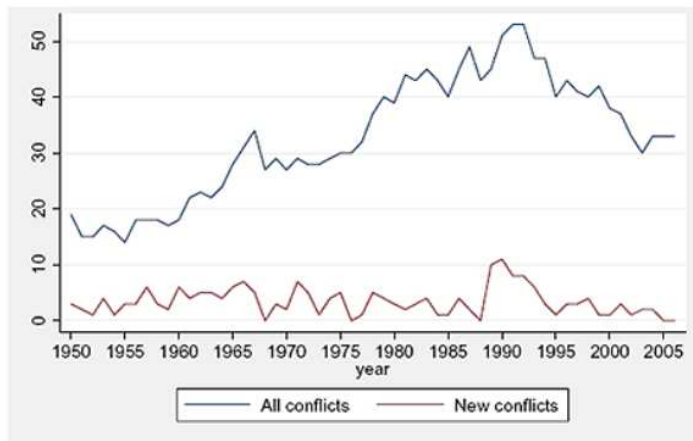
When faced with significant core market erosion or changing competition, most private companies eventually consolidate, liquidate, or exit markets completely (Balis, 2013:5). There is thus a risk that Europe may lose its indigenous defence base if EU MS striving to stay afloat move production activities to emerging markets in the East.

As part of ensuring the economic success of the European defence industry, it must be determined whether national approaches to the protection of crucial capacities in DTIBs still make sense. If so, there must be an open discussion of how to use the instruments available for such protection (Brzoska, 2007:2). Sadly, the EU's 2013 proposal to restructure the defence sector is similar to those dating from 1996 and 2007 and the EU is running out of time to master this challenge.

3.10 THE DEFENCE INDUSTRY

Once every two to four decades, the defence industry undergoes a major transformation (Fischer and Bollinger, 2012:1). Since the start of WWII, the industry's many cycles have generally corresponded with patterns of conflict (Kiernan, 1994:1).

Figure 3.5 Number of global conflicts, 1950-2006



Source: Buhaug et al. (2007:4).

Figure 3.5 depicts the overall number of conflicts in process, as well as the number of new conflicts each year, from 1950 to 2006. One can see a peak period around 1989-1993, which included the civil wars in Afghanistan, Georgia and Rwanda, along with the Romanian revolution, the invasion of Kuwait, the Persian Gulf War, the Ten-Day War between Slovenia and Yugoslavia, the 1991 uprisings in Iraq, and the Bosnian war (Chrysostom, 2007:14).

During WWII, a formalised multi-sector industrial base was developed in various European countries (Fischer and Bollinger, 2012:1). In the post-industrial world, sovereignty called for an industrial base with low levels of technology dependency, ensuring a higher level of independence in policy making (Lungu, 2005:5). The close relationship between foreign and defence policies and defence industries (Van Iersel and Hrusecká, 2012:5) results in certain companies being deemed strategically important (EC, 2012d:2).

Political effects

The defence industry differs from any other industry mainly because it has only one customer in each country—the government—and because of the effects of political factors on foreign sales. The industry has a clear need for extensive technology, logistical support, big investments, secrecy and security (Korkmaz, 2009:14). Despite privatisation, governments maintain a large stake in the defence industry as customers, regulators and providers of export licenses (Van Iersel and Hrusecká, 2012:5). The

armed forces have to design operations that are dependent on multiple variables in highly changeable environments (Rueda, 2011:100). Due to the high technology content of many products and the requirements of SoS, but often also due to limited production runs, the emphasis of competition strategies appears to focus on quality and reliability over price (Ecorys, 2010:47). Innovation strategies are often geared toward achieving technology leadership, resulting in a competitive advantage over rivals (Ecorys, 2010:47).

Governments take the lead in determining the specifications of the defence equipment market and the regulatory framework in which the industry and market must function (Ecorys, 2010:46). “Existing regulatory and non-regulatory frameworks for the global trade in arms can potentially be significant drivers of the defence sector, both internationally and nationally” (Ecorys, 2010:2). Domestic and international demand for defence products and services are key drivers of future development, competition and competitiveness (Ecorys, 2010:46). Numerous variables determine the nature of a country’s defence industry, including the following (Korkmaz, 2009:5):

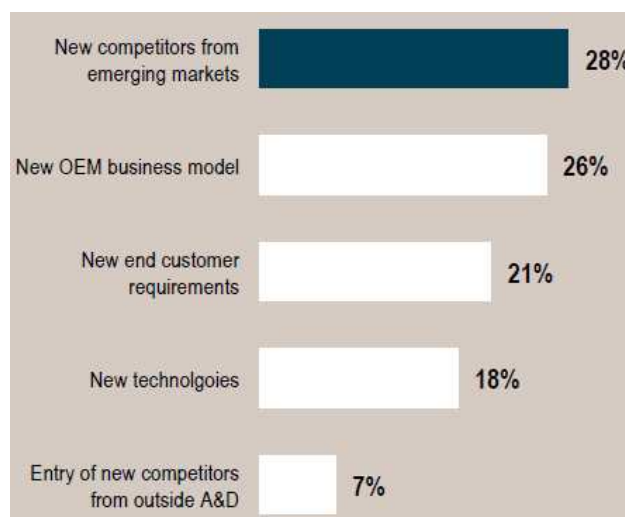
- defence spending;
- the defence industry policies of major participants in the defence market;
- industry development models and strategies of second-tier countries endeavouring to gain prime contractor status; and
- current trends in the defence market.

Increased local production

The lack of competitiveness in the industry resulting from the preference for national production has been balanced by offset (Briani et al., 2013:49). Greater industrial participation demands have naturally translated into increased local production (Anderson, 2012:slide 8), with offset facilitating much cooperation, as well as the sharing of technology. Emerging producers such as Singapore, South Korea and Turkey owe their defence industrial development to offset. South Korea is on target to be counted among the top seven world defence exporters by 2020. Turkey attributed 70% of its 2010 export sales to offset obligations alone. Oman, Singapore, UAE, Malaysia and Indonesia owe all major indigenous platform export sales to offset agreements (Anderson, 2012:slide 9).

No emerging markets have achieved self-sufficiency as yet, and reliance on international contractors will remain in the near term. In the longer term, the greater self-sufficiency goals of countries such as India and Turkey threaten to reduce international reliance (Anderson, 2012:slide 8). In 2010-2011, indigenous procurement in India, expressed as a percentage of total procurement, was at 67%; Turkey was at 52% in 2011, with Brazil at 78% in 2012 and expected to reach 84% local involvement in 2015. Saudi Arabia was at 28% in 2012, with no improvement projected for 2013 (Anderson, 2012:slide 8). New competition from emerging markets is seen as having the biggest potential influence on industry structure through 2015 (Roland Berger Strategy Consultants, 2012:slide 19).

Figure 3.6 Elements that influence industry structure



Source: Roland Berger Strategy Consultants (2012:slide 18).

Reorganising

The industry expects growth in the demand for security services and products and is recomposing itself by expanding beyond the traditional arms market, with strategic acquisitions of cyber security firms and/or biometric solutions providers (Boulainin, 2012:263). Many of the mergers and acquisitions that occurred in 2010 involved acquisitions of cyber security and intelligence services companies. Most of the largest purchases in the US by arms companies based in Western Europe and Canada were of security companies (Boulainin, 2012:263).

Companies in the electronics and IT sectors are finding themselves to be part of the DIB (Ecorys, 2010:271). This trend could lead to a reduction in defence specialisation for all but the largest contractors (Ecorys, 2010:28). Partnerships that bring together government organisations with non-governmental organisations (NGOs), businesses, religious and ethnic leaders and other civil society representatives can be more effective in dealing with difficult security challenges (SIPRI, 2012d:2). State-based institutions have to consider innovative and effective means to interact with a range of increasingly influential non-state entities in certain fragile and conflict-ridden areas in order to reach stable outcomes (SIPRI, 2012d:1-2).

Structure for competition

If every government manufactured its own defence materiel, there would be no competition in the industry. However, the privatisation of the defence sector has led to increased national and international competition. In the EU, the industry has to create structures that are viable within a European context and can also successfully compete on the global stage (Hofbauer et al., 2012:45).

If Directive 81 successfully opens the EU national markets to EU-wide competition, margins will further decrease. If buyers collaborate, orders may be larger but less frequent and companies may be willing to reduce margins in order to win orders. Companies may seek growth and profits not by growing with the market, but by taking shares from one another (Hofbauer et al., 2012:45). US defence investment in the EU is likely to decrease, with the US focusing on markets with large budgets and therefore no longer posing a sufficient source of further growth.

If the EU defence industry loses its competitiveness, the generation of defence technology and production capability in Europe may be weakened, reducing the ability to procure from European sources (Brzoska, 2007:1). The presence of fewer industry participants may lead to less innovation and fewer military capabilities, further strengthening monopolies.

3.11 DEFENCE CONTRACTOR STRATEGIES

European defence and security companies are in a difficult position. They have an important role in supporting Europe's militaries, police forces and first responders, yet they have to compete with other private entities for capital and to generate competitive returns (Hofbauer, 2010:31). DCs have to earn expected returns, invest in next-generation capabilities and meet regulatory, political and financial requirements (Hofbauer, 2010:31).

Economic necessity is wearing away the industry's isolationism, forcing companies to compete and to cooperate across frontiers (Lungu, 2005:21). Cuts in defence budgets across Europe are likely to make some defence manufacturers less attractive for investment (O'Donnell, 2010a:1).

Private companies are at a disadvantage if they have to compete with state-owned companies whose deficits are regularly balanced by the government's finance ministry (Küchle, 2006:48). A level playing field requires the total privatisation of public enterprises, with national governments giving up their golden shares; at this point, such a development seems unlikely to happen.

EU companies' top priorities will be survival and internationalisation, with the establishment of the EDEM taking second position to these priorities. Current strategies of major DCs include the following (Bailes and Depauw, 2011:24):

- concentrating only on defence;
- searching for European and international partners;
- divesting and concentrating on other specific sectors;
- diversifying into non-military markets;
- specialising in certain products;
- privatising; and
- internationalising sales and investments.

Industrial capabilities established in developing countries through offset may develop into export hubs that compete with EU defence contractors, while cost advantages ensured by these countries' DIBs may enable them to compete effectively with Western capabilities (Anderson, 2012:slide 8).

Foreign arms deals

European weapons suppliers use foreign arms sales contracts as a means to support their own domestic weapons development programmes, compensating, where possible, for declining arms orders from the rest of the developing world. Weapons contracts with the more wealthy developing nations in the Near East and Asia therefore appear to be especially significant (Grimmett and Kerr, 2012:5).

In terms of absolute size, South Korea has been the largest such market during 1995-2008, followed closely by India and Brazil (Ecorys, 2010:12). In terms of percentage of import market share, European companies do best in Brazil where they have captured around three-quarters of the market; they represent about one-fifth of the total market in South Korea and India and have minimal exposure in China and Russia. However, the Brazilian total import market for military equipment is small in comparison to that of China, India and South Korea.

The risk to the EU in terms of home-market competition from Brazil is minimal in most domains (Ecorys, 2010:25). Russia can present its own well-rounded defence offerings and is the only real competitor in foreign markets for the EU and US defence industries (Ecorys, 2010:16). It is possible that declines in sub-sectors and a continuing willingness to engage in cooperation will lead to the opening up of the Russian market, providing future business opportunities (Ecorys, 2010:267).

India is mostly an import market in which there is a possibility of developing some cooperation (Ecorys, 2010:17). Competition from other countries, together with the growing domestic capability in India, may result in Europe's fighting to retain India as an export market. However, India is likely to become an increasing source of collaboration as it strives to develop its indigenous industry and move away from its dependence on Russia (Ecorys, 2010:25).

South Korea offers big import opportunities but also poses the most important competition for the EU in some areas, as it possesses the capacity to integrate or develop new technologies. Procurement in South Korea is openly biased in favour of domestic firms, and offset requirements (30% for purchases over US\$10-m) include strong technology transfer rules. South Korea matches Western standards for quality

and performance and is already a competitor with Europe in high-end civil products and military components (Ecorys, 2010:24).

China's encouragement of foreign investment, particularly through joint ventures, creates enormous opportunities for EU firms. The EU can focus on weaponry, equipment and technological support that China's main supplier, Russia, is not able to provide. This collaboration at present only refers to the civil sector, which will facilitate the potential for defence sector developments (Ecorys, 2010:25). In exports, China represents a larger threat to Russia, because these two countries share similar potential markets such as Africa (Ecorys, 2010:24).

Diversification as a hedge strategy

In 2011, the average level of public R&D spending in the EU decreased in nominal terms, with only nine MS maintaining their budget levels of the previous year (EC, 2013b:11). Companies therefore had to absorb a greater proportion of the expenses associated with R&D.

Every major company aimed to reduce its dependence on defence contracts, with diversification becoming a hedge strategy against the declining market in the defence and aerospace sectors (Lungu, 2005:21). In 2011, about 39% of sales by the top 15 European defence industry suppliers were of non-defence products and the six major national defence industry associations in the EU indicated that 62% of revenues were from non-defence products (EC, 2013f:29). "Early signs are that defence companies will try to expand into areas that are adjacent to their core markets, or exhibit similar regulatory features" (Thompson, 2011:2).

One such existing example is General Dynamics, which owns the business jet giant Gulfstream. Both General Dynamics and Lockheed Martin are focusing their business development efforts on their information services units, healthcare support and cyber security.

These markets are strongly influenced by federal policies, but offer extensive sales potential beyond traditional military customers (Thompson, 2011:2). In September 2010, General Dynamics bought healthcare IT provider Vangent from Veritas Capital for

US\$960-m; meanwhile, Lockheed has established a fast-growing cyber security business with companies that operate power grids. Most of the future investment by Boeing will be in commercial transport development (Thompson, 2011:3).

In the civil market, many large companies are increasingly profiling themselves as providers of maintenance and ILS (integrated logistics support) services to armed forces (EC, 2013f:29).

Multi-industry character

Textron in Providence, Rhode Island, may be a good model of where the defence sector may be headed. Despite repeated makeovers, the company remains committed to its multi-industry character, taking the following steps (Thompson, 2011:3):

- managing to maintain its role as a supplier of unique military equipment to all three US military departments;
- ensuring a major presence in commercial markets such as automotive, recreation and business jets;
- focusing on maintaining a USP (unique selling proposition) for the products that it sells to the Pentagon; and
- prioritising a presence in global markets, while generating 36% of revenues overseas—a much higher portion of foreign sales than most military contractors can claim.

Sustaining defence industrial bases

In an effort to sustain major sectors of their individual DIBs, some European arms companies moved away from producing certain types of weapon systems. These suppliers sought to engage in joint production ventures with other key European weapons suppliers or even with foreign client countries, even if a substantial portion of the weapons produced was for the armed forces in the European country (Grimmett and Kerr, 2012:12).

The Eurofighter and Eurocopter projects are examples. The build-up of specialised niche capabilities in other countries, such as CBRN (chemical, biological, radiological and nuclear) defence in the Czech Republic, mountain warfare in Romania and combat engineering and military bridge-laying in Hungary, has proven that countries are willing to develop competitive advantages in defence areas where it is economically beneficial,

even at the cost of forgoing some autonomy across the defence capability board (Flournoy and Smith, 2005:75-76).

Mergers and acquisition strategies

In concluding mergers and acquisitions, defence companies in general sought to fill gaps in product lines, diversify into related sectors or divest non-core activities (Jackson, 2011).

A few large companies already dominated the arms industry in the US. In Europe, DaimlerChrysler's aerospace unit, DASA, merged with Aerospatiale-Matra of France in 2000 to form the biggest European defence aeronautics group, European Aeronautics Defence and Space Company (EADS), now known as Cassidian (Morgan 1999:1).

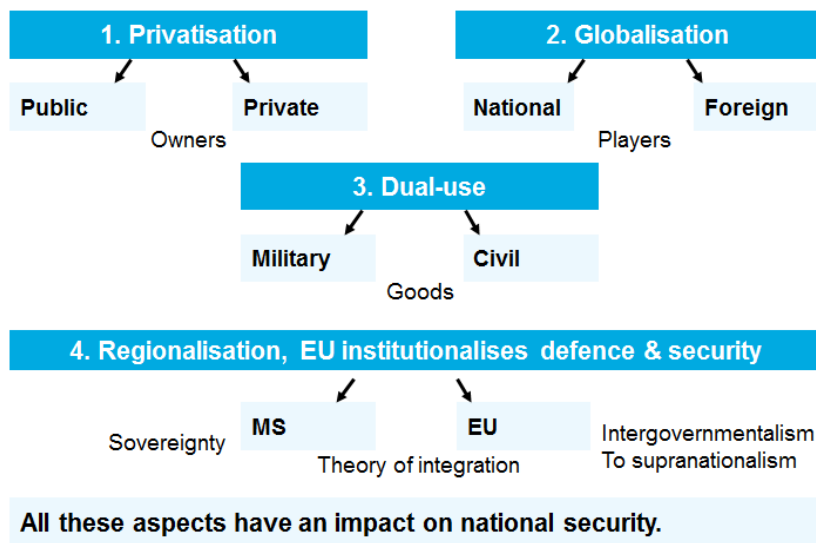
The UK defence industry is monopolised by BAE Systems, which was created when British Aerospace acquired General Electric's Marconi Electronic Systems (Federation of American Scientists [FAS], 2000:1). Four companies dominate the European market: BAE Systems, Thales, EADS and Finmeccanica (Vlachos-Dengler, 2004:1).

3.12 ASPECTS INFLUENCING THE DEFENCE INDUSTRY

The EU has come to institutionalise a new security agenda that challenges the traditional realist account of security politics (Gorenflo, 2008:3). Newer processes including interdependence and integration are geared towards cooperation between MS and actors (White, 2004:50). "This agenda consists of a far wider range of issues than military security", with security itself being redefined in much broader terms that go beyond the military defence arena (White, 2004:50). The EU's steps to institutionalise defence and security brought a new paradigm to the future structure of the defence industry.

The defence industry in Europe has been influenced since the late 19th century by four main aspects that all have an impact on national security: privatisation, globalisation, dual-use products, and the growth of regionalisation and supranationalism.

Figure 3.7 Four aspects that influence the defence industry



Source: Furter, 2014.

Privatisation

As recently as the 1990s, most European defence firms were fully state-owned and governments had no concerns about the risks involved in foreign ownership (O'Donnell, 2010a:2). Since then, privatisation, stock market listings and market liberalisation have increased the competitiveness of the European defence industry, “but also left defence companies vulnerable to unsolicited foreign investments, sovereign or otherwise” (O'Donnell, 2010a:2).

Globalisation

Globalisation has unquestionably shifted attention away from the state as the main referent object of security and opened the way for a multiplicity of other economic, environmental, and political threats to arise (Buzan, 2004:1). Globalisation has led to enhanced civil-military integration, particularly due to the changes in the nature of the defence economy (Matthews, 2006:11). “This meant a big focus on wealth creation, cost reduction and international industrial integration” (Matthews, 2006:11).

Consequently, outsourcing and offset have emerged as important elements of globalisation. The aspects of economic globalisation that are most likely to have an impact on the security domain include new participants and new forms of interconnectedness (Pollins, 2006:2-3). European hopes of maintaining and expanding

an indigenous DIB look increasingly dubious (Hayward, 2011:13). The big four companies in the EU (BAE, Thales, EADS and Finmeccanica) are all global companies with production facilities around the world that have been able to expand their production capacity and enter new markets, often through partnerships with foreign industry that later changed into full ownership (De Vries, 2011:3).

Globalisation resulted in major European defence companies outgrowing national DTIB control, operating key production facilities in several countries and owning non-EU equity (Brzoska, 2007:7). Certain elements of defence technology-generating and production capacity in Europe are in the hands of non-European investors (Brzoska, 2007:1). The controversial investment by a Russian bank in EADS in 2006 led to calls in Berlin for stronger protections against foreign investors (O'Donnell, 2010a:2). The German government even considered introducing golden shares in the European aerospace group that would ensure veto power for government organisations.

Dual-use

A more globalised and open technological environment creates more opportunities for companies outside the defence arena to take a leading role in defence equipment and systems supply (Hayward, 2011:12) and to develop goods and technologies with both civil and military purposes (EC, 2012c:1). Civil-military (civ-mil) integration reduces the burden of defence expenditure by promoting the sharing of technology and supply chains, as well as spin-on and spin-off technologies and dual-use technologies.

Developing countries that do not possess defence capabilities can enter the sector through the creation of dual-use technologies; India, South Korea and China have taken this step. China's plan to pursue civ-mil integration, for example, contributed to its defence industrialisation (Matthews, 2006:12).

Dual-use technologies allow DCs to diversify into civilian markets, making them less dependent on defence procurement without losing weapons production capabilities (Dunne, 2006:11). However, dual-use technologies may also burden civil companies with restrictions related to government regulations and secrecy, making them less competitive in the civilian market and increasing their difficulties in adjusting to cuts in military procurement (Dunne, 2006:11).

The convergence of MS' arms and dual-use export controls has been a long and evolutionary process (Davis, 2002:271). Regulation 428/2009 sets up an EU-wide regime for the control of exporting, transfer, brokering and transit of dual-use items (McKenna Long and Aldridge, 2011:1).

The regulation is the result of a political compromise between the wish for a uniform EU-wide export control regime and the desire among the EU MS to retain an important margin of discretion. Consequently, the system exhibits inconsistencies and complexities “that make it burdensome and expensive for industry” to comply (McKenna Long and Aldridge, 2011:1).

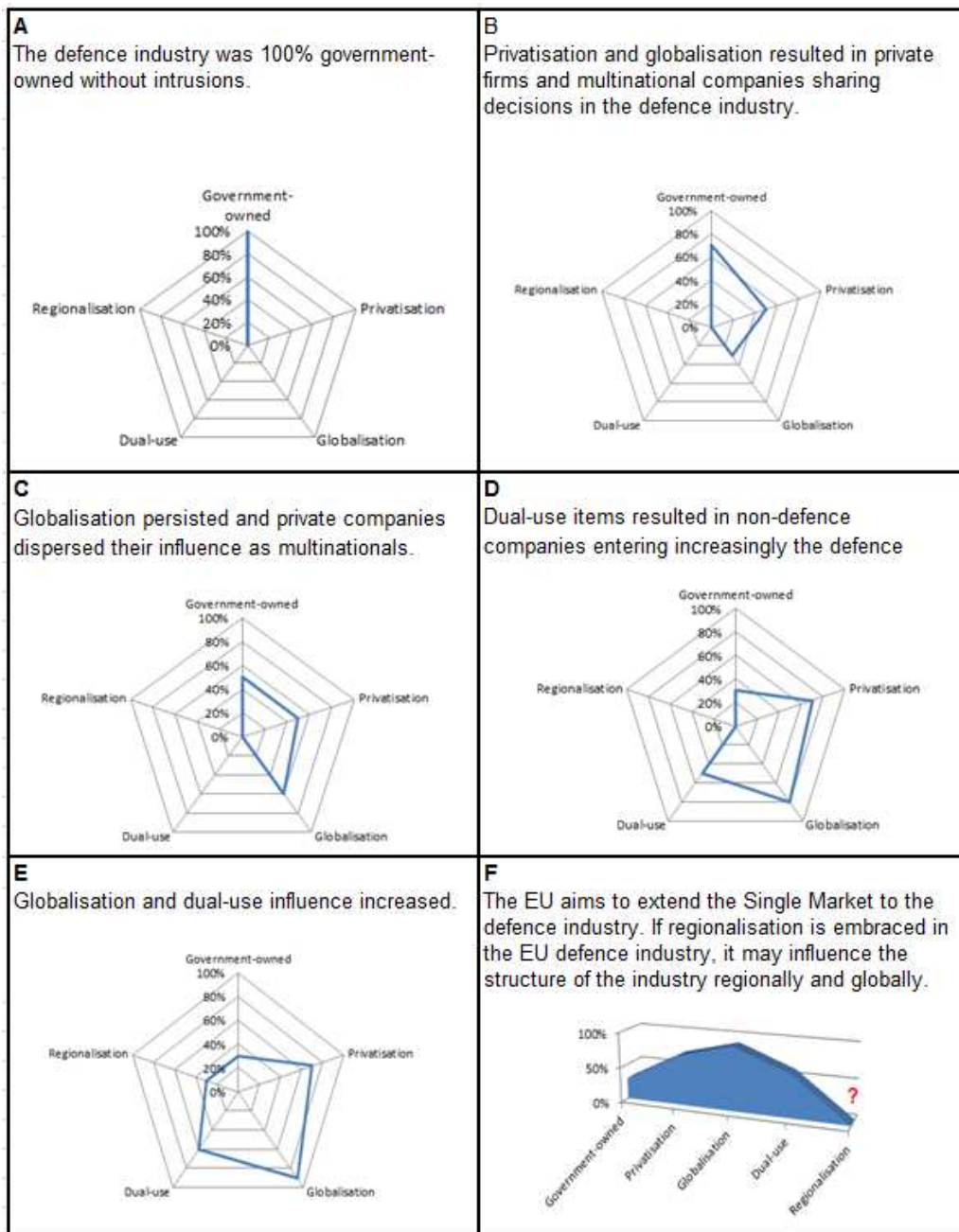
The EC produced a White Paper in 2013, seeking to delineate some preliminary factors and methods that could support establishment of a workable international export control regime for dual-use goods and technologies (Fiott and Prizeman, 2013:1).

Regionalisation

Divided among unionists and statist, social integrationists and liberal expansionists, as well as along various other lines, EU MS have long had to deal with contending regional agendas (Franke, 2007:5). The considerable body of literature on today's regional groupings shows that such groups are beset by intra-institutional rivalries and inter-institutional competition (Franke, 2007:6). On the other hand, the five mutually reinforcing determinants of regional cooperation are as follows (Franke, 2007:6):

- the politico-ideological rifts permeating the continent;
- the prevalence of external dependence and influence;
- the lure of nationalism;
- institutional weakness resulting from the absence of political will and regional identities; and
- personal power policies.

Figure 3.8 Power-sharing in the European defence industry over time



Source: Furter, 2014.

Cross-border collaboration can result in the integrated development of cross-border areas, promoting more harmonious European regional planning (Celata and Coletti, 2009:6), while ensuring these additional benefits (Heuninckx, 2011:3, 30):

- reduced costs;
- the sharing of development costs for expensive defence equipment;
- MS' ability to procure military equipment that they are not able to develop on their own because of budget constraints and a lack of technical or industrial capability;

- mutual dependencies and not just one MS being solely dependent on another; and
- efficiencies and economies of scale.

The industry is expected to move from prescriptive industrial cooperation and offset rules to voluntary collaboration without national preferences. DCs are expected to eliminate trade barriers and establish strategic alliances and collaborative agreements, ensuring that the combined strengths of companies result in an advancement of defence technology and capabilities. In February 2012, the EC called for a new impetus for European defence policy (European Parliament, 2013a:1). Members of the European Parliament (MEPs) highlighted the need for a competitive industrial base in Europe to ensure that the EU's CSDP can continue to deliver despite the current budget constraints. In October 2012, more than a year after the launch of Directive 81, the EC reported that “major legal changes” have been implemented and that offset is “no longer required systematically, but solely in exceptional cases where the conditions of Article 346 TFEU are met” (EC, 2012d:9).

Regionalisation decisions can; however, be risky and in aiming to coordinate defence activities, competition can be invited (as in the case of the development of three European fighter aircraft, as cited in 2.15, heading “Europe’s fighter aircraft”). Competition and concentration are needed in order to create a globally competitive European defence industry and maintain considerable European capacity in the fields of design and production. However, a very competitive armaments market is not feasible in Europe. Consolidation will certainly create some European monopolies, which could be justified on the grounds of global competition (Kešeljević and Kopač, 2005:13).

The US remains a powerful competitor that causes EU DCs to choose the lesser of two evils: a European monopoly and American retaliation, or the rapid destabilisation of leading European DCs due to stronger and more productive American counterparts (Kešeljević and Kopač, 2005:13).

Strategic independence

In February 2013, security and defence MEPs stated that the European defence industry's role in ensuring the EU's strategic independence must come before

competitiveness (European Parliament, 2013a:1). The EDTIB today is far broader than just Europe, and the challenge is to manage global supply risks (Briani et al., 2013:73). Defining the EDTIB from a functional rather than a territorial perspective means that its composition would include non EU-companies and suppliers (Briani et al., 2013:73), and that therefore it may be necessary to defend national industries.

To achieve an EDTIB that effectively serves the “demand of MS to have assured access to supplies of defence material and services”, a comprehensive reform of the EU defence industrial sector is necessary. However, the development of the EDTIB continues to depend on the MS’ defence policy and industrial policy (Briani et al., 2013:70). Whether the future is dominated by intra-European consolidation or extra-EU export strategies, three issues will increasingly be on the table and linked to political decisions: export strategies, international property rights and offset. The EU has to find new ways to manage its defence sector as a whole and the relations among the relevant entities (Briani et al., 2013:71).

3.13 CONSOLIDATION IN THE EUROPEAN DEFENCE INDUSTRY AND THE EU-US TRANSATLANTIC RELATIONSHIP

Intensified competition and economic rivalry, especially in high-technology sectors, have increasingly dominated the security and political agenda between the US and some of its most important Western European allies (Peterson, 1994:68). During the Cold War (1947-1991), military and security cooperation among nations in the transatlantic alliance enjoyed absolute priority, while all trade and economic issues were subsidiary to security (Lungu, 2005:2). The transatlantic alliance was strengthened by three mutually supporting principles (Lungu, 2005:2):

- political and cultural community;
- common military defence; and
- shared burdens and risks.

In the mid-1960s, Europe recognised the alarming technological gap that existed among its industries and those of its competitors in the US. The 1980s witnessed the reawakening of Europe’s concern about its lagging competitiveness in the area of high technology vis-à-vis America, but also in relation to Japan (Lungu, 2005:7).

Dual-use investment

In the early 1980s, US policymakers were concerned that if the US allowed foreign firms to take the lead in the commercial development of dual-use technologies, the Pentagon could ultimately become dependent on foreign suppliers for key military components (Stowsky, 2007:1). The US subsequently pursued a dual-use investment strategy, funding innovative R&D for technologies with both commercial and military applications (Stowsky, 2007:1).

In the late 1980s, the US started promoting a new international order, considering advances in high technology an instrument of achieving economic and military dominance. In 1991, the threat that made military and security cooperation so vital vanished with the collapse of the Soviet Union, profoundly transforming the security environment (Bush, 2002:8).

Europe's competitiveness questioned

The technology policy developments in the US after the Cold War and the country's emphasis on economic security in defining American national security priorities forced Europe to rethink its industrial and technological goals and interests, as well as the means for achieving them (Lungu, 2005:9). Europe struggled to harmonise national armaments requirements and national defence market-protection rules persisted, while the traditional desire to minimise reliance on foreign supplies remained (Becher, 2004:2).

Europe was set on creating a European defence identity, committing to building a European defence industry to serve as a cornerstone of an integrated Europe (Peterson, 1994:68). However, governments were finding it difficult to achieve consistency in their policies, let alone reach agreements among themselves (Walker and Gummett, 1993:3).

Anti-US sentiment emerged

By the mid-1990s a new American technological threat was perceived in Europe's political-industrial circles and an anti-US sentiment emerged in Europe (Cook, 1997). The survival of an independent industrial and technological base in Europe was questioned and the EU Commissioner at the time warned that if nothing was done

within five years the EU could “fall under technological and financial sway of US masters” (Tigner, 1996:11). (For more documentation see Appendix A, Summary of arms trade history between the EU and the US, 1985-2013).

The EU and the US in 1996

The structural advantage of the US industry was increasing and with a reduction in overall demand, the EU market kept fragmenting (Commission of the European Communities, 1996:7). The consolidation of defence-related companies in Europe was restricted by five barriers (EC, 1996:3-11):

- the consent of governments;
- the fact that in some countries a significant part of the industry was owned or controlled by the state;
- differences in arms exporting policies;
- the lack of transnational legal structures; and
- the difference in national defence equipment requirements.

In 1996, the annual output of defence equipment in the EU represented only three percent of total industrial output. About 90% of the EU’s total production of defence equipment was concentrated in MS France, the UK, Germany, Italy and Sweden (Commission of the European Communities, 1996:4), while a substantial part of the European defence industry, notably in France, Italy and Spain, was public or quasi-public, with varying degrees of state control.

Interdependence

Aims to integrate created “bureaucratic discomfort” because the defence industrial integration and rationalisation required by the post-Cold War context were perceived to advocate a level of political, military and technological interdependence—many of the national bureaucracies in Europe were far from ready for it (Lungu, 2005:12-3).

Competitiveness and economic security

In the second half of the 1990s, the technology policy promoted by the Clinton administration in the US sparked a European debate about the need for increased linkages between civilian and defence industrial sectors (Lungu, 2005:7). For the first time defence industrial issues were perceived as having an impact on Europe’s

technological competitiveness and therefore on its economic security, highlighting the increasing importance of civilian technology for competitive military production (Lungu, 2005:10).

Brussels got involved

In an effort to confront the US industry, UK defence producers received limited—if any—support from the national governments and slowly turned their attention to Brussels, as capital of the EU, requesting that European-wide initiatives be launched to improve Europe's competitiveness (Lungu, 2005:13). Various initiatives in the 1990s secured a substantial foothold for the Commission in a policy area that traditionally belonged exclusively to the nation state (Lungu, 2005:15).

The EU's first step toward Directive 81 was probably the EC decision in 1996 to draft rules framing a common defence policy and ensuring interdependence among MS for supplies of defence equipment (Commission of the European Communities, 1996:13). Europe's determination to build its own defence identity apart from the US was understandable, but it also presented real political and security risks to this transatlantic security and defence relationship (Lungu, 2005:3). It eroded the political base that motivated European MS to support NATO and set in motion the process that allowed the DIBs of Europe and the US to grow apart (Lungu, 2005:3-4).

US national security priorities

After 1992, the US government established a comprehensive set of initiatives relating to high-technology and defence industrial and export promotion policies. In defining America's national security priorities, the US government indicated that economic and technological issues should play an enhanced role (Lungu, 2005:7).

The US government made it clear that it would use federal funds to assist the rationalisation of the industry through a series of mergers in order to create giant corporations. Throughout the process, the Clinton administration continuously highlighted the importance of consolidation and efficiency (Dowdy, 1997). The consolidation of the US defence-related industry advanced much faster than that in Europe, reducing overhead costs as well as excess manufacturing and engineering capacity.

Italy, Spain and Sweden all tried to integrate their defence industrial assets into wider international structures, without pursuing a clear European preference (Schmitt, 2004:25). The acquisition of the Spanish defence company Santa Barbara Systems by General Dynamics and the purchase of the German shipyard Howaldtswerke-Deutsche Werft (HDW) demonstrated that investors have had good opportunities to cherry-pick the European DIB. In addition, in contrast to the A&D electronics sectors, trans-European consolidation of land armaments and shipbuilding has failed, leaving European companies in a rather weak position *vis-à-vis* their US counterparts (Becher, 2004:27).

First initiatives in 1997

The first coordinated defence industrial policy initiatives by European governments occurred in December 1997, when France, Germany and the UK indicated the political will to support the restructuring of Europe's defence and aerospace industries (Lungu, 2005:10). As of 2004, in contrast, one observer remained generally pessimistic about the future of transatlantic armaments cooperation, offering the following projections (Becher, 2004:27):

- cooperation was probable on politically less sensitive levels, including sub-systems and components;
- cooperation would be limited due to persistent political obstacles;
- cooperation would be mainly industry-driven by companies with a commercial and/or technological interest in becoming innovative in dealing with bureaucratic and regulatory hurdles; and
- big European companies would be able to cooperate on an equal footing with their US counterparts only if they maintained their capacities as system integrators and remained at the cutting edge of technology in relevant key areas.

Recommendations for policy makers

The main challenge to European companies' viability has been the decline in money available for investments in new products, coupled with the skyrocketing costs required for the development of new weapon systems (Lungu, 2005:19-20). To maintain the competitiveness of the EU defence industry, recommendations were made in 2009 to different categories of stakeholders.

Policy makers at the EU and national levels were urged to take these steps (Cauzic et al., 2009:62-3):

- retain specific skills;
- maintain and increase investment in research and technology development;
- assess the need for a specific SME policy that can support diversification and the transferability of skills across firms;
- create local centres of excellence; and
- identify best practices for preparing and managing change in this sector.

Policy makers at regional levels were encouraged to anticipate future resource needs and plan accordingly, working with a coordinated, clustered approach (Cauzic et al., 2009:63).

3.14 THE EU'S DEFENCE INDUSTRIAL BASE

In recent years, many new and often unforeseen threats, risks and opportunities have made the global and regional security situation more complex and uncertain (Gill, 2012b:1). EU MS are facing new security challenges that can be addressed only by professional forces, equipped with state-of-the-art technology (EC, 2012f:1). Meanwhile, the EU's defence capability has been declining, especially in comparison with some emerging countries that are expanding their military strength.

Capabilities obsolete

More than 20 years after the end of the Cold War, many defence company capabilities are still based on approaches developed for the Cold War era (Fischer and Bollinger, 2012:2). Many of today's threats are less predictable and tend to evolve more rapidly, making these older systems potentially obsolete.

"Defence companies need faster development and fielding cycles to remain relevant for large portions of their core markets" (Fischer and Bollinger, 2012:2). Some shareholders view the defence sector as an industry in irreversible decline and urge DCs to forget about growth and focus on maximising dividends (Fischer and Bollinger, 2012:2).

Lack of innovation and new products has compounded the non-competitiveness of the European defence industrial base. In 2005, most national defence industrial capabilities in MS were still primarily focussed on large weapon platforms similar to those used during the Cold War, including ships, aircraft, tanks and armoured vehicles and the operation and maintenance of these systems (Flournoy and Smith, 2005:75).

Unbalanced capability

Countries with a strong DTIB account for most of the supply of new equipment (*Defpro Daily*, 2011:1). EU MS with the strongest defence capabilities may therefore have the greatest commercial advantage, as well as political influence. In 2003, France, Germany, Italy, Spain, Sweden and the UK represented 90% of the EU defence industrial capability and 80% of EU defence procurement expenditure in the 25 EU nations at that time (Hayes, 2006:6). Defence industrial capabilities and defence spending are highly concentrated in a few MS (Mölling and Brune, 2011:9).

The advantages of internationalisation that ensure the best location and the best provider cannot be achieved in the defence sector due to Europe's nationally fragmented defence markets (Küchle, 2006:3). Moreover, current national European inventories are prepared more for static territorial defence and not for expeditionary operations (Braddon, 2011:slide 31). As in the post-Cold War era, Europe is trying to consolidate its defence capabilities in an effort to be a more formidable competitor to the US. In times of austerity and waning defence budgets, defence capability development is a tall order. In Europe, defence budgets have become too small to maintain national industries; as a result, the survival of the European industrial base is at risk.

Low equipment expenditures in an age of restructuring

Without a strong group of EU MS that desire to establish a powerful and autonomous CSDP, as well as efficient EU institutions and a wide range of effective instruments at its disposal, "the EU runs the risk of losing its spirit as an important and distinguished security actor in this field" (Juvan and Prebilič, 2012:136).

Significant steps in restructuring and consolidating the EU-wide defence industrial base have still left the overall strength of the EDTIB dwindling *vis-à-vis* global competition—not only relative to the US but also in comparison to emerging Asian economies

(Bekkers et al., 2009:4). The US spends a third of its defence budget on personnel and a third on equipment, whereas many EU MS spend around 60% of their budgets on personnel and only about 20% on equipment (Titley, 2010:1).

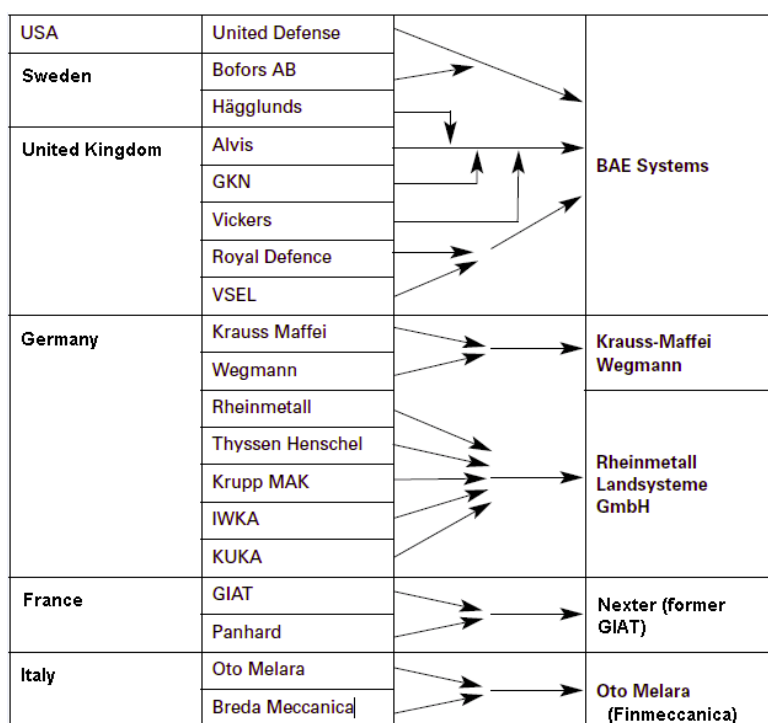
The current size, structure and ownership of EU defence industries reflect the variety of MS' defence budgets, national procurement policies and technology influences. These drivers, together with industry supply-side adjustments via mergers or acquisitions and entry into foreign markets, determine the current state of the EU defence industry and the potential for the emergence of an EDEM and EDTIB (Bekkers et al., 2009:28).

Technical fragmentation

The number of platforms and systems in use and in production within the EU is more than three times that in the US, demonstrating a high level of fragmentation, especially in the naval and land sectors (EC, 2013f:4). The degree of consolidation has varied across industry sectors. In the aerospace sector, consolidation resulted in the creation of European companies such as EADS and Thales. Joint military programmes resulted in new European entities such as MBDA (missiles) and Eurocopter (helicopters) (EC, 2013f:19). Yet the aerospace sector continues to be characterised by overcapacity and capability gaps, with too many relatively small firms and a lack of efficiency in comparison to the US (EC, 2013f:19).

In the naval and land sectors, fragmentation is observed regionally, as well as nationally. In the land sector, industrial capabilities are concentrated in a few countries, particularly France, Germany and the UK, demonstrating complex supply chains.

Figure 3.9 Mergers and acquisitions of the armed vehicles sector in the EU



Note: Country names have been translated into English.

Source: Küchle (2007:23).

In the area of armed vehicles, consolidation has largely taken place along national lines (see Figure 3.9). In the UK, the armed vehicles sector has been reduced from five prime contractors to one, namely BAE Systems (EC, 2013f:18). Also in Germany, France and Italy, the industry has consolidated.

With the formulation of its 2010 Headline Goal (HG) the EU MS committed to becoming more coherent on defence matters, with the objective of cooperating to overcome existing capability gaps and investing in future capabilities (Mölling and Brune, 2011:9). MS aimed to be able by 2010 to respond with rapid and decisive action, applying a fully coherent approach to the whole spectrum of crisis management operations covered by the TEU, referred to as the Petersberg Tasks (Juvan and Prebilič, 2012:129).

The EU's ability to deploy forces in "high readiness" in response to a crisis was considered a key element of the HG 2010 and was based on the EU battlegroups. The battlegroups prioritise a small response force aimed at increasing the EU's capability to defuse escalating crises; however, they have not been deployed once after five years of

full operational capability due to a lack of political union, common foreign policy and common identification of security challenges (Hatzigeorgopoulos, 2012b:2). HG 2030 has articulated a common set of future industrial and technological priorities for the EU defence industry (Mölling and Brune, 2011:14).

Restructuring complex

The restructuring of the European defence industry is inextricably linked to the development of institutions, policy paradigms, business networks and relationships between governments (Lovering, 1999:342). Adjusting an industrial base to focus on expeditionary and multinationally interoperable systems for new missions is a costly process involving economic and political dislocations (Flournoy and Smith, 2005:75). This demand becomes even complex when the HG 2010 presents the EU as a global power ready to share in the responsibility for global security, whereas European defence budgets are declining and the defence industry is shrinking and consolidating.

Rising costs, inefficiencies and budget cuts have brought European defence to a crucial point (Croft, 2012:1). MS fail to invest in "critical shortfalls" and there is a risk that Europe's military could be marginalised. It is predicted that many MS will be unable in a few years to sustain essential parts of their national forces, with air forces being the prime example (Croft, 2012:1).

The NATO relationship

NATO is still regarded as the dominant institutional foundation for transatlantic security affairs, with the EU and NATO struggling to work out an effective cooperative relationship despite their overlapping membership (Mix, 2013:ii). US and European policymakers have to effectively manage the dynamics of the US-EU-NATO relationship in order to allow for the comprehensive and effective use of Euro-Atlantic resources and capabilities (Mix, 2013:ii). The European DIB was developed in accordance with prior NATO strategy, and the outcomes of the December 2013 European Council meeting stated that the CSDP "will continue to develop in full complementarity with NATO in the agreed framework of the strategic partnership between the EU and NATO and in compliance with the decision-making autonomy and procedures of each" (Ricci, 2014:3).

However, NATO is in reality an instrument of US strategy and the EU and NATO will never merge their efforts (Johnstone, 2010:2). In order to lessen political conflict and permit the EU to close its political-capacity-capability gaps, these institutions should converge and seek truces to enable practical cooperation and harmonise capability action plans (De Haas, 2007:6). It has even been advocated that the EU and NATO should aim to combine different policy instruments (De Haas, 2007:23).

Two examples

Poland is one of the few alliance countries that approach the NATO defence spending benchmark of two percent of GDP (Anderson et al., 2013:27). Compliance with NATO guidelines resulted in significant infrastructure development within Poland. In 2004, NATO committed US\$344-m to the construction and modernisation of airfields, naval bases and command centres. Poland was able to replace much of its Soviet-era military inventories with NATO-compliant materiel (Anderson et al., 2013:27). Since 2000, Poland has acquired materiel from the US, the UK, Sweden, Spain, Norway, Netherlands, Lithuania, Italy, Israel, Germany, Finland and Canada.

On the other hand, in April 2014 a Czech daily newspaper published details of a leaked NATO document evaluating the performance of the Czech Republic as an alliance member. Czech MoD officials regarded it as the worst performance evaluation in at least five years (Kominek, 2014:1). NATO warned the Czech Republic that its level of readiness will not improve unless its MoD budget increases. "The current state [of the military budget] requires a complete re-working of defence planning and results in delaying the further development of the defence capability of the ACR [Army of the Czech Republic]," the document stated (Kominek, 2014:1).

The stronger partners

In 2010, six EU MS (the UK, France, Germany, Italy, Spain and Sweden) represented 90% (10% more than in 2005) of the EU defence industrial capability, 85% of its defence spending and 98% of its R&D spending (Arrowsmith, 2010:262). These six stand to gain or lose the most in terms of GDP, employment and technology base from any significant shifts in defence production (Flournoy and Smith, 2005:73).

The defence industries in both France and the UK are relatively large and have the capability of developing both conventional and nuclear weapons and a complete range of advanced air, land and sea systems (Owen and McCall, 2008:62). The UK industry demonstrates complete openness to foreign participation (Seibertz, Stähle and Hensler, 2010:23), while the technology segment is fully developed in the UK and France—on par with the US—with Germany lagging behind slightly. France is ranked as one of the world’s best aeronautics manufacturers, while Germany focuses on infantry and non-nuclear submarine technologies (Seibertz et al., 2010:23).

Figure 3.10 Cooperation can ensure high potential in the EU

Criteria	Germany	UK	France	US
Technology				
Export				
Domestic demand/budget				
Openness of industry to foreign participation				
R&D				
Size of companies				
Overseas engagement				
Diversification				

strong / fully developed

Source: Seibertz et al. (2010:23).

EU technology and export abilities

When one compares the defence sectors of the three leading EU countries (France, UK and Germany) with the US on the basis of major economic and technological criteria, it is clear that the strength of the European industry lies in its technology and export abilities (Seibertz et al., 2010:23). In fact, the openness of the UK industry to foreign participation is ranked higher than that of the US industry, while both the UK and France own technology comparable to that of the US (Figure 3.10).

National budgeting, however, reveals major weaknesses, especially relating to R&D spending and the size and diversification of armament suppliers. This scenario has resulted in a fragmented market and duplication within the EU (Seibertz et al., 2010:23).

The comparison illustrated in Figure 3.10 should also be considered by DCs and the EU alike in assessing strategic options and in aiming to be more competitive and reach the HG 2030 goals.

France is one of the few countries to enjoy widespread technological strength, thanks to public investment in programmes, research and training. “France’s historical choice in favour of national autonomy in defence has favoured the emergence of poles of excellence” (*Defpro Daily*, 2011:1). The French DIB has developed several leaders in global defence technology; French aircraft, space systems, tactical guided missiles, electro-optics and naval systems are recognised everywhere as among the most technologically advanced in the global market (Globalsecurity.org, 2013:1).

In the 1990s France moved away from an almost totally indigenous armament strategy toward a mix of indigenous and external acquisition, “in spite of the potential impact on domestic high technology employment” (Globalsecurity.org, 2013:2). This comprehensive reform aimed to significantly reduce the costs of developing and procuring weaponry and other defence equipment. Today France’s defence industry produces about 90% of its own armament requirements and exports to more than 25 countries (Globalsecurity.org, 2013:2).

As of 2010, France was the world’s fourth-largest exporter of defence equipment. The order book of €5.12-b at the time reflected the strong performance of the industry in a difficult environment (*Defpro Daily*, 2011:1). French companies have increasingly turned to exports to ensure the survival of the French DIB. In 2011 the export market accounted for 32% of sales by French A&D companies, with substantial potential for further growth. As of 2010, France’s main export customers were Saudi Arabia, Brazil, India and Malaysia; only 17% of exports were within Europe (*Defpro Daily*, 2011:2).

France plans to overhaul its armed forces to create a more mobile army and to boost intelligence resources and special forces. It also has made cyber security a priority (Irish and Vignal, 2013:2). Continued French arms exports are viewed as indispensable to the future health of the country’s defence industrial base (Globalsecurity.org, 2013:2).

The UK ranked fifth on the 2012 global firepower listing (see 1.1, heading “Global military powers”), the highest of all EU countries, and demonstrated especially strong air power. Between 2008 and 2011, the top six recipients of UK defence exports were Saudi Arabia, France, the US, UAE, Malaysia and China. Out of a total product value of £24.2-b over this period, the UAE purchased nearly £4-b, or 17% (Baker, 2012:1).

The UK security sector is growing fast and is one of the most diverse and technically advanced in the world, demonstrating key strengths in counter-terrorism, border control, transport security, forensics and CBRN protection. In 2012, the UK MoD stated that the country’s defence industry was the second-biggest defence exporter in the world and that the UK security industry had a good base from which to improve. The sector comprised 9 000 companies, including many SMEs, employing around 140 000 people. UK security exports were worth £2-b in 2010, an increase of more than eight percent from the previous year (MoD UK, 2012:44).

In the long term, the UK wants to withdraw from combat operations in Afghanistan and foresees a significant increase in the utility of the army’s reserve force. In July 2011 the UK announced that the size of its army would be reduced by 20% by 2020 and that the part-time reserve Territorial Army (TA) was to be revitalised (International Institute for Strategic Studies [IISS], 2013:2). The UK government’s decision to lower the defence budget has prompted the British Army to “undertake its most radical reorganisation in 50 years (IISS, 2013:1).

The German security and defence industry is based on high-tech products and prioritises R&D. In 2012, the German defence budget was US\$43.4-b and the external debt of the country in 2011 was US\$5.6-trillion (Global Firepower, 2012a:4). Germany ranked seventh on the global firepower list of 2012.

Table 3.1 Comparing the military strength of France, the UK and Germany

France	UK	Germany
<p>LAND SYSTEMS</p> <p>Tank value includes MBT, light tanks and tank destroyer systems, wheeled or tracked.</p> <ul style="list-style-type: none"> Tanks: 571 ^[2012] Armored Fighting Vehicles: 6,728 ^[2012] Self-Propelled Guns: 251 ^[2012] Towed Artillery Pieces: 105 ^[2012] Rocket Projectors (MLRS): 41 ^[2012] Portable Mortar Systems: 1,550 ^[2012] Portable AT Weapons: 14,760 ^[2012] Logistical Vehicles: 13,750 	<p>LAND SYSTEMS</p> <p>Tank value includes MBT, light tanks and tank destroyer systems, wheeled or tracked.</p> <ul style="list-style-type: none"> Tanks: 227 ^[2012] Armored Fighting Vehicles: 5,315 ^[2012] Self-Propelled Guns: 89 ^[2012] Towed Artillery Pieces: 138 ^[2012] Rocket Projectors (MLRS): 42 ^[2012] Portable Mortar Systems: 2,563 ^[2012] Portable AT Weapons: 4,000 ^[2012] Logistical Vehicles: 25,650 	<p>LAND SYSTEMS</p> <p>Tank value includes MBT, light tanks and tank destroyer systems, wheeled or tracked.</p> <ul style="list-style-type: none"> Tanks: 408 ^[2012] Armored Fighting Vehicles: 1,794 ^[2012] Self-Propelled Guns: 185 ^[2012] Towed Artillery Pieces: 1,500 ^[2012] Rocket Projectors (MLRS): 250 ^[2012] Portable Mortar Systems: 2,200 ^[2012] Portable AT Weapons: 12,000 ^[2012] Logistical Vehicles: 10,400
<p>AIR POWER</p> <p>Includes fixed-wing and rotary-wing aircraft from all branches of service.</p> <p>All aircraft types accounted for including UAVs, transports, gunships, recon, naval, trainers, etc.</p> <ul style="list-style-type: none"> Total Aircraft: 544 ^[2012] Helicopters: 410 ^[2012] 	<p>AIR POWER</p> <p>Includes fixed-wing and rotary-wing aircraft from all branches of service.</p> <p>All aircraft types accounted for including UAVs, transports, gunships, recon, naval, trainers, etc.</p> <ul style="list-style-type: none"> Total Aircraft: 1,412 ^[2012] Helicopters: 367 ^[2012] 	<p>AIR POWER</p> <p>Includes fixed-wing and rotary-wing aircraft from all branches of service.</p> <p>All aircraft types accounted for including UAVs, transports, gunships, recon, naval, trainers, etc.</p> <ul style="list-style-type: none"> Total Aircraft: 925 ^[2012] Helicopters: 493 ^[2012]
<p>NAVAL POWER</p> <p>Aircraft Carrier value does not include helicopter carrier-type vessels.</p> <ul style="list-style-type: none"> Total Strength: 180 ^(includes auxiliaries) Aircraft Carriers: 1 ^[2012] Frigates: 22 ^[2012] Destroyers: 0 ^[2012] Corvettes: 9 ^[2012] Submarines: 10 ^[2012] Coastal Craft: 43 ^[2012] Mine Warfare: 11 ^[2012] Amphibious Assault: 4 ^[2012] 	<p>NAVAL POWER</p> <p>Aircraft Carrier value does not include helicopter carrier-type vessels.</p> <ul style="list-style-type: none"> Total Strength: 77 ^(includes auxiliaries) Aircraft Carriers: 1 ^[2012] Frigates: 13 ^[2012] Destroyers: 5 ^[2012] Corvettes: 0 ^[2012] Submarines: 10 ^[2012] Coastal Craft: 24 ^[2012] Mine Warfare: 15 ^[2012] Amphibious Assault: 4 ^[2012] 	<p>NAVAL POWER</p> <p>Aircraft Carrier value does not include helicopter carrier-type vessels.</p> <ul style="list-style-type: none"> Total Strength: 67 ^(includes auxiliaries) Aircraft Carriers: 0 ^[2012] Frigates: 14 ^[2012] Destroyers: 0 ^[2012] Corvettes: 2 ^[2012] Submarines: 4 ^[2012] Coastal Craft: 8 ^[2012] Mine Warfare: 17 ^[2012] Amphibious Assault: 2 ^[2012]

Source: Global Firepower (2012b:2-3, 2012c:4, 2012a:2-3).

Comparing the three EU leaders

When comparing the military forces of EU MS France, the UK and Germany in Table 3.1:

- the UK has the highest number of aircraft (excluding helicopters);
- the UK is believed to have the strongest naval force;
- the UK has very few portable anti-tank weapons, but about twice the number of logistical vehicles;
- France has the highest number of tanks and armoured fighting vehicles; and
- Germany has a high number of towed artillery pieces.

Military capabilities of the future

To assess how the European defence market is developing, we must look at defence spending trends, changes in the defence acquisition regulatory framework, and the financial health of the European defence and security industrial base (Hofbauer, 2010:39). A trend analysis based on these data indicates some implications for

Europe's ability to generate military capabilities in the future. The situation will likely have two interconnected effects on demand (Hofbauer, 2010:40);

- European armed forces may obtain technologically more sophisticated equipment in smaller quantities and possibly at a higher price per unit, with decisions in certain MS, including Germany, the UK and Sweden, to reduce the number of soldiers robustly increasing the amount of equipment per soldier and thereby the capabilities of Europe's armed forces; and
- acquiring fewer units of more advanced equipment may have an adverse effect on economies of scale, accelerating the drive toward increased multi-national collaboration.

If the EU is set on establishing an independent EDTIB based on more sophisticated technology, the R&D activities needed to yield this technology have to be planned and budgeted for, while the EU may need to include relevant mergers and acquisitions in its game plan. The EU governments and DCs may need to coordinate their strategies to reach this goal.

Indigenous investment, but frequently without focus

The EDTIB can advance in sophistication only through indigenous European governmental investments (Decision–US Crest, 2009:3). However, European countries that possessed a strong industrial base in the post–Cold War era opted for a *de facto* modernisation or specialisation, often without a specific national defence strategy (Flournoy and Smith, 2005:75).

One success story was the Netherlands government's specialisation strategy. The country decided to discard its manned aerial maritime reconnaissance capabilities and aimed to specialise and lead in domains such as communications and naval sensors (Flournoy and Smith, 2005:75). These areas were chosen to take advantage of local expertise and aimed at focused local industry investment that could provide capabilities for multiple applications. Another result of this decision has been the emergence of several Netherlands-based companies as global leaders in maritime sensor systems (Flournoy and Smith, 2005:75).

Low interoperability in the EU

In several domains relevant for the new range of missions such as command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR), there are often slight differences between military and civilian systems. The fact that European national militaries independently developed and procured information, collection and dissemination infrastructures resulted in a scenario where few systems are compatible, resulting in very low interoperability among countries (Flournoy and Smith, 2005:76).

Multinational deployments are often hampered by the fact that countries have incompatible hardware. The increased application of dual-use systems that are not based on military standards further complicates interoperability.

The EU and the US market

The different models followed by the European industry to connect with the US defence market can have positive, neutral or negative impacts on the EDTIB, depending on the criteria used to analyse the situation, which may include the following (Decision–US Crest, 2009:2-3):

- the financial or technical impact;
- the constraints on operational or technological sovereignty;
- system integrator or platform provider capability; or
- sub-system or equipment supplier capability.

The European defence industry cannot really address the US defence market in a sustainable manner from its European base, because in any transatlantic defence trade relationship, technology can travel one way only, from Europe to the US (Decision–US Crest, 2009:3). European defence investments and technology that are sold to the US *de facto* become subject to the US technology control regime (Decision–US Crest, 2009:3; see 3.6 Procurement policy).

No business model that focuses on non-EU markets and the transfer of technology to non-EU countries can advance the EDTIB. Only the BAE Systems (UK) strategy, which consisted of buying an American entity and conducting business from the US as an

American company with a high level of independence from the European headquarters, has offered a sustainable business model (Decision–US Crest, 2009:2).

3.15 COMPETING COUNTRIES' DEFENCE BASES

A look at other defence bases around the world confirms the significant possibility of a shift in the global balance of power that would leave the EU without a major role in world politics (Cuyckens, 2012:1). One possible future scenario involves the emergence of a new type of bipolar world composed of two superpowers—the US and China, while other visualise a sort of triumvirate that includes the EU as a third participant. Some foresee China and the other BRIC countries (Brazil, Russia, India), as well as South Korea (the group is referred to as BRICK if South Korea is included) playing a major role (Cuyckens, 2012:20).

FDI (foreign direct investment) flows indirectly supported China's defence industries and aided the country in technology acquisition. While China is progressively improving its export capacity (Ecorys, 2010:16), Russia remains its principal defence supplier (Bickford, 2006:11).

When comparing developments of 2002-2006 to those of 2007-2011, the volume of China's exports increased by 95%, mainly due to Pakistani imports, while China moved from being the largest recipient of major conventional weapons in 2005-2009 to number four on the importers list (Holtom et al., 2012c:4). Between 2007 and 2011 China became the sixth-largest supplier of major conventional weapons, narrowly trailing the UK (Holtom et al., 2012c:5). China sold to various countries (Holtom et al., 2012c:5):

- other states in Asia and Oceania (73% of the volume of exports);
- Pakistan (64%);
- the Middle East (12%);
- Africa (9%); and
- South America (6%).

The Russian industry has a long record of arms sales and has all the necessary components to manage export contracts. Brazil has significant knowledge and industrial maturity in the aeronautical segment, but a limited presence. Consequently its portfolio

is limited and the capacity to export is very low (Ecorys, 2010:15). Driven by threats from its northern neighbour, South Korea has built up a very large defence industry in relation to the size of its country. However, the industry does not cover the whole range of armaments sectors and access to key technologies is not complete (Ecorys, 2010:16). Several pressing security issues largely determine the direction of India's security policy and military spending. The insurgency in Kashmir and the related conflict with Pakistan remain unresolved (SIPRI, 2012j:2).

The most important domains represented by each country include (Ecorys, 2010:17):

- Brazil: aircraft
- India (at a lower level than the other achievements mentioned here): helicopter, aircraft, missile;
- China: land armaments;
- South Korea: surface ships; and
- Russia: an even distribution among helicopters, aircraft, missiles, land armaments, surface ships and submarines, with electronic systems and optronics slightly lower.

The US retains sufficient core capabilities and skills to ensure that the US government will have proportionately more control over the flow and direction of defence developments than any other political entity. In this respect, it is still difficult to see an end to US military technological hegemony (Hayward, 2011:13). The US home market is significant, with the vast majority of US military sales being domestic procurement rather than export (Standford.edu, 2003:7). Only two percent of the US national defence procurement budget is directed to foreign suppliers. In Europe, on the other hand, about 12% of the defence procurement budget was directed to US suppliers in 2008 (Decision–US Crest, 2009:2), rising to 18% in 2011.

The BRIC countries, South Africa and Turkey seek global or regional status in economic, political and diplomatic terms, calling for a strong and modern military that is able to project influence (Perlo-Freeman, Ismail et al., 2012a:180). The development of domestic arms industries to reduce dependence on imports for modernisation is a priority for all six countries (Perlo-Freeman, Ismail et al., 2012a:180). China and Russia are both concerned by overwhelming US military dominance and technological

superiority, while China's rapid modernisation is creating a major concern for India. Russia has been a main supplier to other BRIC and South Korean companies, making it an important competitor to EU suppliers, while South Korea has been the only BRICK country dominated by US imports (Ecorys, 2010:13).

While Brazil, China, India, South Africa and Turkey are pursuing naval and airborne power-projection capabilities, Russia is seeking to re-establish itself as the dominant military force in the former Soviet area (Perlo-Freeman, Ismail et al., 2012a:180). Between 2009 and 2013, the Russian government invested significantly in the modernisation of its armed forces, "including the replacement of outdated Soviet era equipment in an upgrade program triggered by the country's 2008 conflict with Georgia" (ADS News, 2013:1).

The desire for military power may also reflect a dedicated decision to stay abreast of military technology to ensure security and status. Offset is one means by which these countries ensure that their military purchases result in an advancement of the respective local defence industries, requiring localisation and the development of defence capabilities. In cases where there are no clear actual or perceived threats or immediate uses for advanced weapons systems—such as in Brazil and South Africa—military power appears to be desired as a mark of prestige (Perlo-Freeman, Ismail et al., 2012a:180).

Business-as-usual scenario

A business-as-usual forecast has predicted that, by 2025 each BRICK country will have the capability and capacity to produce most of its own defence equipment while competing with Europe in the international defence market within specialised niches (Ecorys, 2010:27). If the European defence industry aspires to be a leading producer and supplier of more advanced technologies to emerging markets, it has to maintain its technological edge in engineering, design and research (Ecorys, 2010:19).

Conclusion: uncertain direction for defence industrial bases

In a bipolar world where China opposes the US, Russia may take the lead in defence production, resulting in two types of defence equipment that are incompatible and

forcing purchasers to choose between US- or Russian-made products. With the EU no longer able to “go it alone” in the defence industry, the EU may want to join Russia, especially in advancing electronic and optronic systems; however, the EU and Russian systems are not currently compatible. There may be a semi-split in the EU, with Northern countries forming their own sub-coalition, the UK following the US, and central Europe joining forces with South American countries, especially Brazil. Such a development would further undermine the potential for defence collaboration within the EU.

Although it is tempting to rely on the US’s unrivalled military status for protection, “leading thinkers are increasingly concerned that in a few key areas potential adversaries, especially China, will erode America’s technological advantage, catch up, or even surpass them” (Freedberg, 2012:2).

3.16 THE ECONOMICS OF THE DEFENCE MARKET

Defence markets are distinctive in nature, with the demand dominated by governments and both defence and security being national prerogatives (EC, 2012d:3). In contrast to a monopoly where there are many customers but only one supplier, the defence market is a monopsony representing many suppliers (in this case, national arms producers), but one customer, the national government (European Monitoring Centre on Change [EMCC], 2006:5). Monopsony power exists only within a national market, because if the EDEM were fully open, each MS would be a potential buyer (Arrowsmith, 2010:262). DCs are burdened by the fact that they have no control over the actions of governments (Kiernan, 1994:2).

The unusual structure of the defence market demonstrates an emphasis on performance of high-technology weaponry rather than on cost. Elaborate rules and regulations governing contracts compensate for the absence of any form of competitive market and assure public accountability (Dunne, 1995). “For all of these reasons, the monopsony in the defence market has helped to create near-monopolies for certain companies” (Dunne, 2006:5).

Demand-driven

The defence equipment market is almost solely “demand-driven”, offering few ready-made products, but acting on initiatives usually taken by the State with requirements based on defence policy and military doctrine (Arrowsmith, 2010:263). In 2012, declining budgets, together with changing customer requirements and the increasing success of non-traditional competitors such as Cisco, Eurocopter and Boeing Commercial Airplanes, signalled that “the industry’s *status quo* is likely untenable” (Fischer and Bollinger, 2012:1).

Some portions of the sector can ensure their stability by spanning defence and commercial applications, while others are more viable as national champions, where there is only one competitor per segment (Fischer and Bollinger, 2012:1). The strategy can depend on the product in question. For example, a military tank has no commercial application, but many sub-systems of the tank, including cameras, communication systems, computers and seats, have dual-use applications that may be freely available in the market.

Maintaining inefficient capabilities

In most market sectors, when a country cannot provide a commodity efficiently and effectively, it is imported. In the name of national security, countries may maintain independent capabilities even though they are not efficient or effective. The defence sector features a delicate balance between security ambitions and economic aspirations and independent potential is prioritised (Bailes and Depauw, 2011:6).

In some MS, national governments still own a significant proportion of some defence companies. This can act as a barrier to future collaboration and consolidation within the European market as governments, through their procurement, have a strong desire to maintain employment and protect domestic industries, often due to SoS concerns (Ecorys, 2010:44). If a country is able to specialise and at the same time gain the benefit from commercial market rules, this is an advantage.

By way of comparison, even in agriculture governments do not necessarily make efficient and effective production a priority. The Common Agricultural Policy (CAP) is the most controversial and most expensive scheme in the EU, accounting for more than

40% of its annual budget (BBC, 2013:1). In 2013, the budget for direct farm subsidies and rural development (the so-called twin "pillars" of the CAP) amounted to €57.5-b, or 43% of the total EU budget of €132.8-b. "Most of the CAP budget represents direct payments to farmers" (BBC, 2013:3).

The political and industrial considerations that influence the defence market make it doubtful that an open or unregulated arms production market would follow commercial market rules. An "open" EDEM would still represent some form of oligopsony, where the number of buyers is small and the number of sellers could be large (Arrowsmith, 2010:262). Open markets further result in a race for the lowest price, and the cheapest goods in EU may not be the cheapest elsewhere on the globe.

Trade barriers

In the context of the wider economic crisis, some countries have introduced more stringent protectionist measures relating to procurement contracts, which may negatively impact European companies. Examples of these measures include the Buy American Act, Buy Brazil and Buy China regulations and domestic preferences in Turkey, Russia and certain states in Australia (EU Business, 2012:2).

For European defence industries, the barriers to trade with the US, which has the most regulated defence markets in the world, have always been numerous and powerful (Decision–US Crest, 2009:6). The US technology control regime (i.e. ITAR) remains the principal inhibitor of a greater transatlantic flow of defence goods in both directions. European industries trading defence goods with the US have to comply with this regime (Decision–US Crest, 2009:3).

With regard to defence procurement, Directive 81 stipulates that it is up to MS to decide whether their contracting authorities can accept bids from third countries or not, which can be seen as a trade barrier. In the utilities sector (telecommunications, post, water, energy), Directive 17 stipulates that a tender may be rejected if the proportion of the products originating in third countries exceeds 50% of the total value of the products. The rationale behind this such protectionism seems to be that the EU's markets are in effect fully open even when the EU does not have access to a third country's market. In the event of repeated and serious discrimination against European suppliers in other

countries, EU sectors may be closed to foreign bidders from third countries (EU Business, 2012:3).

Protected

From the regulatory and institutional perspective, national markets in the EU's defence sector have been protected over many years, resulting in fragmentation (Secades, 2011:29-30). "Even though hardly any European state is still able to afford to finance and sustain a full spectrum of defence technological and industrial capabilities", strict national rules still hinder foreign ownership of defence companies or cross-border alliances (Küchle, 2006:3). Despite many efforts on the demand and supply sides, there was still no integrated European defence market in 2006 (Küchle, 2006:3).

Between 2008 and 2010, 66% of the €8.8-b contract value published on the Tenders Electronic Daily (TED) (EDA, 2013a) and the Electronic Bulletin Board for European Defence Contract Opportunities (EDA, 2013b) was awarded to national suppliers, 26% (€2.3-b) to operators established in other MS and only five percent (€0.4-b) to operators from third countries (EC, 2013f:13). In 2013, this scenario was unchanged in both the EU and the US (see 4.26.6 Resisting national awards).

Dual-use results in less protectionism

The growing dual-use potential of technologies that do not fall within the strict definition of defence procurement could improve the global competitiveness of the European industry, with a more open market boosting industrial restructuring across national boundaries to reduce duplication (EC, 2004:3).

However, with weapons being commonly assembled from components sourced from across the globe and with no single company or country taking the responsibility for the production of all the different components, collaborative ventures and foreign subsidiaries may have few controls over where weapons go or for what ends they are used (Cairns, 2011:2). The civ-mil cooperation in the EU is compounded by the complex distribution of competencies and division of work (EC, 2013e:16), demanding new regimes to manage such a synthesis.

Domain challenges

Challenges identified in the European defence and security domain include:

- a lack of certainty regarding the future structure and required tasks of the European defence industry, which are determined by political factors (Secades, 2011:29);
- a fragmented market that hampers innovation and leads to the duplication of defence programmes and research, undermining Europe's global competitiveness and the effectiveness of the CSDP (EC, 2013d:2);
- the re-allocation of defence public expenditures as a consequence of the current financial and budgetary crisis (Secades, 2011:29);
- the continuous decrease of national defence budgets, which is likely to weigh heavily on the profitability and competitiveness of European DCs (EC, 2013f:29);
- defence markets remain hamstrung by heavy restrictions on technology transfer, burdensome export controls and government reluctance to buy equipment from abroad (O'Donnell, 2010b:1);
- a need to develop an integrated approach across the civ-mil dividing line, ensuring effective regulations and optimising mechanisms for cooperation and coordination between the EC's own services and with stakeholders (EC, 2013e:16; Cairns, 2011:2); and
- retaining key skills so as to deliver high-technology solutions in an increasingly competitive global market when a significant percentage of the workforce is expected to retire in the coming ten to 15 years (EC, 2013f:30-1).

The European defence industry is facing serious competitive pressure because traditional competitors such as the US may be more flexible than the EU in adapting to new circumstances, whereas emerging countries such as India, China and Brazil are able to compete on price, which becomes a more important factor in critical economic times. The industry will have to find additional markets outside Europe to maintain its current size, but it cannot count on having the same advantages that it enjoys in the domestic market and therefore desperately needs to be more competitive (Secades, 2011:29).

3.17 THE EXPORT MARKET

The international defence equipment market is highly competitive, dominated by a small number of exporters. The ranking of the top five EU exporters of high-tech equipment has not changed significantly in recent years (*Defpro Daily*, 2011:1). The top ten US companies have also not changed greatly over the years with Lockheed Martin, Boeing, Northrup Grumman, Raytheon and General Dynamics holding their places over time (*Defense News*, 2013:1). As of 2005, these top five US firms accounted for 43% of total global arms sales (SIPRI, 2009:1). The list of top defence exporters as of 2012 included 11 EU companies, mostly from the UK and France.

Table 3.2 Biggest exporters, 2009-2012

(Figures are SIPRI Trend Indicator Values, or TIVs, expressed in US\$m at constant 1990 prices)

Rank 2009-2012	Supplier	2009	2010	2011	2012	2009-2012
1	US	6921	8335	9672	8760	33687
2	Russia	5877	5974	8620	8003	28474
3	Germany	2465	2647	1295	1193	7600
4	France	2065	971	1796	1139	5971
5	China	1076	1518	1506	1783	5883
6	UK	1004	1121	1006	863	3994
7	Spain	971	280	1455	720	3426
8	Italy	501	542	878	847	2768
9	Ukraine	348	475	553	1344	2720
10	Israel	708	609	518	533	2369
	<i>Others</i>	<i>2919</i>	<i>3115</i>	<i>3166</i>	<i>2986</i>	<i>12186</i>
	Total	24 853	25 587	30 465	28 172	109 077

Source: SIPRI (2013d:List of top '10').

The US, the EU (mainly France and the UK), Russia and Israel have accounted for 90% of the export market between 2001-2011 (*Defpro Daily*, 2011:1), and their export figures far surpass the rest of the countries in the top ten between 2009 and 2012 (Table 3.2).

The countries profiting most from the arms trade between 2005-2011 were the five permanent members of the United Nations Security Council (the US, the UK, France, Russia and China) plus non-member Germany (Shah, 2011:7).

Between 2006 and 2010 the five largest suppliers globally—the US, Russia, Germany, France and the UK—accounted for 75% of the volume of exports of major conventional weapons (Holtom, Béraud-Sudreau et al., 2011:1). In 2008, there were three EU MS among the top five exporters of defence equipment: Germany, France and the UK (SIPRI, 2013d). In 2011, China replaced the UK in the top five (Goldsmith, 2013:2; SIPRI, 2013d). By 2012, Ukraine had also dislodged France from the top five (Table 3.2).

Concentration

There has generally been an increasing concentration of military expenditures, with a small number of countries dominating the market (Shah, 2012a:3). The top 15 spenders in 2012—from biggest to smallest—were the US, China, Russia, the UK, Japan, France, Saudi Arabia, India, Germany, Italy, Brazil, South Korea, Australia, Canada and Turkey (SIPRI, 2012h:1-2, Table 4A.1). Only four of the countries had military budgets above the global average of 2.6% of GDP—the US, Russia, South Korea and Saudi Arabia (SIPRI, 2012f:2).

Market changes

The market changes between 1985 and 2013 are summarised in Table 3.3 on the following page.

Table 3.3 Summary of market changes, 1985-2013

PERIOD	EVENT	REFERENCE
1985-1994	Biggest suppliers of arms: US, Russia, UK, France and Germany	SIPRI (2013d:1)
2004	Top 6 spenders: US, UK, France, Japan, China and Germany	EMCC (2006:3)
2005	Top 5 US firms: Lockheed Martin, Boeing, Northrup Grumman, Raytheon and General Dynamics accounted for 43% of total global arms sales	SIPRI (2009:1)
1992-2009	Global defence spending increased by 53%	Anderson (2012:slide 7)
1999-2009	World military expenditure showed a steep increase	Shah (2012a:13)
2010	Since 2010 a clear plateau has been evident in global spending	Anderson (2012:slide 7)
2001-2010	29 major armed conflicts were recorded in 28 locations, with the highest number in Asia and second-highest in Africa	Themnér and Wallenstein (2011:61)
2001-2011	The US, the EU (mainly France and the UK), Russia and Israel have accounted for 90% of the export market	<i>Defpro Daily</i> (2011)
2005-2011	The US, UK, France, Russia, China and Germany were responsible for 70% of reported conventional arms exports	Shah (2011:7)
2006-2011	The five largest suppliers globally, the US, Russia, Germany, France and the UK, accounted for 75% of the volume of exports of major conventional weapons	Holtom, Béraud-Sudreau et al. (2011:1)
2007-2011	The US received 25% of defence imports from the UK, 20% from Norway, 11% from Germany and 5% from France	Holtom et al. (2012a:5, Table 6.3)
2008-2011	US firms sold US\$146-b worth of military hardware to foreign countries	Klare (2013:2)
2011	Plateau in total military spending because of economic and security patterns: austerity measures in Western Europe and US; Arab Spring resulted in substantial increased expenditures in the Middle East and a continuing global demand for US weapons	Grimmett and Kerr (2012:12)
2011	Individual West European suppliers struggled to secure large new contracts with developing nations	Grimmett and Kerr (2012:12)
2011	More than 50% of sales for the Top 15 European industry suppliers were to non-European buyers	EC (2013f:26).
2011	Strong economic growth in BRIC and South Africa and Turkey ensured each country increasing prominence in regional and global affairs	Perlo-Freeman, Ismail et al. (2012a:157)
2011	It seemed that US, the UK, France and Germany would remain the world's principal exporters of major conventional weapons, exercising diplomatic and military influence through their trade	Perlo-Freeman (2012:3)
2000-2012	Various sources include these countries as the biggest spenders: the US, China, Russia, the UK, Japan, France, Saudi Arabia, India, Germany, Italy, Brazil, South Korea, Australia, Canada, Turkey, Israel, Spain, the Netherlands and UAE	SIPRI (2012h:1-2, Table 4A.1)
2013	The development of domestic arms industries able to reduce dependence on imports for modernisation is a priority for BRIC countries, plus South Africa and Turkey	Perlo-Freeman, Ismail et al. (2012a:180)
2025	BRIC countries plus South Africa and Turkey will have the capability and capacity to produce the "bricks and mortar" of most defence equipment, while competing with Europe in the international defence market within specialised niches	Ecorys (2010:27)

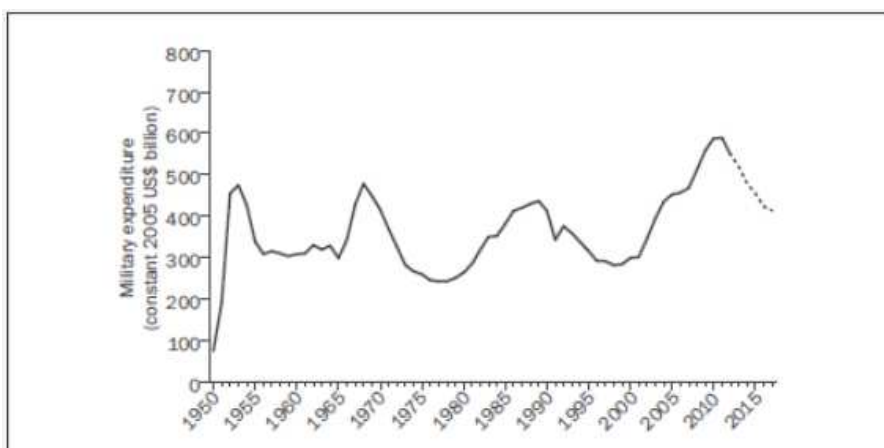
3.18 US AND EMERGING MARKETS

US defence spending peaked around 2011 and has declined since then, with further cuts projected, but remains the world's highest. In 2012, the Task Force on a Unified Security Budget for the US recommended measures to ensure savings (Sköns, 2013:4). Reductions over ten years focus on savings from budget reform, as well as on resetting US security along more realistic lines.

Proposed cuts in military spending for financial year 2013 included less spending on nuclear forces (US\$20-b), health care (US\$15-b), retirement (US\$13-b), personnel (US\$10-b) and some procurement programmes, including the F-35 Joint Strike Fighter (JSF) combat aircraft, the V-22 Osprey aircraft and Virginia class submarines (with savings of US\$8.8-b foreseen for these programmes) (Sköns, 2013:4).

Figure 3.11 US military spending, 1950–2017

(Figures represent national defence outlays and figures for financial years 2013–2017 are estimates)



Source: US Office of Management and Budget, Budget of the US Government, Fiscal Year 2014, in Sköns (2013:3).

During the economic downturn of 2007-2010, companies in emerging markets used their strong domestic base as a springboard for global expansion; between 2013 and 2017 emerging markets will account for much of the globe's economic growth. Rapid and sustained levels of growth are occurring in BRIC countries, as well as in other emerging markets such as Argentina, Chile, Indonesia, the Philippines, Qatar and Vietnam, all of which grew by more than five percent in 2011 (Egan and Ovanessoff, 2012:1; World Bank, 2013:1-6). Increases in the price of oil create the opportunity for

major oil-producing states to fund their arms purchases, while oil-consuming states have to curtail or defer new weapons acquisitions (Shah, 2011:3).

DCs that are “quick to re-evaluate the opportunity in emerging markets and organise themselves to seize the opportunities will be best placed to capture new sources of growth” (Egan and Ovanessoff, 2012:1). Most emerging countries’ defence capabilities are low, but these countries may become important actors in the development of dual-use technology. DCs should understand the changing nature of the industry and its relation to the civil sector (Ecorys, 2010:271).

In many cases, the success of EU contractors in BRICKs has resulted from failure by the US to meet these countries’ needs in terms of knowledge transfer and the provision of vital central processing information for advanced systems (Ecorys, 2010:273). Regulatory frameworks can influence the competitiveness of defence industries, and the following conditions may drive the competitiveness of defence industries in BRICK countries (Ecorys, 2010:10):

- self-reliance that eliminates the risk of arms embargos;
- membership of regional organisations that provides a forum for the future development of defence-oriented cooperation and collaboration;
- US technology content in the majority of EU-produced defence equipment places EU defence equipment under US ITAR export controls;
- political developments and resulting policies and strategies act as the leading driver of all defence industries; and
- the fact that competitors do not have an even chance in the export of defence equipment and dual-use goods can enhance or diminish the competitiveness of some European producers in BRICK countries’ defence markets.

As stated, offset will further assist emerging countries to expand their influence in the global defence market. Oman, Singapore, UAE, Malaysia and Indonesia owe all major indigenous platform export sales to offset agreements (Anderson, 2012:slide 9).

3.19 IMPLICATIONS FOR THE EUROPEAN DEFENCE MARKET IN CRISIS

In 2013, Europe's military spending was in free fall with combined spending by EU MS dropping from €200-b to €170-b since the start of the economic crisis in 2008 (O'Donnell, 2013:1). US officials warn that Europeans will soon be incapable of deploying a mission similar to the one sent to Libya in 2011 (O'Donnell, 2013:2). Finland and Denmark have maintained steady spending in recent years, while only Poland and Sweden have increased spending (O'Donnell, 2013:1). Spending in the US in 2012 amounted to US\$685.3-b, which was 69% higher in real terms than in 2001 when the US wars on terrorism began (Sköns, 2013:1). In the same year, the European defence industry recorded a turnover of €96-b (US\$130-b), still making a major contribution to the broader EU economy (EC, 2013f:3).

With the global market becoming increasingly competitive and new countries becoming able to offer a variety of systems and platforms, global trends and assumptions do not forecast a rosy future for the European defence industry. It is unlikely that domestic security spending will increase at such a rate that it could replace defence sales. US defence investment is more likely to decrease than to increase, and the US is no longer a major customer of EU companies anyhow (Hofbauer, 2010:42).

In order for DCs to survive in the market, operating models, capabilities and leadership approaches that have worked over the past years will need to be adapted. Higher levels of agility are called for, as well as cost controls and innovative thinking regarding new bases of competition (Fischer and Bollinger, 2012:4). To better withstand the competitive rigours of the military environment, major contractors have to reduce their excess capacity through restructuring, mergers, sales of assets and "simply closing down failing facilities" (Weidenbaum, 1992:32).

Quite possibly, some DCs will leave the industry in the long run, because it simply will not be profitable to stay in. Some may try to move into the civilian market, as did Hughes Electronics by developing a miniature receiving dish for home use with a satellite television network, or Boeing in 1971 when it significantly reduced its number of military contracts in favour of civilian aircraft production. Boeing's gamble paid off and it became the leading civilian aircraft manufacturer (Kiernan, 1994:3). A new wave of industrial consolidation is possible as well (Briani et al., 2013:14). Decreasing demand

and reduced investment in defence R&D require defence companies to develop new business models or adapt existing ones (EC, 2013f:21-26). The European defence industry has to be able to adapt to and compete in the new world scenario by means of specialisation, restructuring, cost reduction and the exploitation of an overwhelming technological edge (Secades, 2011:29).

The transformation of the European defence industry requires the willingness of principal companies to reach a sufficient size and search for better complementarities and synergies to enhance their business (Cassier, 2010:29; EC, 2013f:20). Few defence companies in Europe have the critical size that will enable them to partially finance R&D or to develop the capacity to support contracts with armed forces and operations in international theatres (EC, 2013f:20).

It is possible that the defence market will evolve into a more segmented sector, with clearer distinctions between local and global participants (EC, 2013f:21). Policy measures for these two types of corporations should be addressed differently (EC, 2013f:21). Domestic defence companies must have the capacity to meet local army needs, be supported by a local budget and ensure enough contracts to occupy its staff. Global companies need a global presence, the ability to self-finance new developments and the ability to offer fully integrated solutions.

Figure 3.12 Potential future scenario of the European aerospace and defence landscape

Type of player	Key success factors	Comment
Global players > 40 bn\$ turnover	<ul style="list-style-type: none"> > Financial capabilities to bear risks for large self-financed development or services contracts > Global presence from a geographical point of view > Multi platform / multi product players > Ability to win some major export contracts without a strong political support 	<ul style="list-style-type: none"> > Need a critical size to self finance new development (eg 40% of self financing on NH90) > Large product portfolio, to provide fully integrated solutions including platform and system integration, as well as services or outsourcing > Cost competitiveness
National domestic players 1-10 bn\$ turnover	<ul style="list-style-type: none"> > Political lobbying capacity to protect domestic market from any local / foreigner player (sanctuarisation) > Capacity to meet local army needs by highly customized equipments 	<ul style="list-style-type: none"> > Local country must have financial capacities to support its local players > In addition, domestic market must be sufficient to provide workload to the local players, without a clear need to go to export market

These two levels should be addressed differently by policy measures

Source: Roland Berger, in EC (2013f:21).

New markets

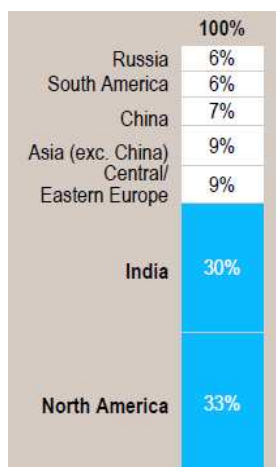
The mid-term strategy of most Western companies is to secure long-term positions in emerging markets (Roland Berger Strategy Consultants, 2012:slide 7). Nearly 50% of senior industry executives of 100 global A&D companies in the EU, representing a broad range of segments and positions in the value chain, stated in 2012 that they would aim to do more than 60% of their business outside Western Europe (Roland Berger Strategy Consultants, 2012:slide 7). In 2012, only 24% of these EU companies were actually doing more than 60% of their business outside Western Europe, so the trend to look elsewhere for business opportunities is substantial.

Acquisitions and partnerships in non-European markets

In order to ensure markets, EU defence companies often make acquisitions in other non-European markets and build partnerships with non-European producers (EC, 2013f:26). North America and India are the most attractive destinations for companies looking to develop design capabilities abroad.

Figure 3.13 North America and India are the most attractive

Leading A&D companies in the EU identified North America (26%), China (19%) and South America (14%) as the most attractive areas to develop revenues outside Western Europe.



Source: Roland Berger Strategy Consultants (2012:slide 13).

By way of specific examples, BAE Systems established a joint defence venture with Mahindra & Mahindra Ltd in India, while DCNS and its partner in Brazil established a joint venture called ICN for the construction of four submarines and a naval base (EC,

2013f:26). In addressing markets outside Western Europe, A&D companies in the EU indicate that the main challenges are knowledge and understanding of local rules (36%) and developing local political support (21%) (Roland Berger Strategy Consultants, 2012:slide 11).

The most efficient mechanism for developing foreign revenues in the various countries was identified as joint ventures and partnerships with local companies. In the Middle East and Russia, local sales presentations were the second-favourite priority; in the US, having a local subsidiary was the most commonly preferred development mechanism (41%), with acquisition ranking second (Roland Berger Strategy Consultants, 2012:slide 12).

Cooperation strategies

European governments have acknowledged that armed forces cooperation could result in savings (O'Donnell, 2013:2); however, cooperation does not yet relate to major military systems. Cooperation projects that started in 2012 included the following instances (O'Donnell, 2013:2):

- 14 EU MS agreed to buy surveillance drones for a joint NATO-run squadron;
- Belgium and the Netherlands decided to cooperate in helicopter maintenance;
- Bulgaria and Romania agreed on terms to police each other's airspace;
- 18 EU MS started facilitating maritime surveillance through information exchanges;
- Britain and France trained together to develop a new joint expeditionary force; and
- the UK and other Europeans started providing logistical support to France's deployment in Mali.

Internationalisation and risks

Faced with lack of orders, companies are increasingly turning to third markets. More than 50% of 2011 sales by the top 15 European industry suppliers were to non-European buyers (EC, 2013f:26). Defence export agreements usually include transfers of technology, intellectual property rights and/or relocation of production. Collaboration with non-European countries entails risks to the longer-term competitiveness of the European defence industry, especially if this trend coincides with declining R&D investment (EC, 2013f:29).

Diversification the trend

Defence executives need a new paradigm for how they deploy capital (Thompson, 2011:2). Contractors that offer only military products may not be able to survive a prolonged defence downturn, while diversified companies with interests in both the civil and defence markets may be able to steer various major business units through rough patches to a point where they can resume steady profitability (Thompson, 2011:5).

Commercial markets are likely to offer more favourable conditions in the years ahead than the military marketplace (Thompson, 2011:3). “Even though most of the big business moves in the sector in 2011 have been about divestiture and ‘deconglomeration’, the dominant trend going forward will be diversification” (Thompson, 2011:1). Some company executives want to retain the defence portfolio, viewing the “counter-cyclical” behaviour of defence stocks—i.e. that they do not tend to perform in tandem with the commercial business cycle—as their biggest selling point (Thompson, 2011:2).

Due to the shift in recent years from traditional military operations toward peace operations and counter-terrorism, innovation and technology were transferred between the civil and the defence industries. Successful transfers were recorded in the areas of (Lisek, 2011:7):

- communication and space;
- humanitarian assistance and support to civil authorities; and
- civil protection applications in cases of natural or man-made disasters.

Further militarisation

The EU Parliamentary Committee on Industry, Research and Energy (CIRE), in a report on the impact of the financial crisis on the defence sector in EU MS (2011/2177(INI)), advocated further militarisation of the EU, encouraging increased investment in security, defence and military research and equipment despite the financial and economic crises and potential environmental impacts (Lisek, 2011:9). CIRE asked the EC to support the EDTIB by establishing a procedure that indicated the Union’s preference for certain defence equipment that was essential in maintaining strategic autonomy and operational sovereignty.

According to CIRE, only less competitive companies on the supply side that could not implement an export-led growth strategy should diversify their portfolios to focus less on defence goods and more on civil security or dual-use items. CIRE believed that some degree of supply consolidation was unavoidable (Tošenovský, 2011:10).

Collaborative defence procurement among European States can offer the most adequate compromise between often-unachievable development of domestic capacity and off-the-shelf purchases from another country (Heuninckx, 2011:34). Eurofighter 2000 was the largest European collaborative armaments project to date, with major companies in the UK, Germany, Italy and Spain participating. The procurement of capabilities through transnational collaboration can create mutual dependencies and pose the opportunity to reinforce the national industry, while still achieving efficiencies and economies of scale (Heuninckx, 2011:30). However, the project did not meet the required timelines or cost projections.

A few European suppliers adopted the strategy of cooperating in defence production ventures with the US, such as the Joint Strike Fighter, rather than attempting to compete directly. In this way these suppliers met their own requirements for advanced combat aircraft while positioning themselves to share in the profits resulting from future sales of new equipment (Grimmett and Kerr, 2012:12). However, in 2011, the US prioritised arms transfer to developing nations and the European ventures were not pursued (Grimmett and Kerr, 2012:8).

Intra-EU transfers and Directive 43

In an effort to simplify the terms and conditions of transfers of defence-related products within the EU, the EC launched Directive 43 (2009/43/EC on intra-EU transfers of defence-related products, also known as the Intra-Community Transfer [ICT] Directive) (Decision–US Crest, 2009:89). Until 2012, most EU governments have required a national export authorisation whenever military goods were moved between MS. This applied to major equipment, spare parts and components. Even though export requests within the EU are hardly ever rejected, governments acknowledged in 2009 that such onerous controls were unnecessary and agreed to a directive that would create a more efficient system (O'Donnell, 2010b:3).

In 2013, MS were working to establish their compliance regimes accordingly. “For the initiative to be effective, EU countries will have to trust their neighbours to ensure that their defence equipment is not re-exported to undesirable destinations. That trust does not yet exist across the whole of the Union” (O’Donnell, 2010b:3). In order to maximise the potential of the EU’s streamlined controls, European governments and DCs could start opting for ITAR-free goods (O’Donnell, 2010b:5). The Pentagon fears that the EU’s new licensing system will lower the effectiveness of European export controls and that looser controls among EU MS will increase the risk of technology leaking out of the EU, ending up in the wrong hands (O’Donnell, 2010b:5).

3.20 THE JUSTIFICATION FOR DEFENCE SPENDING

While Western Europe has been reducing its defence spending, the global trade in weapons is still on the rise, with the major demands coming from Washington, Beijing, and Moscow (Klare, 2013:1). The fastest growing military budgets between 2001 and 2010 were in China (189%), Russia (82%), the US (81%), Saudi Arabia (63%) and India (54%) (Gill, 2012c:3; SIPRI, 2012h:2, Table 4A.1). Both strategic factors and the ongoing presence of numerous armed conflicts around the world justify maintaining a strong defence posture.

Geopolitical intrusion

Arms sales are valuable tools of foreign policy that can impel the formation of alliances, serve as an expression of ongoing support and lure a country to join new allies (Klare, 2013:2). Recent arms deals and negotiations suggest a fresh willingness on the part of the major powers to “use weapons transfers as instruments of geopolitical intrusion and competition” (Klare, 2013:5). In 2011, the US and China launched a strategic dialogue on the Asia-Pacific region to ensure that these two large democracies “pursue strategies that reinforce one another” (Klare, 2013:5).

Spending versus exports

The manufacturing of weapons as valuable trade commodities can prove immensely lucrative for companies specialising in their manufacturing (Klare, 2013:2). International weapon sales have proved to be a thriving global business in economically tough times.

Since 2003, US export volumes has remained quite stable at an average of 30.65% of world defence exports (SIPRI, 2013f: Military expenditure by region).

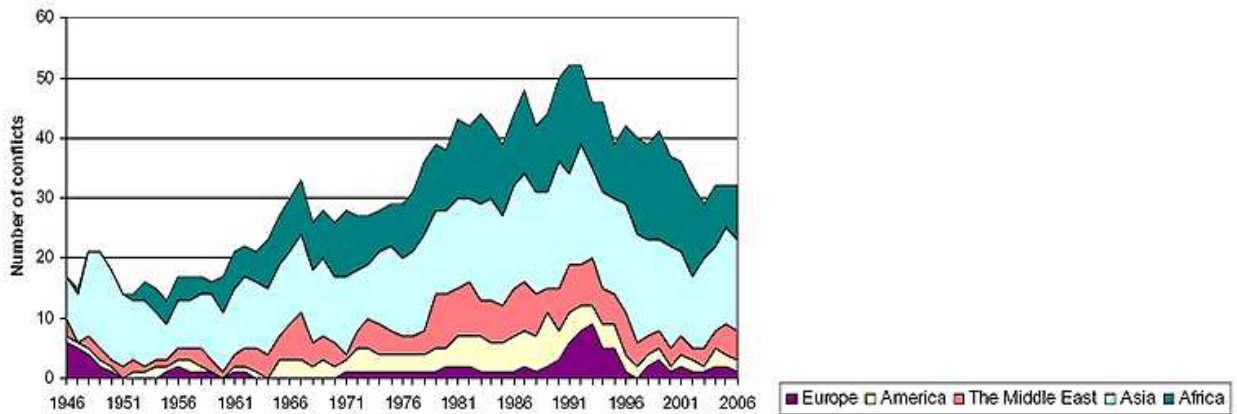
Between 2008 and 2011, US firms sold US\$146-b worth of military hardware to foreign countries, representing an average of US\$36-b per year and ensuring that domestic production lines remain profitable even when government acquisitions slowed down at home (Klare, 2013:2). These foreign exports represented the equivalent of 22% of the 2012 US defence budget of US\$668-b.

Threats and conflict

While political effects, international relations and foreign policies play important roles in defence spending, threat assessment is the major driver (Korkmaz, 2009:7-8). The European Security Strategy (ESS) adopted by the European Council in December 2003 established principles and set clear objectives for advancing the EU's security interests based on its core values (Europa, 2008c:3). The five threats and challenges identified in the ESS in 2004 were similar to those of the US (Keohane, 2012:1): international terrorism; the proliferation of materials and weapons of mass destruction; failed states; organised crime; and regional conflict. The 2008 ESS review added three further challenges (Keohane, 2012:1): cyber security, energy security and climate change.

The number of ongoing conflicts has declined since shortly after the end of the Cold War and the severity of armed conflict has generally declined since WWII (Buhaug et al., 2007:1). The intensity of ongoing conflicts, immediate security threats and relations with neighbouring countries—such as India's conflict in Kashmir and Turkey's relations with Greece—influence military expenditure levels (Perlo-Freeman, Ismail et al., 2012a:180). Geographic trends in armed conflict between 1946 and 2006 show that since 1951, the African continent has experienced the most armed conflicts (Buhaug et al., 2007:5).

Figure 3.14 Armed conflict by continent, 1946-2006

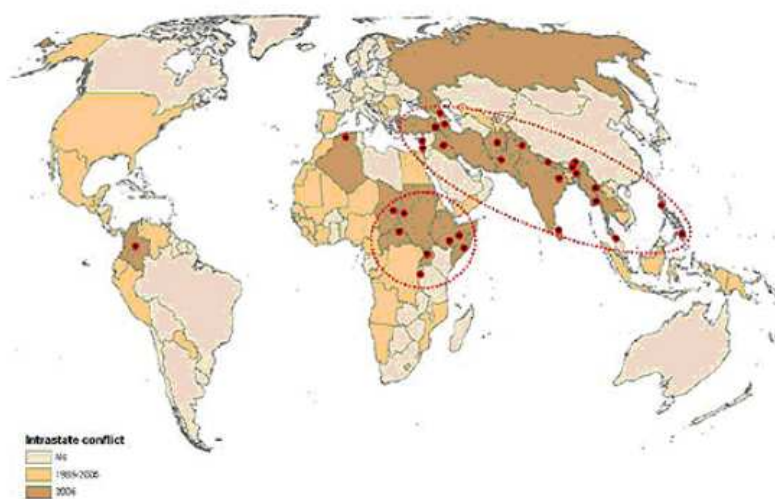


Source: Buhaug et al. (2007:5).

Locations of conflict

The locations of armed conflicts fought in 2006 centre around the east of East Africa, the Persian Gulf and the Arabian Sea and are denoted by red dots.

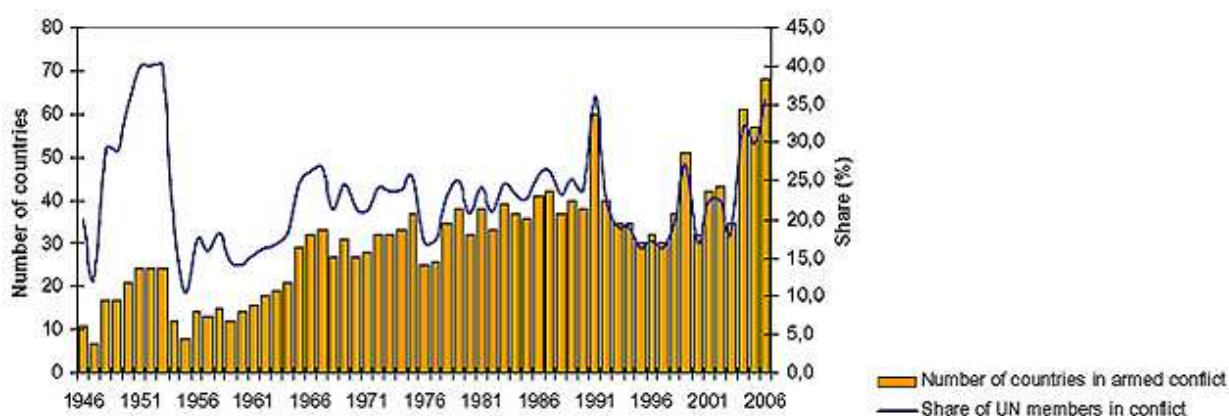
Figure 3.15 Armed conflicts in 2006



Source: Buhaug et al. (2007:5).

In 2006, the number of countries involved in armed conflict reached its highest level since 1946 (Figure 3.16). The Afghanistan conflict alone involved 39 countries, while 33 were engaged in Iraq and 18 were fighting al-Qaida. Many of the same countries were involved in all three conflicts.

Figure 3.16 Number and share of countries in conflict, 1946-2006



Source: Buhaug et al. (2007:6).

Two trends are shown: the absolute number on the left-hand vertical axis and the share of countries involved in armed conflict on the right-hand vertical axis.

Between 2001 and 2010, 29 major armed conflicts were recorded in 28 locations (Themnér and Wallensteen, 2011:61), with the greatest numbers occurring in Asia and Africa. Only two of the 29 were fought in Europe: between the Russian government and the self-proclaimed Chechen Republic of Ichkeria (2001-2007) and between the Azerbaijani government and the self-proclaimed Republic of Nagorno-Karabakh (2005). It is worth noting that 27 of the 29 conflicts were within states; the two exceptions were between India and Pakistan over territorial issues and between Iraq and the US and its allies.

The years since 2010 have seen a dangerous escalation of armed struggle in Syria, which has embroiled many of his neighbours and has also been internationalised along Cold War lines, with the US and Russia backing rival camps (Gerges, 2012:2). In 2012, China had run-ins with two US allies, Japan and the Philippines, over disputed islands (Langfitt, 2012:1). Meanwhile, rapid military modernisation in Asia, though not yet showing signs of developing into a hostile arms race, in some ways reflects a classic security dilemma. China's sense of vulnerability to US power motivates its military development, which triggers similar reactions from China's neighbours, especially India. The danger is that predictions of an arms race and of inevitable rivalry could become self-fulfilling (Perlo-Freeman, Ismail et al., 2012a:180).

Trends until 2019

Projections through 2019 that will require relevant strategies and policies include the following (Quille, 2009:14-15):

- the international system will move away from a US-dominated, unipolar world to include more centres of power;
- groups deprived of certain rights due to globalisation will pose a threat to the international system;
- strategic threats will remain of high concern to the international community as a whole and will include nuclear weapons and their further proliferation in Asia and the Middle East;
- the EU will fight international terrorism and face regional conflict dynamics triggered by the invasions of Afghanistan and Iraq;
- instability in the Asia region, including Afghanistan, could have a regional spillover effect on Europe's security;
- the successful handling of the Afghanistan-Pakistan conflict will remain a strategic priority for the EU;
- the economic centre of power will continue its general shift from West to East and continue to affect US military strategic considerations, with force deployments moving from Europe toward Asia and nearby regions;
- China and India will upgrade their military force projection capabilities in the naval and air force sectors;
- Russia will seek to renew military naval facilities in energy-rich Algeria and Syria, reasserting its influence through Central Asia;
- the oil and gas pipelines across Central Asia and the Middle East will demonstrate the interrelationship between strategies for the location of military bases, power projection capabilities and energy interests;
- Asia's rise as an economic power will shift the balance of international trade, while Central Asia will remain important to the EU as a source of important energy supplies, as well as a transit route;
- the Middle East will remain a region of strategic importance to the EU and any breakthrough in the peace process will require EU support;
- instability in Africa may result in regional turmoil and uncontrolled movement of goods and people on Europe's southern borders;

- European governments may be expected to respond to developmental needs on the African continent; and
- regional security challenges may come from the Middle East, Central and South Asia, and sub-Saharan Africa.

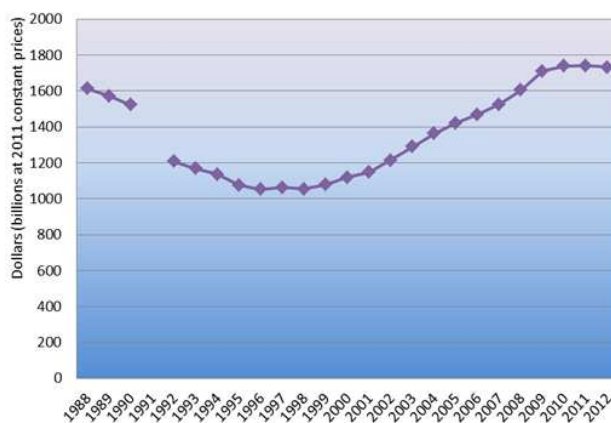
3.21 GLOBAL MILITARY EXPENDITURES

This section provides useful background information on global military expenditure trends around the world, documenting the shift of power away from the EU.

In addition to threat assessment and foreign policy objectives, armed conflict, decisions to contribute to multilateral peacekeeping operations, and the availability of economic resources influence military spending (Shah, 2011:4). The last point is particularly relevant for rapidly developing nations such as China and India that have seen their economies boom in recent years. High and rising world market prices for minerals and, until recently, fossil fuels have enabled some nations to spend more on their militaries (Shah, 2011:4). Between 1999 and 2009, world military expenditures showed a steep increase (Shah, 2012a:13). However, since 2010 a clear plateau has been evident. Since the recession started in 2008, spending has fallen by ten percent in 20 of the 37 countries of Western and Central Europe (*The Economist*, 2013:1). The regions and sub-regions in which military spending did grow in 2010 were South America (5.8%), Africa (5.2%) and Oceania (4.1%) (Perlo-Freeman, Ismail et al., 2012a:181).

Figure 3.17 Global defence spending, 1988-2012

(In 2011 constant US\$-b; 1991 figures are unavailable)



Source: SIPRI military expenditure database 2013, in Shah (2012a:2).

The EU, 1995-2004

EU military spending showed an increase of 2.5% between 1995 and 2000, recording a total expenditure of US\$204-b, followed by a slight decrease of 0.3% between 2000 and 2004, as shown in Table 3.4.

Table 3.4 EU military expenditures, 1995, 2000, and 2004

(In US\$-b)

		Military expenditure			Growth, in %		Proportion of GDP		
		1995	2000	2004	1995-2000	2000-2004	1995	2003	Change in %
1	Austria	2002	2083	1925	4	-7.6	0.9	0.8	-0.1
2	Belgium	4216	4136	4398	-1.9	6.3	1.6	1.3	-0.3
3	Cyprus	222	249	203	12.2	-18.5	2.3	1.5	-0.8
4	Czech Rep	1315	1505	1741	14.4	15.7	1.8	2.2	0.4
5	Denmark	3181	3142	0.228	-1.2	2.7	1.7	1.5	-0.2
6	Estonia	52.8	106	181	100.8	70.8	1	1.9	0.9
7	Finland	1850	1954	2077	5.6	6.3	1.5	1.2	-0.3
8	France	46 100	43 806	46 174	-5	5.4	3.1	2.6	-0.5
9	Germany	37852	36021	33882	-4.8	-5.9	1.7	1.4	-0.3
10	Greece	,450	7412	-	36	-3.9	4.3	4.1	-0.2
11	Hungary	967	1212	1485	25.3	22.5	1.6	1.8	0.2
12	Ireland	786	941	1,010	19.7	7.3	1.1	0.7	-0.4
13	Italy	22425	29681	27759	32.4	-6.5	1.8	1.9	0.1
14	Latvia	60.7	79.9	204	31.6	155.3	0.9	1.7	0.8
15	Lithuania	54.9	249	336	353.6	34.9	0.5	1.6	1.1
16	Luxembourg	136	168	244	23.5	45.2	0.8	0.9	0.1
17	Malta	34.7	31.2	36.1	-10.1	15.7	1	0.8	-0.2
18	Netherlands	8104	8080	8407	-0.3	4	1.9	1.6	-0.3
19	Poland	3343	3685	4149	10.2	12.6	2.1	2	-0.1
20	Portugal	2887	3011	3115	4.3	3.5	2.6	2.1	-0.5
21	Slovakia	909	516	585	-43.2	13.4	3.2	1.9	-1.3
22	Slovenia	350	294	465	-16	58.2	1.7	1.5	-0.2
23	Spain	9160	9434	9565	3	1.4	1.5	1.2	-0.3
24	Sweden	5514	5875	5439	6.5	-7.4	2.3	1.8	-0.5
25	UK	42579	40925	47401	-3.9	15.8	3	2.8	-0.2
	Total EU	199 551	204 596	204 009	2.5	-0.3			
	<i>Mean</i>	<i>7982</i>	<i>8183</i>	<i>8160</i>			<i>1.8</i>	<i>1.7</i>	<i>-0.1</i>

Note: Military expenditures are in constant US\$-b, 2004 prices, with US\$1 equivalent to €0.82.

Source: SIPRI Yearbook, 2005, in EMCC (2006:3).

Since US military expenditures consistently represented 36% to 43% of world expenditures from 2001-2010, they provide a useful benchmark comparison purposes (Perlo-Freeman, Solmirano et al., 2013:3, Table 3.3). During this period, Europe spent on average 51.27% (or barely half) of what the US expended, with the EU average annual expenditure at US\$280-b. The world share of the US arms expenditure in 2012 at US\$685-b, was 39% (Perlo-Freeman, Solmirano et al., 2013:Table 3.3).

Table 3.5 Comparing US to global expenditures, 2001-2010

(Figures are in US\$b at constant (2009) prices and exchange rates for 2001–2010 and, in the right-most column, marked *, in current US\$b. for 2010. Figures do not always add up to totals because of the conventions of rounding)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2010*
World total	1 044	1 107	1 177	1 243	1 294	1 334	1 381	1 457	1 549	1 569	1 630
US	379	425	484	528	553	562	576	619	669	687	698
Rest of world	665	682	693	715	741	772	805	838	880	881	932
US%	36%	38%	41%	42%	43%	42%	42%	42%	43%	44%	43%

*in 2010 US\$b. Only relevant data tabled.

Source: Perlo-Freeman, Cooper et al. (2012b:2-3, Table 4A.2).

Global expenditure figures between 2000 and 2010 heralded a possible shift in defence spending (Anderson, 2012:slide 7). While EU expenditures declined significantly during this period:

- Russia showed the biggest increase in defence sales (13%) compared to 1992-2000;
- the share of global sales attributable to countries other than the top five increased by six percentage points; and
- the US’s global defence market share fell by 18.7%, with market growth buoying actual figures.

Between 2002 and 2012, China's military budget increased by 175% (*The Economist*, 2013:1; Ecorys, 2010:10).

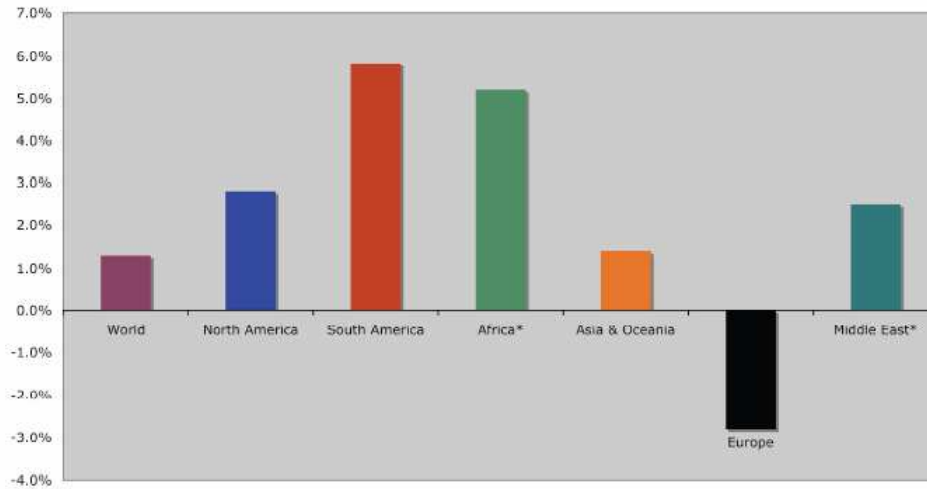
Table 3.6 The 15 countries with the highest military expenditures, 2010

Spending figures are in US\$, at 2011 prices and exchange rates. Countries are ranked according to military spending calculated using market exchange rates (MER). Figures for military spending calculated using purchasing power parity exchange rates are also given.

Rank	Country	Spending (\$ b., MER)	Change, 2001–10 (%)	Share of GDP (% estimate) ^a	World share (%)	Spending (\$ b., PPP) ^a
1	United States	698	81.3	4.8	43	698
2	China	[119]	189	[2.1]	[7.3]	[210]
3	United Kingdom	59.6	21.9	2.7	3.7	57.6
4	France	59.3	3.3	2.3	3.6	49.8
5	Russia	[58.7]	82.4	[4.0]	[3.6]	[88.2]
Sub-total top 5		995			61	
6	Japan	54.5	-1.7	1.0	3.3	43.6
7	Saudi Arabia ^b	45.2	63.0	10.4	2.8	64.6
8	Germany	[45.2]	-2.7	[1.3]	[2.8]	[40.0]
9	India	41.3	54.3	2.7	2.5	116
10	Italy	[37.0]	-5.8	[1.8]	[2.3]	[32.2]
Sub-total top 10		1 218			75	
11	Brazil	33.5	29.6	1.6	2.1	36.2
12	South Korea	27.6	45.2	2.8	1.7	40.8
13	Australia	24.0	48.9	2.0	1.5	17.3
14	Canada	[22.8]	51.8	[1.6]	[1.4]	[19.4]
15	Turkey	[17.5]	-12.2	[2.4]	[1.1]	[23.9]
Sub-total top 15		1 344			82	
World		1 630	50.3	2.6	100	

Source: SIPRI (2012h:3, Table 4A.1).

Figure 3.18 Percentage increases in global and regional military expenditure, 2009-2010



(* Data uncertain)

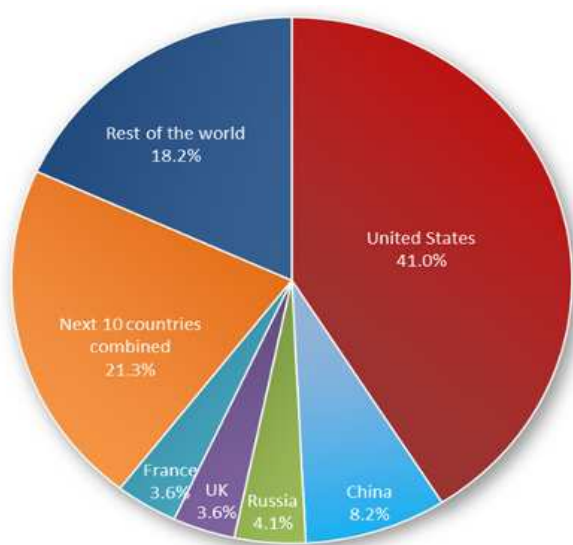
Source: SIPRI (2011:3).

Plateau in 2011

The plateau in total military spending in 2011 has resulted from a mixture of economic and security patterns, balancing a decline caused by austerity measures in Western Europe and the US, with substantial increased expenditures in the Middle East. The continuing global demand for US weapons created a more difficult environment for individual Western European suppliers. These suppliers found it difficult to secure large new contracts with developing nations on a sustainable basis (Grimmett and Kerr, 2012:12).

In 2011, the US represented about 41% of the world's total defence expenditures, distantly followed by China (8.2% of world share), Russia (4.1%), the UK and France (both 3.6%). The "next 10 countries combined" in the chart below include Japan, India, Saudi Arabia, Germany, Brazil, Italy, South Korea, Australia, Canada and Turkey; together they represent 21.3% of global military expenditures (Perlo-Freeman and Solmirano, 2012:1, Table 4.2).

Figure 3.19 Global distribution of military expenditures, 2011



Source: SIPRI Military Expenditure Database 2012, in Shah (2012a:3).

Defence expenditures, 1988-2012

In an effort to indicate the biggest spenders over time, defence expenditures between 1988 and 2012 were recorded and then ranked from the highest to the lowest expenditure recorded in 2011 (see Appendix B, Ranking defence expenditure 1988-2012, ranked according to 2011 expenditures). In cases where expenditures vary vastly or have been constant over many years, an explanatory comment was added in column two.

As already noted, the US was by far the biggest spender with China second, spending 86% more than Russia. The US, China, Russia, France, the UK and Japan spent over US\$50-b in 2011. Expenditures in Russia decreased after the disbanding of the USSR (Union of Soviet Socialist Republics) in 1994. In 2011, there were five EU MS in the lowest spending bracket, under US\$1-b. EU MS Austria and Denmark demonstrated the most constant arms expenditures during 1988-2012 (see Appendix B).

Trends 2000-2012

Most major spenders in the global top 15 in 2012 (the US, China, Russia, the UK, Japan, France, Saudi Arabia, India, Germany, Italy, Brazil, South Korea, Australia, Canada and Turkey) made relatively small cuts during the time period from 2000 to 2012, while many smaller Central and East European countries recorded large declines,

including Bulgaria (28%), Latvia (26%), Georgia (25%), Moldova (24%) and Estonia (23%). Spending in Albania, Greece, Hungary, Lithuania and Slovakia also fell by more than ten percent (Perlo-Freeman, Ismail et al., 2012a:186). Compared to 2009, Sweden, Poland and Luxembourg recorded the biggest spending increases in 2010. The biggest declines in the same period were recorded by Greece, Latvia, Lithuania, Slovakia and the Czech Republic (Pires, 2012:slide 3). Between 2008 and 2012, the UK cut spending by 5.2% and France by 3.8%, while Germany increased its spending by 2.6% (Perlo-Freeman, Solmirano et al., 2013:3).

Table 3.7 Average annual changes in military expenditure, by region or sub-region, 2003–2009 and 2009–2012



Source: Perlo-Freeman, Solmirano et al. (2013:2).

Data from 2003-2012 show that Western and Central Europe have had the largest declines in military spending (Table 3.7).

The cutbacks in Europe that followed the financial crisis and economic recession do not reveal the whole story. Most military budgets in Europe have been more or less stagnant for a decade since 2003. “Military spending for the European members of NATO was at the same level in constant prices in 2011 as in 2003” (Gill, 2012a:2).

EU vs US expenditures, 2003-2012

Between 2003 and 2012, the EU spent on average 48% of the US annual expenditure. The average annual defence expenditure in the EU between 2003 and 2006 was US\$294-b.

Table 3.8 EU vs. US arms expenditures in constant 2011 prices, 2003-2012

(Calculated in US\$b at constant (2011) prices and exchange rates)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
US spending	507	553	579	588	604	649	701	720	711	671
EU spending	280	299	298	300	307	312	317	307	291	285
EU vs US	55%	54%	51%	51%	51%	48%	45%	43%	41%	42%

Sources: US figures: Perlo-Freeman, Abdul-Shafi et al. (2013:1); EU figures: Perlo-Freeman, Solmirano et al. (2013:1).

2013 trends

In 2013 the global defence segment showed continued declines in revenue for the third consecutive year, due to decreased military spending, principally in the US and Europe (Deloitte Touche Tohmatsu Limited [DTTL], 2013:3). The global financial crisis influenced military spending even in regions not directly affected by the crisis, and the reduction in export demand in the developed world slowed economic growth in emerging regions as well, affecting total military expenditures (Perlo-Freeman, 2012:4). There was a definite shift in the balance of spending at the regional level (Hoyos, 2013:2). Chinese and Russian companies have made inroads in overseas markets, buoyed by their governments' investments. This scenario makes it more difficult for companies such as Lockheed Martin and BAE Systems to make up lost ground by selling internationally (Hoyos, 2013:2).

3.22 SUMMARISING DEFENCE EXPENDITURES AND MARKET OPPORTUNITIES

As the US dominates the global military scene, "the enormous difference between budgets in Europe and the US represents an irresistible incentive for European companies to attempt penetration of the US market" (Becher, 2004:26). The relative decline of Europe and Japan will have a big influence on the US. While the US will hold its own amid the coming revolution, falling fortunes of its allies will compromise

America's ability to maintain global sway (Kupchan, 2012:3). The Obama administration's decision to rein in the US defence budget over the next several years is seen by some critics as a dangerous signal of decline relative to potential adversaries such as Iran and China. Others commend it as a practical policy that may not go far enough (Masters, 2012a:2).

European spending

EU industries are significantly dependent on EU MS' spending, but defence expenditures in the EU have decreased by 15% in the past 20 years (Simon, 2011:slide 5). European spending is dominated by personnel costs, with half of the EU MS spending more than 60% of their respective defence budgets on personnel (EC, 2013f:8-9).

In need of clear strategies

In February 2012, the German Defence Minister stated that "the party is over". Since 2002, the defence industry has benefitted from the buying fever in southern Europe, delivering shipments to Greece, Portugal and Spain and making Germany the third-largest arms exporter in the world (Fasse, 2012:2). The UK and Germany are planning further cuts: the UK by 7.5% in real terms by financial year 2014/15 compared to fiscal year 2010/11 and Germany by around ten percent by 2015 compared to 2011. France is planning to maintain roughly constant spending in real terms up to 2013 (Perlo-Freeman, 2012:2).

Greece, Ireland, Italy, Portugal and Spain are facing acute sovereign debt crises that will call into question these governments' ability to service or refinance their debts (Perlo-Freeman, 2012:2). Germany has to find new orders to make up for the loss of its best client, Greece.

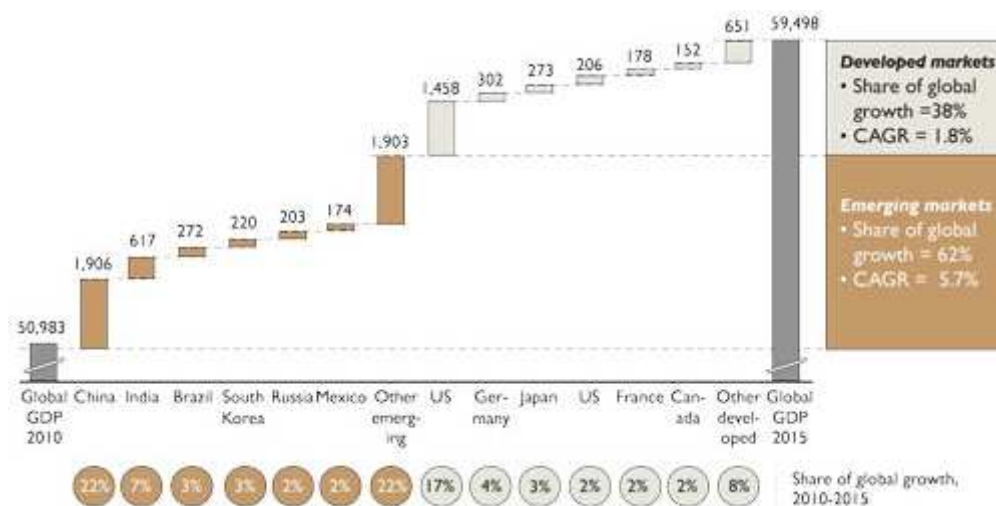
KMW and Rheinmetall hope for more work from Saudi Arabia, the UAE and Brazil, while EADS Cassidian is looking toward the Middle East and India (Fasse, 2012:1-2). Most companies still need clear strategies that look beyond the fog of economic uncertainty and invest to achieve sustainable, long-term growth (Egan and Ovanessoff, 2012:1).

Top five emerging markets, 2010-2015

Emerging markets are growing and increasing ownership of shares of the global GDP. Between 2010 and 2015, global economic output is projected to rise by US\$8.5-trillion, with emerging markets expected to account for about 62% of that growth (Egan and Ovanessoff, 2012:1). For multinationals in many industries, emerging markets will pose the greatest opportunities, as well as the greatest risks (Egan and Ovanessoff, 2012:1). The top five emerging countries, Brazil, China, India, Mexico and South Africa, contributed US\$170.5-b to the global defence spending industry in 2011, showing a compounded annual growth rate (CAGR) of 12.5% between 2007 and 2011 (Research and Markets, 2012:1). The same countries are expected to reach a total value military expenditure of US\$3.2-b in 2015, with a CAGR of 11.3% over the 2010-2015 period.

Figure 3.20 Emerging markets, 2010-2015

(In US\$-b at 2005 prices and market exchange rates)



Source: Economist Intelligence Unit; Accenture analysis, in Egan and Ovanessoff (2012:2).

The implications of reduced spending

Current and impending military spending cuts have made perennial accusations of free-riding on US military power more frequent on both sides of the Atlantic (Perlo-Freeman, 2012:3). Some countries are blamed for “not pulling their weight” in the European defence initiative as they spend less than two percent of their GDP on defence (Braddon, 2011:slide 31). Decreasing defence budgets have prompted unease in many quarters that European countries risk losing global influence as their military capabilities

fall further behind those of the US and as other powers such as China may overtake them (Perlo-Freeman, 2012:3).

The US, the UK, France and Germany will remain the world's principal exporters of major conventional weapons, exercising diplomatic and military influence through their trade (Perlo-Freeman, 2012:3). Nevertheless, established powers will struggle through a period of financial austerity, constraining their relative strengths; they will aim to do more with less or, more likely, less with less (SIPRI, 2012c:2). World total defence spending is expected to grow by 6.8% between 2011-2015; however, as austerity in the West will be more than offset by accelerated defence spending in emerging markets (EC, 2013f:6).

Erosion of influence

Due to many constraints, not the least of which is time pressure, cuts in EU defence expenditures are taking place with very little coordination among capitals. The risk is that skills and hardware will erode and that the disconnect between EU needs and means will continue to widen, jeopardising the EU's future. By 2017 Europe may have lost 12% of its overall defence spending since the start of the economic crisis (Europa, 2013a:2).

While the European continent's GDP is at least equivalent to that of the US, Europe's geography and history favour fragmentation (Papic, 2011:2). Geographic features of the continent prevent the formation of a single political entity, limiting Europe's ability to produce an independent body capable of global power projection. While it is possible for ideas, capital, goods, and services to flow freely, armies are not as easily consolidated, especially across national borders (Papic, 2011:2). Policymakers have to balance the need to restructure the EU's defence industry with maintaining European security (Fiott, 2012:1).

CSDP contested

There are few policy areas in which European integration in the past two decades has been pursued so tenaciously as in the foreign, security, and defence realm. However, the democratic foundation of these developments has been contested (Peters, 2011:1). The ToL was supposed to simplify the institutional framework of the CSDP by ending

the three-pillar system of the EU. However, intergovernmental and *ad hoc* structures were multiplied and the EC's control of the CSDP transformed the policy framework into a blurred system, making it hard to distinguish the roles and responsibilities of each actor (Cassier, 2010:4).

The Treaty of Amsterdam (1997) gave the go-ahead for the CSDP, but implementation failed to materialise (Gnesotto, 2004:257). The democratic foundation of security and defence decisions in the EU is questioned. Particularly in the field of CSDP, there is a marked trend towards consensus-seeking between representatives of MS, without rational bargaining or intergovernmental negotiating (Howorth, 2011:7, 11) The “insulated institutional settings typical of the agencies involved in CSDP” decision-making allows for a different form of political process, which equates more closely to socialisation (Howorth, 2011:19). The degree of socialisation that occurs within the committee is a major factor in generating compromise (Howorth, 2011:23).

The CSDP is currently a project at risk. “Like the Eurozone project, it was launched for primarily political reasons in the knowledge that the physical, political and strategic elements required for success were not in place” (Howorth, 2013:1). It is not clear what the CSDP is attempting to achieve, and Howorth (2013:1, 3) argued that the EU should attempt to define a strategic objective, because the MS could never agree on one. This attitude is seen as going “far beyond what one might normally expect of diplomatic practice”, yet it comes close on many occasions to policy-making (Howorth, 2011:23-24).

In restructuring the European defence industry, a simple *pro rata* adjustment of supply, together with changes in demands arising from a changing security environment, will not yield results. Such a restructuring “is inextricably bound up with the development of institutions, policy paradigms (in both the military and the industrial domains), business networks, and relationships between companies and governments” (Lovering, 1999:342).

Strategic and force-planning processes are conducted independently by EU MS, making harmonisation of military requirements almost impossible (Becher, 2004:21-22). The openness of European defence markets differs greatly from country to country,

while national policies do not align collectively. In Europe, armaments remain in the national domain, with defence industrial interests and strategies still diverging (Becher, 2004:23).

Cooperation in areas with significant ramifications for States' relative power, such as military structures, force postures and capability procurement, remains limited (Dyson and Konstadinides, 2012:21). Common programmes may ensure value, but joint defence procurement initiatives are not likely to be established before Europe becomes a political union (EDA, 2007a:11).

As Neorealism postulates, the principle of national sovereignty in defence remains sacrosanct for EU MS. A political and legal analysis provides compelling evidence that cooperation in defence will be inherently intergovernmental due to the low "international agential power" of the state (Dyson and Konstadinides, 2012:21).

Capabilities

In ensuring future European military capabilities, the EDTIB must be strengthened, maintaining reasonable and acceptable levels of technology investment, in terms of both defence and dual-use technologies (Meiriño, 2011:128). In the past, industries in the sector have consolidated to achieve the appropriate technological, trading and financial dimensions to compete internationally (Suárez Pérez, 2011:205).

At present, the internationalisation of the defence industry is a necessity. States and leading companies need to work together in order to select technologies that are critical to national security, technologies to which countries are willing to commit in cooperation programmes, and niche products that can be developed and sold abroad (Suárez Pérez, 2011:205).

For deeper unification to take place, EU MS have to agree that they all share the same fate (Papic, 2011:7); otherwise the dream of a "United States of Europe" will be caught in ongoing regionalisation. Without a threat that calls for rapid coalition and force strength, MS may not integrate.

Lack of seriousness

The lack of seriousness in EU about defence “stems from intervention fatigue and the absence of any direct military threat” (Witney, 2013:1). The hegemony of the West has come to an end, with the US pivoting to Asia and Europe being rapidly marginalised. Europe needs to exploit all its assets, including its armed forces, to continue to be a major world player. “The missing understanding is how the military can be used as a tool of statecraft” (Witney, 2013:1). Europeans need to re-think the global strategic environment, assessing how their armed forces can support foreign policy (Witney, 2013:1).

EU defence companies have to compete with US industries that form part of a huge and protected market. New players in the armaments market, such as the industries of the BRICK countries, may marginalise European industries on the international stage (Liberti, 2011:40). Without a competitive armaments industry, it will become impossible to equip European armed forces with competitive products, implying a loss of autonomy and even risks in terms of SoS that would undermine the independence of MS’ foreign and defence policy (Liberti, 2011:40-1).

Unified entity

MS with an industrial competence in defence, including Germany, Spain, France, Italy, Sweden and the UK, which together own 90% of the EU’s industrial capacities, may no longer be able to launch new equipment programmes in the near future (Liberti, 2011:40). Given the difficulties of cooperation programmes, governments of EU MS with a relatively minor armaments industry would have to purchase either off-the-shelf defence equipment or items produced by a non-EU country (Liberti, 2011:40).

The latter option would not develop European programmes or support European research efforts. EU MS may be concerned about “failing States” among the EU membership and may therefore want to take defence matters into their own hands. However, the EC’s interpretation of Directive 81 may not to be the best way to address this problem, since the EU does not act as a unified entity in the area of European foreign policy.

Formerly a central strategic theatre for international relations, Europe is suddenly finding itself ageing, outmoded and without much real influence globally. The world is witnessing a multi-polarisation of international relations that is relocating the global centre of gravity away from Europe, in the defence sphere, as well as in other ways (Liberti, 2011:43).

NATO and the EU regarded the Russian move in Ukraine as a wakeup call, a reminder that hard power can easily trump 21st-century assumptions about Europe as a sphere of trade, international law and cooperation. However, it seemed unlikely at the time that Russia's seizure of Crimea would prompt increased European military spending at a time of economic anemia and budget cuts (Erlanger, 2014:1).

Clash of interests

Initiatives in the EDEM reflect a clash of diverse interests (Terlikowski, 2011:38):

- MS are driven by state security imperatives and ways to increase or maintain national defence potential;
- the EC views complete liberalisation of the market as the only correct solution; and
- the defence industry wants to protect its own economic interests and viability.

It is up to European decision makers to send a strong signal that prioritises the relaunch of the process of EC integration until 2020, to be carried out by the sectors in which the advantages of integration are the most significant (Liberti, 2011:44). An EU policy that aims to establish an EDEM and restructure cross-border trade in the European armaments industry should be clear and aligned with the establishment of an industrial policy in the defence arena.

One can argue that the integration of the EU defence sector is a step toward a full handover of national sovereignty. However, it is still not clear how new legislation will overcome the past difficulties experienced by cooperation programmes between MS and how it would motivate MS to give up their sovereignty and military capabilities. There is of course the doomsday scenario under which some MS will become so weak as to have no option but to hand their governance, defence and security over to the EU.

3.23 DEFENCE EXPORTERS AND IMPORTERS

Introductory remarks on exporting, importing and offset values

The remainder of Chapter 3 will characterise the global armaments market more quantitatively by presenting available statistical information on exporters and importers and on the impact of offset on the world market.

Defence spending figures cannot be used to gauge the global arms trade, because a great percentage of defence budgets is designated for staff salaries, logistics and other national military interests (SIPRI, 2013g:2). The arms trade is closely linked to countries' industrial capabilities. If a country's DIB is incapable of supplying the huge array of technologies, materials, components, parts and sub-systems needed to meet the defence requirements of a local government, the country has to rely on foreign sources (Yudken, 2010:5).

Defence export and import (arms transfer) information therefore reveals which countries have the industrial capability to manufacture and distribute defence equipment and which countries have the means to purchase it. Import statistics are also more representative of procurement values because they do not consider fixed costs that relate to production (Ecorys, 2010:iii).

Significant limitations in assessing arms export figures

The countries that produce official data on the financial value of their arms exports account for over 90% of the total volume of deliveries of major conventional weapons globally (Bromley, 2013:1). The available data should therefore offer a rough estimate of the financial value of the global arms trade. However, SIPRI states that the data sets are based on different definitions and methodologies and may not be directly comparable (Bromley, 2013:1). Moreover, there is no simple answer to questions like the size of the international arms trade and the definition of what constitutes "arms", and there is no standardised methodology for collecting and reporting data on arms exports.

Differences exist *inter alia* with regard to arms leased to other States, the transfer of technology to produce arms and military equipment, and upgrades, parts and services related to the transfer of arms and military equipment. The UK, for example, does not release data on "arms exports", while other countries, including China, do not release

any data on “arms exports”, “arms export licenses” or “arms export agreements” (Bromley, 2013:1). “The lack of openness and transparency by many arms suppliers and recipients regarding the value and volume of their arms exports and imports makes it difficult to collect accurate data” (Holtom and Bromley, 2010:1). Statistics on the financial value of countries’ arms exports or agreements may therefore differ considerably (Holtom and Bromley, 2010:1).

Offset benefits that EU MS stand to lose

In order to assess the potential effects of Directive 81 on EU MS and determine whether the EU would be disadvantaged when offset is discarded, the benefits that EU MS stand to lose have to be quantified. In an effort to determine the extent to which various countries appear to have fulfilled other nations’ offset requirements as exporters, or benefitted from their own requirements as importers, from the 1980s until the launch of Directive 81, three routes have been followed. Export and import data have been researched to identify the biggest exporters and importers, with exporters fulfilling offset while importers receive the benefits.

Secondly, the volume of arms transfers (see 3.26 Arms transfers) was interpreted against the backdrop of global offset requirements (Table 2.2) to assess whether the EU received or fulfilled the most offset. Lastly, the value of offset transactions recorded in trade registers in the SIPRI arms transfer databases generated between 2000 and 2012 has been analysed to calculate the offset benefits that have been confirmed publicly (SIPRI, 2012a, 2013c) (see 3.27 Arms trade registers, 2000-2012).

Offset projects are not always made public. While offset agreements contain the terms and conditions regarding industrial cooperation that result in the transfers of technology, skills and intellectual property from the seller to the buyer, the details contained therein are seldom available, because governments and suppliers protect this information through non-disclosure agreements. In assessing arms transfer volumes, the nationality of companies that had to fulfil offset in certain countries can be determined to some extent. The facts that many DCs represent global companies with various operations worldwide and that prime contractors may use foreign sub-contractors to deliver the programme limit researchers’ ability to arrive at precise calculations.

Published figures for arms transfers

The total of all arms exports between 2001 and 2011 was US\$256.7-b (Table 3.9)—only 1.7% of the global defence expenditure in this period of US\$15.24-trillion (Table 3.10).

Table 3.9 Volume of global arms exports, 2001-2011

(In constant 2010 US\$-b prices and exchange rates)

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total 2001-11
19.8	17.9	19.4	21.4	21.4	24.6	26.6	24.3	24.8	25.5	30.4	256*

* The figure for global arms exports in 2012 is given as US\$28.1-b (see Appendix C, Volume of arms exports by country, 2003-2012).

Source: SIPRI (2013b:World exports), retrieved 7 December 2013.

Table 3.10 Global defence spending, 2001-2011

(In constant 2010 US\$-b prices and exchange rates)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
World total expenditure	1 044	1 146	1 218	1 286	1 340	1 383	1 436	1 513	1 613	1 629	1 634
TOTAL 2001-2011 = 15 242											

Source: Perlo-Freeman, Cooper et al. (2012b:5, Table 4A.2) for 2001 figures; Perlo-Freeman and Solmirano (2012:1, Table 4.1)

Table 3.11 Comparing the value of arms exports and export agreements to global defence expenditures

US\$-b	2001-2011
Published value of global arms exports	256
Total available values of arms exports, export licences, export agreements	1 118
Total global defence expenditure	15 240

Total values available for global arms exports, arms export licences and arms export agreements between 2001 and 2011 amount to US\$1.18-trillion, or 4.6 times as much as the published export figures of US\$256-b in Table 3.9 (see Appendix D, Government and industry data on the annual financial value of arms exports, export agreements and export licences, 2001-2011).

Table 3.12 US exports, 1995-2012

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Total '95-2012
US	11239	10921	14663	16145	11747	7697	5933	5049	5677	6787	6796	7711	7990	6808	6921	8335	9672	8760	158848

Source: SIPRI (2013b), retrieved 7 December 2013.

In Table 3.12, the global arms exports for 2011 are recorded as US\$85.3-b, whereas the figure in Table 3.9 is only US\$30.4-b. The total figure for US overseas weapon sales is given as US\$66.3-b (Shanker, 2012:1), which is 7.5 times more than the SIPRI volume of arms exports recorded as US\$9.6-b (see Table 3.12).

Another source identified total arms exports for 2008 as US\$57-b and for 2012 as US\$73-b (Hargreaves, 2013:1)—up to 2.6 times as much as the SIPRI figures in Table 3.9. SIPRI acknowledges that the total export value is likely to be higher than what it is able to identify; for example, it described the total value of global arms trade in 2011 as US\$30.4-b, but stated that by analysing figures more closely and adding together the data that countries have made available on the financial value of their own arms exports, it reached a total of at least US\$43-b—which is 41% higher (SIPRI, 2013g:2).

To add one more example, the SIPRI database records export volumes for the US in 2012 as US\$8.7-b (see Table 3.12). This figure is barely one-third of the collective 2012 export figure of US\$23.4-b published for the following top arms-exporting companies: Lockheed Martin (US\$6.4-b), Boeing (US\$5.6-b), Russia's United Aircraft Corporation (US\$4-b), Raytheon (US\$3.7-b) and BAE (US\$3.7-b) (Hargreaves, 2013:3). It can thus be deduced that available arms export figures published in SIPRI transfers registers, which are used as the baseline for measuring past offset benefits, are very conservative and do not include all global arms exports. On the contrary, this study discovered that in some cases actual export figures could be more than seven times higher than SIPRI figures. Note that SIPRI statistical data relate to major conventional weapons. It can be concluded that recorded arms export figures are not a true representation of global exports and that real arms transfer figures are in fact much higher.

3.24 LEADING EXPORTERS

The US and Russia have remained the dominant arms exporting countries since the end of the Cold War in 1991 (Holtom et al., 2012b:1). However, several EU MS have also been involved in considerable defence exporting, with the UK, France, Germany, the Czech Republic, Italy and the Netherlands generally among the top ten exporters. Between 2006 and 2010, the five leading exporters (the US, Russia, Germany, France and the UK) maintained their positions, accounting for 75% of the volume of exports of

major conventional weapons. During this period, the US represented 30% of the total global arms exports and Russia 23%, with the top three EU countries combining to capture 22% of the market.

Table 3.13 The suppliers of major conventional weapons, 2006–2010

In US\$b. Ranking is according to 2006–2010 total exports, and figures are SIPRI TIVs. These values are based on the known unit production costs of a core set of weapons and intended to represent the transfer of military resources rather than the financial value of the transfer. Actual figures may therefore be higher.

Rank 2006–10	Rank 2005–09	Supplier	Volume of exports (TIVs, thousands)						% global share 2006–10
			2006	2007	2008	2009	2010	2006–10	
1	1	US	7 453	8 003	6 288	6 658	8 641	37 043	30
2	2	Russia	5 095	5 426	5 953	5 575	6 039	28 088	23
3	3	Germany	2 567	3 194	2 500	2 432	2 340	13 033	11
4	4	France	1 643	2 432	1 994	1 865	834	8 768	7
5	5	UK	855	1 018	982	1 022	1 054	4 931	4
6	6	Netherlands	1 187	1 326	530	545	503	4 091	3
7	8	China	597	430	586	1 000	1 423	4 035	3
8	7	Spain	843	590	610	998	513	3 554	3
9	9	Italy	502	684	417	514	627	2 744	2
10	12	Sweden	432	366	454	383	806	2 441	2
11	11	Israel	299	438	281	807	472	2 297	2
12	10	Ukraine	553	728	330	320	201	2 132	2
13	13	Switzerland	284	301	482	255	137	1 460	1
14	14	Canada	226	334	227	169	258	1 214	1
15	16	South Africa	137	153	164	165	80	699	1
16	17	South Korea	94	220	80	163	95	652	1
17	18	Poland	253	162	76	81	8	580	0
18	15	Belgium	58	18	228	242	7	554	0
19	20	Norway	17	55	107	128	141	449	0
20	23	Brazil	44	47	92	36	179	398	0

Figures and percentages may not add up because of the conventions of rounding.

Source: SIPRI (2012k:4, Table 6A.2).

To analyse the volume of arms exports of the top eleven suppliers identified in Table 3.13 over time, Table 3.14 records annual figures between 1995 and 2012.

Table 3.14 Volume of arms exports between 1995 and 2012 of the largest suppliers between 2006 and 2010 identified in Table 3.13

In US\$b. Retrieved from SIPRI arms transfers database, using TIVs. The SIPRI TIVs for 1995-2012 are not the same as for 2006-2010, since the values for the former have had to consider fluctuations over longer periods. Therefore the values in Tables 3.13 and 3.14 do not correlate completely.

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Total 95 - 2012
US	11239	10921	14663	16145	11747	7697	5933	5049	5677	6787	6796	7711	7990	6808	6921	8335	9672	8760	158848
Russia	3860	3633	3203	2047	4231	4168	6043	5765	5428	6194	5196	5156	5608	6710	5877	5974	8620	8003	95716
France	971	1926	3097	3255	1845	1111	1454	1474	1474	2376	1842	1752	2416	2071	2065	971	1796	1139	33034
Germany	1488	1973	952	1829	1864	1612	917	909	1732	1121	2104	2654	3184	2319	2465	2647	1295	1193	32258
UK	1451	1641	2408	1413	1397	1647	1394	1092	752	1234	1009	949	1008	1003	1004	1121	1006	863	22392
China	1059	792	450	364	344	300	512	518	692	380	314	623	454	579	1076	1518	1506	1783	13264
Netherlands	458	479	585	589	349	284	203	234	336	218	568	1158	1235	467	502	381	563	760	9370
Italy	286	326	452	425	494	202	243	462	355	249	823	521	694	391	501	542	878	847	8691
Israel	168	295	254	229	190	378	439	554	364	618	426	379	523	326	708	609	518	533	7511
Sweden	194	342	98	319	373	358	904	166	508	280	523	416	350	403	384	658	658	496	7430
Spain	82	105	625	170	44	46	8	16	98	56	112	847	594	610	971	280	1455	720	6840
TOTAL	21255	22434	26786	26787	22877	17802	18049	16239	17414	19512	19714	22167	24056	21688	22472	23036	27968	25097	395353

Source: SIPRI (2013b:Selected countries manually), retrieved 7 December 2013.

The ranking of the annual average export values for these countries between 1995 and 2012 is as follows (in US\$b):

COUNTRY	ANNUAL AVERAGE, 1995-2012
US	8.825
Russia*	5.318
France	1.835
Germany	1.792
UK	1.244
China	0.737
Netherlands	0.521
Italy	0.483
Israel	0.417
Sweden	0.413
Spain	0.380

*The lower export figures for Russia in the early part in this period resulted in a far lower annual average despite the higher exports in 2011 and 2012.

Table 3.15 Volume of arms exports in 2012 for the largest suppliers

(In US\$-b)

Ranking 2012	Supplier	2012
1	US	8.760
2	Russia	8.003
3	China	1.783
4	Ukraine	1.344
5	Germany	1.193
6	France	1.139
7	UK	0.863
8	Italy	0.847
9	Netherlands	0.760
10	Spain	0.720
11	Israel	0.533
12	Sweden	0.496
TOTAL		US\$25-b

Source: SIPRI (2013b:Selected countries manually), retrieved 7 December 2013.

Arms export values for 2012 show that China and the Ukraine have improved their positions since the 2006-2010 period (Table 3.15). China moved from seventh to third and Ukraine from twelfth to fourth.

The 2012 rankings

When comparing the 2012 ranking of suppliers by country with that of 2010 (Table 3.16 on the following page), one sees that the only EU MS that improved its position drastically, was Poland. The US remained first, with Russia second and China moving up to third place.

Tables 3.16 Comparing the rankings, 2010 vs. 2012

(Figures are SIPRI TIVs expressed in constant 1990 US\$m prices)

Rank 2010	Supplier	2010	Rank 2012	Supplier	2012
1	USA	8335	1	USA	8760
2	Russia	5974	2	Russia	8003
3	Germany (FRG)	2647	3	China	1783
4	China	1518	4	Ukraine	1344
5	UK	1121	5	Germany (FRG)	1193
6	France	971	6	France	1139
7	Sweden	658	7	UK	863
8	Israel	609	8	Italy	847
9	Italy	542	9	Netherlands	760
10	Ukraine	475	10	Spain	720
11	Netherlands	381	11	Israel	533
12	Spain	280	12	Sweden	496
13	Canada	244	13	Canada	276
14	South Africa	234	14	Switzerland	210
15	Uzbekistan	209	15	South Korea	183
16	Switzerland	198	16	Norway	169
17	Brazil	176	17	South Africa	145
18	Belarus	160	18	Poland	140
19	Norway	159	19	Romania	108
20	Australia	98	20	Singapore	76
21	South Korea	97	21	New Zealand	75
22	Jordan	79	22	Australia	75
23	Iran	45	23	Finland	62
24	Turkey	43	24	Turkey	53
25	UAE	39	25	Brazil	32
26	Finland	34	26	Ireland	25
27	Austria	34	27	Denmark	23
28	Serbia	30	28	Belgium	21
29	Poland	28	29	Unknown country	16
30	Libya	28	30	Jordan	12
	Others	142		Others	29
	Total	25587		Total	28172

Generated 29 March 2013. Figures may not add up due to the conventions of rounding.

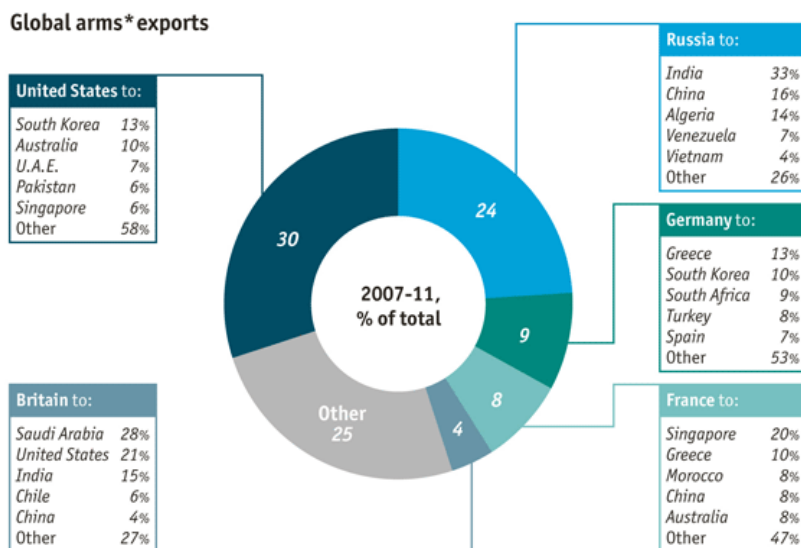
Source: SIPRI (2013d:1).

Rankings of leading European countries were as follows:

- Poland moved up from 33th to 18th;
- France stayed in position 6;
- Italy stayed in position 8;
- Germany moved down from third to fifth;
- the UK dropped from fifth to seventh;
- Sweden fell from seventh to 12th; and
- Spain dropped from ninth to tenth.

Aircraft represent the leading category of exports, followed by ships, missiles, and armoured vehicles. For 2012, the amounts procured were as follows: aircraft US\$11.6-b, ships US\$4.8-b, missiles US\$3.5-b and armoured vehicles US\$3.3-b (SIPRI, 2013b:1).

Figure 3.21 Global arms exporters, 2007-2011



*Large conventional weapons, excluding munitions and small arms

Source: *The Economist* (2012:2).

Fulfilled the most offset

The top five arms exporters for 2006-2010 were the same for 2007-2011. The same five countries were responsible for 75% of all exports: the US, Russia, Germany, France and the UK (*The Economist*, 2012:1). Their share marked a collective decline of three percent when compared to the 78% that they held in 2002-2006 (Holtom et al., 2012a:1).

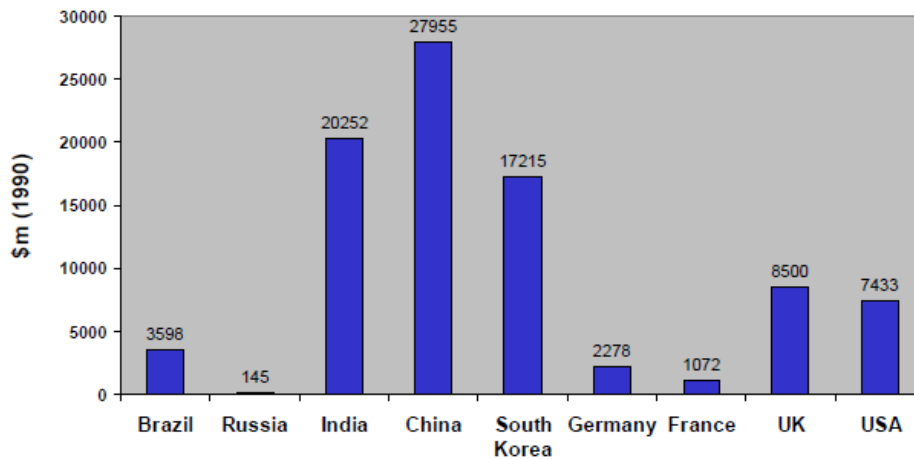
EU MS exporting countries Germany, France the UK, Italy, the Netherlands, Spain and Sweden (Table 3.13) are deemed to have fulfilled the most offset globally between 2006 and 2011. If these leading suppliers continue to export to EU MS in the future, under Directive 81 they may no longer be required to fulfil offset in the EU. Furthermore, because importing EU MS may no longer be able to sustain their defence capabilities without offset, the leading defence exporters in the EU (Germany France and the UK) will gain an advantage.

3.25 LEADING IMPORTERS

With regard to interpreting offset and its implications, it is important to understand the import market as well, since the biggest importers generally receive the most offset benefits if the country has an offset requirement linked to defence procurement.

Between 1995 and 2008, China, India and South Korea were the biggest importers of arms, while Russia, France and Germany had low importing activity (Ecorys, 2010:12).

Figure 3.22 Global total military imports, 1995-2008



Source: Ecorys (2010:12).

EU MS Poland and the UK each accounted for 25% of all European imports from the US during this period (Decision–US Crest, 2009:2). Poland, the UK, India and South Korea presumably received the most offset benefits during these years, with China being excluded because it had no official offset policy (CTO Data Services, 2009c:52).

Import values, 2002-2010

Greece, the UK, Poland, Spain, Germany, Portugal, Italy, the Netherlands and EEA member Norway were the biggest importers in the EU between 2002 and 2010 (Table 3.17 on the following page) and will lose the most offset benefits if this practice is eliminated in the EU. As discussed previously, Germany maintains that it does not practice offset, but there are examples of offset-like benefits delivered to the country.

Table 3.17 EU MS import values, 2002-2010

(In US\$m at constant 1990 prices)

	EU MS	2002 US\$m	2004 US\$m	2006 US\$m	2008 US\$m	2010 US\$m	TOTAL US\$m
1	Greece	446	1 365	750	521	659	3 741
2	UK	737	214	338	538	557	2 384
3	Poland	262	226	445	580	127	1 640
4	Spain	271	295	300	370	279	1 515
5	Germany	69	225	414	372	331	1 411
6	Portugal	0	70	220	145	965	1 400
7	Norway	93	6	522	612	154	1 387
8	Italy	247	433	413	190	86	1 369
9	Netherlands	238	163	345	133	138	1 017
10	Denmark	51	229	112	53	17	462
11	Finland	14	71	123	157	58	423
12	Belgium	62	18	26	204	31	341
13	Sweden	75	47	122	44	52	340
14	Austria	70	56	4	200	7	337
15	France	43	93	71	9	107	323

Source: SIPRI (2013e).

Top ten EU MS importers, 2006-2010

Greece was the largest importer of major conventional weapons in Europe in recent years. The EU MS in the global top ten list of importers between 2006 and 2010 were Greece, the UK, Norway (an EEA country) and Poland (Holtom, Béraud-Sudreau et al., 2011:1), with these four countries presumably receiving the most offset benefits in this period (see Table 3.18 on the following page).

Table 3.18 The world's leading arms importers, 2012

Rank 2012	Recipient	2012
1	India	4764
2	China	1689
3	USA	1297
4	Turkey	1269
5	Pakistan	1244
6	UAE	1094
7	South Korea	1078
8	Saudi Arabia	923
9	Australia	889
10	Morocco	790
11	Algeria	650
12	Venezuela	643
13	Singapore	627
14	Myanmar	619
15	UK	598
16	Afghanistan	576
17	Iraq	455
18	Taiwan	412
19	Brazil	410
20	Israel	387
21	Syria	376
22	Viet Nam	364
23	Uganda	342
24	Bangladesh	325
25	Qatar	316
26	Thailand	297
27	Colombia	279
28	Mexico	267
29	Netherlands	260
30	Spain	256
	Others	4675
	Total	28172

Source: SIPRI (2013d:1).

In 2012, the top 20 importers were all non-EU MS, except for the UK in position 15 SIPRI (2013d:1). All non-EU importers will keep receiving offset benefits even if EU MS may be required to discontinue offset after the launch of Directive 81.

Summary

The data show that the biggest EU MS importers since 2002 have included Greece, the UK, Poland, Spain, Germany, Portugal, Italy, the Netherlands and Norway and that these MS may lose the most offset benefits after the launch of Directive 81. The US, as the biggest exporter, is the biggest fulfiller of offset globally, with France, Germany and the UK serving as the main suppliers among EU MS and thus possibly benefitting the

most if offset requirements in the EU become less stringent. The biggest defence exporters in the EU are likely to gain either by no longer having to fulfil offset in EU MS, or by improving their market positions because EU MS with smaller defence capabilities would no longer receive offset benefits that could assist them in developing their own DIBs and would have to rely more heavily on the MS with developed defence bases.

While some EU MS exporters may be able in the future to count on not having to share know-how and technology with EU MS, new markets outside the EU will generally require 100% offset fulfilment and in some cases also joint ventures with minority shareholding. Germany, for instance, supplied many EU MS, but also South Korea, South Africa and Turkey where it had to fulfil offset.

UK and France exports destined for developing countries have translated into industrial benefits that assisted greatly in developing defence industries in those countries, and will continue to do so. Narrowing or elimination of offset in the EU may bring the biggest benefits to countries that previously sold much of their defence exports to EU MS. These countries include the US, Sweden, the Netherlands, Germany and France.

3.26 ARMS TRANSFERS

In order to further assess the potential effects of Directive 81 on EU MS, arms transfer figures are analysed. US exports indicate the extent to which the US had to fulfil offset in EU MS or elsewhere; EU-to-EU sales indicate offset benefits granted within the EU; EU imports from non-EU countries indicate offset benefits flowing to EU MS from non-EU countries, while EU exports are indicative of offset demands presented to EU MS by foreign sellers.

3.26.1 US arms transfers

Between 1988 and 1992, the majority of all defence imports to eight European countries (now-EU MS), Belgium, Germany, Greece, Spain, France, Italy, the Netherlands and the UK, came from the US. In fact, all these countries except Greece relied nearly completely on the US for their arms imports (Commission of the European Communities, 1996:32).

Between 1999 and 2000, the US delivered about US\$74-b of military equipment, services and training to countries in the Middle East through its FMS programme (US General Accounting Office, 2001:4). The four largest recipients were Saudi Arabia, Israel, Egypt and Kuwait. On average, between 1988 and 2008, about one-third of US defence exports were destined for Europe, while 50% of US defence imports have come from Europe (Decision–US Crest, 2009:2).

However, with the US being a leading arms exporter, the US exports to the EU greatly overshadowed the EU exports to the US in dollar value. Between 2004 and 2008, the total volume of the transatlantic defence trade flow increased by more than 60%; however, the EU was not able to increase its exports to the US (Decision–US Crest, 2009:2).

Between 1993 and 2005, the UK, Greece, Poland, Italy, the Netherlands, Spain, Denmark, France, Portugal and the Czech Republic, along with Norway and the EPG (the European Participating Group that includes Belgium, the Netherlands and Norway), imported 42% of the total US export contract value and received offset benefits (US Department of Commerce, BIS, 2007a:4-2).

Between 1993 and 2006, European countries accounted for the majority of offset activity and defence system exports, representing 48% of the reported value of US defence export contracts and 65.9% of the value of offset agreements (US Department of Commerce, BIS, 2007b:4-4). In the years 1995-2006, with the exception of 2002, 2004 and 2005, European offset values recorded in the US exceeded all non-European offset. As shown in Chapter 2, European countries have traditionally had high offset demands, with offset in some countries exceeding 100% (US Department of Commerce, BIS, 2007a:2-13).

Table 3.19 on the following page includes the offset agreements that the US concluded with EU MS between 1993 and 2005, valued in excess of US\$33-b, translating to more than US\$2.55-b per year for this collection of EU MS.

Table 3.19 US offset agreements with EU MS, 1993-2005

(The figures do not include FMS)

1993-2005, US\$	# of agreements	Exports contracts	Offset agreements
1. UK	43	12.1-b	10.1-b
2. Greece	49	6.3-b	7.1-b
3. Poland	withheld	3.7-b	6.2-b
4. Italy	9	2.6-b	2.5-b
5. Netherlands	44	2-b	2-3-b
6. Spain	25	1.8-b	1.6-b
7. Norway	28	1.2-b	1.2-b
8. Denmark	33	800-m	800-m
9. France	4	785-m	664.2-m
10. EPG	withheld	539.5-m	150.2-m
11. Portugal	3	442-m	123.3-b
12. Czech Republic	withheld	312.6-m	62.5-m
	238	32.8-b	33.2-b

Source: BIS Offsets Database, in US Department of Commerce, BIS, (2007a:4-3).

Figures for 1995-2005 show that the UK, Greece, Poland, Italy, the Netherlands, Spain, and Norway will be most disadvantaged if they can no longer receive offset benefits from the US as a result of Directive 81. Poland is still purchasing much defence equipment from the US and may be the single biggest EU loser from a decrease in offset benefits. Greece is currently not purchasing, while the UK has established a defence engagement programme, separate from defence procurement contracts, that is set to ensure the development of its defence and security industry.

Between 2003 and 2007 the EU received 27% of US exports, which had a total value of US\$35-b (SIPRI, 2013d:1) and represented 23% of all EU imports (Holtom et al., 2008:2). The EU thus received an annual average of US\$9.45-b of arms imports from the US in this period (SIPRI, 2013d:1), which presumably included offset benefits for the same amount.

Between 2008 and 2012, the EU received 17% of total US exports, which had a total value of US\$40.49-b (Holtom et al., 2013b:2) and represented an annual average of about US\$8-b; presumably the EU received approximately an equal value of offset benefits. Since 2008, the US has been focusing on new markets and its export profile has changed dramatically.

The UK's defence exports to the US tripled during these years and, as of 2008, accounted for more than 50% of all European exports to the US. In 2008, the UK imported 35% and Poland 25% of all European imports from the US (Decision–US Crest, 2009:16).

Between 2006 and 2010, Poland was the EU MS that received the most offset from the US, while South Korea was in the top position globally. See Table 3.20 for information on other EU MS as well.

Table 3.20 Recipients of US arms exports, 2006-2010

(In US\$m)

	2006	2007	2008	2009	2010	Total
Afghanistan		22	78	280	245	626
Australia	338	559	282	609	1412	3200
Canada	78	418	368	105	185	1155
Chile	254	81		30	132	496
Colombia	31	128	15	147	60	381
Egypt	539	464	186	106	249	1544
Germany	24	24	348	412	307	1115
Greece	21	257	15	922	150	1366
India	74	87	5	2	51	219
Iraq	47	137	283	315	363	1145
Israel	1110	839	663	134	28	2773
Italy	25	34	33	42	30	164
Japan	423	467	614	377	343	2224
Jordan	4	165	34	18	6	227
Kuwait		279		1	22	302
NATO				420		420
Netherlands	284	83	19	77	41	504
Norway	45	56	106	88	80	376
Oman	283	16	71	2		372
Pakistan	85	368	282	125	1042	1901
Poland	346	850	480	87	41	1804
Portugal	43	58	88	90	89	367
Qatar				280		280
Saudi Arabia	170	147	237	234	338	1127
Singapore	30	8	25	748	733	1542
South Korea	1364	1250	1138	264	1223	5239
Spain	70	29	46	105	7	258
Taiwan	578	12	11	1	73	675
UAE	1022	492	677	394	151	2736
UK	138	305	473	299	346	1561
Total	7711	7990	6808	6921	8335	37764

All exports lower than US\$250-m have been deleted (which includes Turkey at US\$230-m), yet the totals for the years have been retained.

Source: SIPRI (2013d:1).

Value of US offset lost

While EU MS stand to lose offset benefits of up to US\$9-b per year that they have received from the US prior to Directive 81, the US will greatly benefit by not having to fulfil offset in the EU MS when selling defence equipment to them.

3.26.2 EU-to-EU arms transfers

During the period from 1985 to 1994 EU exports decreased by 76.9%, while EU imports increased by 77% (Commission of the European Communities, 1996:32).

Table 3.21 EU imports and exports of major conventional weapons, 1985-1994

(TIVs expressed in constant US\$m at 1990 prices)

Year	EU imports	World total	EU exports	World total
1985	2.126	39.713	8.514	39.713
1986	3.118	44.118	8.001	44.118
1987	2.942	46.377	7.372	46.377
1988	4.162	38.585	6.129	38.585
1989	4.827	37.798	7.696	37.799
1990	3.865	30.891	6.160	30.891
1991	5.463	25.527	5.637	25.527
1992	6.190	24.776	4.611	24.777
1993	3.766	24.494	5.108	24.494
1994	3.766	21.725	6.548	21.725

Source: SIPRI Yearbook 1995, p. 510-511, in Commission of the European Communities (1996:32).

German military spending fell nearly four percent during 2002-2011, and between 2008 and 2012 the country sold 35% of its total arms exports to Europe. Italy's spending shrank by 21% during 2002-2011. As the financial crisis intensifies in Europe, military spending on the continent is expected to continue its slowdown (Holtom, 2013:1).

Between 2006 and 2010, seven EU MS (Germany, France, the UK, the Netherlands, Spain, Italy and Sweden) represented 34% of global weapon exports and as a group exported 41% of their arms to Europe, 28% to Asia and Oceania and nine percent to the Middle East (Holtom, Béraud-Sudreau et al., 2011). From available arms transfer information for 2006-2010, it can be deduced that Germany made deliveries to South Korea and, while still exporting heavily to Greece and Turkey, started developing exports to new markets; France had a collection of clients across the globe, with main

export markets outside Europe; and the UK had strong trade relationships with the US, also exporting to Saudi Arabia and India ((Holtom, Béraud-Sudreau et al., 2011).

The EU MS that sent the largest percentages of their total weapon exports to the EU between 2006 and 2010 were Sweden at 57%, the Netherlands at 46%, Germany at 42% and Italy 37% (percentages indicate the portion of total exports of the supplying country) (SIPRI, 2012e:5, Table 6A.4). Between 2007 and 2010, Germany, the Netherlands and Italy sent more than 30% of their total exports to the EU (Holtom et al., 2012a:2); between 2008 and 2012, the leading European exporters to EU MS were Germany and Italy (Holtom et al., 2013b:2).

MS that will benefit based on trade figures

As the biggest exporter to EU MS, Germany will benefit if it maintains its export volumes to the EU and no longer has to fulfil offset in the EU. If the other EU MS keep supplying the EU, they will also reap net benefits when offset requirements are decreased or eliminated.

France's main export customers in 2009-2010 included no EU MS, but instead were Saudi Arabia, Brazil, India and Malaysia (*Defpro Daily*, 2011:2). Based on offset regulations in the purchasing countries, France had to commit to offset for about 70% of its export sales (out of a total of US\$3.3-b as per Table 3.14 which thus could have amounted to US\$2.1-b). It can therefore be deduced that France will not gain much by Directive 81, but will keep fulfilling offset in non-EU countries. Saudi Arabia, India and Brazil are expected to remain among the top military offset markets through 2021 (Kimla, 2013:slide 21).

UK exporting to the EU and others

The top five countries to which the UK exported during 2008-2011 included Saudi Arabia, France (the only EU MS in the group), the US, the UAE and Malaysia, followed closely by China (Baker, 2012:1).

Table 3.22 The countries that received controlled goods from the UK in 2011

Country	Controlled Goods Export Value
France	£2,915,399,245
Saudi Arabia	£1,750,908,132
United Arab Emirates	£1,609,766,797
United States of America	£1,007,402,351
China	£361,337,163
Singapore	£320,357,161
Japan	£233,275,363
Taiwan	£191,784,601
India	£142,301,862
Korea, South	£110,649,832

Source: CAAT (2013:1).

In 2011, UK exported military controlled goods to the value of £5.94-b. France was the top receiver of UK arms exports in this year and the only EU MS to receive controlled goods from the UK. Leading non-EU recipients of military controlled goods in 2011 included Saudi Arabia, the UAE, the US, China, Singapore, Japan, Taiwan, India and South Korea (Campaign Against Arms Trade [CAAT], 2013:1).

The UK will not benefit much if offset decreases in the EU, given that France is the only EU MS among its five biggest clients and France reportedly does not require offset. However, the UK may experience increased offset requirements outside the EU. Both Saudi Arabia and the UAE, which received large amounts of exports from the UK in 2011 (Table 3.22), are expected to be among the top 20 offset markets through 2021 (also see Figure 3.24).

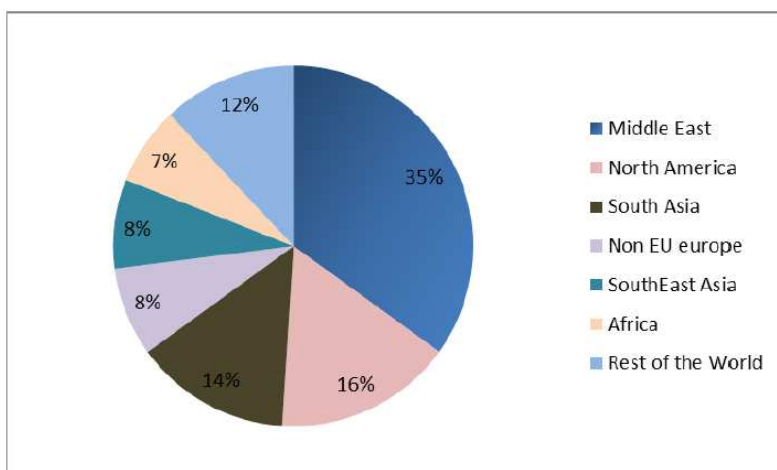
Germany benefits

Germany is the biggest exporter of defence goods to the EU in terms of dollar value and therefore the biggest potential beneficiary from a decrease in offset in the EU. From 2008 to 2012, 35% of Germany's exports went to Europe, 31% to Asia and Oceania, and 17% to the US.

European exporting overall by destination

European DCs have begun to search more diligently for clients outside the EU in recent years.

Figure 3.23 European defence exports by destination, 2011



Source: European Council data, in EC (2013f:26).

In 2011 the Middle East was the biggest recipient of exports from Europe, receiving about one-third of total European exports (accounting for €8-b, or 34% of the total export value of €23-b). Other recipients included North America (16%), South Asia (14%), non-EU countries (8%), Southeast Asia (12%) and Africa (7%) (EC, 2013f:27).

EU exports to BRICK countries, 1995-2008

Between 1995 and 2008, China purchased US\$28-b (in constant 1990 prices) worth of major arms from Europe, India US\$20-b, South Korea US\$17-b and Brazil US\$3.6-b (Ecorys, 2010:49-50). All five major EU MS producers (France, Germany, Italy, Spain, UK) exported major arms to one or more of the BRICK countries during this period, as did several other EU MS. While EU MS were not the main suppliers to any of the BRICK countries, South Korea received US\$3.7-b worth of arms from the EU during this period, India US\$3.4-b and Brazil US\$2.7-b (Ecorys, 2010:50).

Russia received just one major weapons transfer during this period—a 2006 shipment worth US\$5-m from Germany. By percentage, the biggest EU exporters to a BRICK country included the UK (27% of Brazilian imports) and France (22% of Brazilian imports). Germany and France were the main EU exporters to South Korea, accounting for 11% and 7.5% of total arms transfers there, respectively. These exporters had to fulfil offset requirements in Brazil, India and South Korea and are still expected to do so.

EU trade register to non-EU countries, 2012

A listing of the transfers of major conventional weapons by DCs in the EU to non-EU recipients offers an overview of the latest non-EU defence markets of EU MS. The information (see Appendix E) is sorted by recipient country. Deals with deliveries or orders made for 2012 are included as deduced from the information in the SIPRI 2012 trade list (SIPRI, 2013c:1-38), which contains a huge collection of information that this author has painstakingly reviewed.

The transactions can include sales as well as licensing agreements; however, not all amounts may be exact, because of subsequent confidential negotiations or amendments by parties after the purchases have been announced. According to data in Appendix E, the following countries had the most EU suppliers in 2012 (counting Norway, which supplies Australia, Canada and Chile):

- eight EU MS selling to Australia, Saudi Arabia, and the UAE;
- six EU MS selling to Algeria, Colombia, Indonesia, South Korea and Thailand;
- five EU MS selling to Egypt, Canada, Mexico, Oman, Pakistan and Turkey; and
- four EU MS selling to Argentina, Brazil, Chile, Japan, Malaysia and Venezuela.

This list provides a good indication of the future defence and security markets of EU MS and the requirements for offset fulfilment.

3.26.3 Global arms transfer statistics

To put the EU's performance in fuller global perspective, this section provides various statistics on global arms transfers.

Table 3.23 The five largest suppliers of major conventional weapons and their main recipients, 2006–2010

Supplier	Share of global arms exports (%)	Main recipients (share of supplier's transfers)		
		1st	2nd	3rd
United States	30	South Korea (14%)	Australia (9%)	United Arab Emirates (8%)
Russia	23	India (33%)	China (23%)	Algeria (13%)
Germany	11	Greece (15%)	South Africa (11%)	Turkey (10%)
France	7	Singapore (23%)	United Arab Emirates (16%)	Greece (12%)
United Kingdom	4	United States (23%)	Saudi Arabia (19%)	India (13%)

Source: (Holtom, Béraud-Sudreau et al. (2011:4).

Table 3.23 shows the five top arms suppliers between 2006 and 2010 and their three leading recipients. The table shows considerable variance in exporting strategy among these countries. Between 2006 and 2010, India received 33% of Russia's exports and China 23%. Singapore received 23% of France's exports, while the US received 23% of the UK's transfers (Holtom, Béraud-Sudreau et al., 2011:4). Overall, between 2006 and 2010, Russia exported 67% of its arms to Asia and 14% to Africa (Holtom, Béraud-Sudreau et al., 2011:2), whereas France exported 27% of its sales to the Middle East and 25% to Latin America (*Defpro Daily*, 2011:2).

Table 3.24 The five largest recipients of major conventional weapons and their main suppliers, 2006–2010

Recipient	Share of global arms imports (%)	Main suppliers (share of recipient's transfers)		
		1st	2nd	3rd
India	9	Russia (82%)	United Kingdom (6%)	Israel (3%)
China	6	Russia (84%)	France (5%)	Switzerland (3%)
South Korea	6	United States (71%)	Germany (16%)	France (9%)
Pakistan	5	United States (39%)	China (38%)	Sweden (6%)
Greece	4	Germany (39%)	United States (29%)	France (21%)

Source: Holtom, Béraud-Sudreau et al. (2011:5).

Table 3.24, conversely, shows the five largest recipients of weapon sales and their main suppliers. The largest importers between 2006 and 2010 included India, China, South Korea, Pakistan and Greece. Data show that the first two of these were heavily dependent on Russia. India, South Korea and Pakistan were the three leading beneficiaries of offset benefits during this time period (as noted previously, China did not have official offset regulations).

Both South Korea and Saudi Arabia required offset from the US, while the UAE, according to its industrial participation practices, required offset benefits from France and Singapore (*The Economist*, 2011:2).

Table 3.25 The ten largest recipients of major conventional weapons and their suppliers, 2007-2010

(Figures are the percentage shares of the recipient's total volume of imports received from each supplier)

Supplier	Recipient									
	India	South Korea	Pakistan	China	Singapore	Australia	Algeria	US	UAE	Greece
China	–	–	42	..	–	–	0	–	–	–
France	1	7	5	12	39	15	3	5	15	22
Germany	1	17	2	0	8	3	–	11	1	35
Norway	–	–	–	–	–	0	–	10	–	–
Russia	80	–	2	78	–	–	93	0	14	–
UK	6	–	–	–	–	2	2	25	–	2
US	3	74	36	–	43	79	0	..	62	32

Source: SIPRI Arms Transfers Database, in Holtom et al. (2012a:6-7).

The suppliers, by percentage, to each of the ten largest recipients of arms between 2007 and 2010 are shown in Table 3.25.

Significant trends over time

As tensions mounted over territorial claims in the South China Sea, arms deliveries to Southeast Asia rose particularly steeply between 2007 and 2011, increasing by 185% (*The Economist*, 2012:1). During the same period, exports to Syria were supplied overwhelmingly by Russia and increased by nearly 600% over figures for 2002-2006 (*The Economist*, 2012:1). Between 2007 and 2011, 78% of Syria's imports were provided by Russia (SIPRI, 2012b:1). Global transfers of large conventional weapons such as tanks and planes were 24% higher when compared to 2002-2006. These increases are clear indications of how quickly arms purchases can escalate when conflict becomes a reality, and increased sales further suggest that offset demand is increasing in Southeast Asia and the Middle East, as these countries generally require high levels of offset requirements.

Suppliers and recipients by region, 2007-2010

Between 2007 and 2010, the equipment of the ten largest suppliers globally was destined mainly for the following regions, ranked from highest to lowest amount received (Holtom et al., 2012a:2):

- main suppliers for Africa: Russia, France, Germany and China;
- main suppliers for the Americas: Spain, the UK, the Netherlands, Israel, Italy and Germany;

- main suppliers to the EU: Germany, the Netherlands, Italy, France, Israel, the US, the UK and Spain;
- main suppliers for Europe: Spain, Germany, the Netherlands, Italy, Israel and the US;
- main suppliers for the Middle East: the UK, the US, Israel, Italy, China, France, Germany, Russia and the Netherlands;
- main supplier for Central Asia: very low imports from Russia;
- main suppliers for East and Southeast Asia: France, Russia, the US, Germany and the Netherlands;
- main supplier for Oceania: the US; and
- main supplier for South Asia: mostly China and Russia, but also Italy, Israel and the US.

The information above confirms that the EU MS that fulfilled the most offset included Spain, Germany, the Netherlands, Italy, the UK and France.

Table 3.26 Leading arms importers, 2010-2012

2010 LEADING IMPORTERS	2011 LEADING IMPORTERS	2012 LEADING IMPORTERS
Global arms imports US\$25.5-b	Global arms imports US\$30.4-b	Global arms imports US\$28.1-b
India US\$2.8-b	India US\$3.5-b	India US\$4.7-b
Pakistan US\$2.6-b	Australia US\$1.6-b	China US\$1.6-b
Australia US\$1.5-b	South Korea US\$1.5-b	US US\$1.3-b
South Korea US\$1.3-b	UAE US\$1.3-b	Turkey US\$1.2-b
US US\$1-b	Pakistan US\$1.2-b	Pakistan US\$1.2-b
Singapore US\$969-m	Saudi Arabia US\$1.1-b	UAE US\$1-b
China US\$940-m	Singapore US\$ 1-b	South Korea US\$1-b
Saudi Arabia US\$787-m	China US\$1-b	Saudi Arabia US\$923-m
UAE US\$612-m	US US\$921-m	Australia US\$889-m
Turkey US\$488-m	Turkey US\$900-m	Singapore US\$627-m

Source: (SIPRI, 2013a:1, generated 1 February 2014).

Most offset benefits received outside Europe, 2010-2012

Between 2010 and 2012 EU MS were not listed as major importers, with decreased sales resulting in a decrease in offset benefits to EU MS. The import analyses in Table

3.26 confirm that during this time period non-EU countries India, Pakistan, Australia, South Korea, Saudi Arabia, the UAE and Turkey benefitted the most from offset.

Summary of offset benefits

Within Europe, the countries that have seemingly received the most offset benefits include Greece, the UK, Poland, Spain, Portugal, Italy, the Netherlands and Norway. These MS may be disadvantaged when offset is decreased. The biggest suppliers to EU MS in the past may benefit the most through reduced offset requirements; these include the US, Sweden, the Netherlands, Germany and France. Italy, Israel, the UK and Spain could be added to this list of countries receiving deliveries between 2007 and 2010. The UK received much offset from the US, as did Poland. France and the UK may not be affected by Directive 81 because EU MS are not their main export target. Germany, as a major EU MS exporter, is the biggest potential beneficiary from a decrease in offset in the EU.

3.27 ARMS TRADE REGISTERS, 2000-2012

In an effort to calculate offset benefits granted or received in the past by various countries and regions, the value of offset transactions recorded in trade registers in the SIPRI arms transfer databases generated between 2000-2012 was analysed (SIPRI, 2012a, 2013c). Transactions listed were assessed at the end of March 2013, with offset values accumulated in the following categories:

- offset that EU MS received from other EU MS
- offset that EU MS received from non-EU MS;
- offset that EU MS had to fulfil in non-EU countries;
- offset fulfilled or received by non-EU MS.

Detailed data on offset are not always available, and in some cases it was not possible to calculate the exact offset figure from the data given. In such cases the most conservative figure has been used, or further information on defence procurement or specific projects was researched in other sources such as the Internet, while further estimations were made based on offset regulations and trends in the buying country. It is recognised that in some cases offset had been fulfilled before the end of the end-delivery date, with the purchasing country receiving the benefits before the end of the

contract date. Offset figures may also include licensing. Multipliers granted cannot be assessed and for that reason offset values may be greater than the value of the actual fulfilment activities.

As a single project may be listed in three or more SIPRI arms trade lists—categorised according to the order date, manufacturing date or various delivery dates—many projects have not been dated explicitly. However, by using the recipient country, the name of the supplier and the contract value, the project can again be found in the various SIPRI lists, which are public knowledge. Since most figures are given in US dollars, the lists reproduced calculate the amounts in US dollars and convert totals back to Euros, using the conversion rate of 1.32 as representative of the average conversion rate between 2000 and 2012.

Where the SIPRI lists indicated a high and low amount for a contract, the average was used. In cases where the number of deliveries is indicated as uncertain, these were excluded from the calculations. Further delivery options were also not taken into account. The values are found in the 2000-2012 SIPRI trade registers. Dates used in the listing refer to year of delivery. If the delivery date was postponed or is not the same in all documents, the latest delivery date was used, although this aspect does not influence the values. Even when some delivery dates are in the future, if the contracts have been negotiated and offset benefits committed during 2000-2012 they were included. Note that the following tables were compiled from many listings in various SIPRI trade registers in order to calculate offset values. Such an analysis has not been available in any source previously.

3.27.1 Offset that EU MS received from other EU MS

The data below show that between 2000 and 2012 a total of US\$28.77-b of offset was fulfilled by seven EU MS (not including Norway), benefitting 14 EU MS plus Norway. Note that the US\$105-m offset fulfilled by Norway was subtracted from the total US\$28.671-b. When equally divided over 13 years, EU MS transferred offset benefits worth US\$2.2-b annually to other EU MS and Norway in this period. This is a very conservative figure (see Table 4.10 “Offset benefits received and fulfilled”, which shows that the annual benefit could have been as high as US\$6.8-b. Such offset benefits may no longer be received by EU MS after the launch of Directive 81.

Table 3.27 Offset that EU MS received from other EU MS, 2000-2012

(This table continues on to the following two pages)

COUNTRIES	DATE (registers 2000- 2012)	VALUE	DESCRIPTION	OFFSET VALUE US\$
Austria to Belgium	1998-2000	\$42-m deal	100% offset included production of components and assembly in Belgium	\$42-m
Austria to Czech	2009-2010	CZK14.4-b (\$650-m)	offset 150% including assembly of 90 in Czech Republic	\$975-m
Austria to Portugal	2007-2011	Part of €365-m (\$480 m)	offset 150% including assembly in Portugal	\$396-m
Austria to Portugal	2009-2011 delivery 2007-2013	Part of €365-m (\$480-m)	offset 150% including assembly in Portugal	\$49-m
Finland to Poland	2004-2012	PLN4-b (\$1.45-b)	including \$308-m for turrets from Italy, offset 133% including production of 600 in Poland	\$1.5-b
Finland to Poland	2004-2012	\$308-m	offset \$525-m including production of 241 in Poland	\$525-m
Finland to Sweden	2010-2012	SEK2.5-b deal /6.39 (\$391-b)	offset 100% including production of components in Sweden	\$391-b
Finland to Poland	2004-2010	\$1.5-b (\$1.45-b)	offset 133% including production of 600 in Poland	\$1.93-b
France to Bulgaria	2006-2010	Part of €358-m deal	offset €354-m (\$467-m) including €105-m indirect	\$467-m
France to Finland	2008-2012	Part of \$350-m deal	offset included assembly of 18 aircraft for Finland and some 28 for Norway and Sweden in Finland. Finland ordered 20 of the total 52 aircraft (38%) (more info found at forum.shrapnelgames.com)	\$250-m
France to Greece	1999-2001	(11) Part of \$266-m deal (including offset)	offset 100%	\$266-m
France to Greece	2005-2006	\$55-m deal	offset 160%	\$88-m
France to Greece	2003-2004	\$90-m	offset 100%	\$90-m
France to Greece	2011, delivery delayed	€546-m deal	offset 120% including production of components in Greece	\$655-m
France to Spain	1998-2002	\$205-m deal	offset 100%	\$205-m
France to Sweden	2007	\$660-m	offset 100% including \$220-m production of parts for 200 NH-90 in Sweden	\$660-m
France to Sweden	2001	Part of \$660-b deal	offset 100% including \$220-m production of parts for 200 NH-90 in Sweden, most assembled in Finland	\$220-m
Germany to Belgium	2005-2011	€170-m	offset included production of components in Belgium	\$224-m
Germany to Belgium	2005-2011	€170-m	offset included production of components in Belgium	\$224-m
Germany to Greece	1998-2000	(170)	offset for Greek order for modernisation of F-4E combat aircraft in Germany	\$160-m

Germany to Greece	2000-2003	\$223-240-m	offset 120% including production of parts	\$277-m
Germany to Greece	2003-2004	(24+28+114) \$164-228 m deal	offset 120%	\$235-m
Germany to Greece	2004	(114)	M-109A3GEA version - offset for Greek order for 24 PzH-2000, self-propelled guns	\$196
Germany to Greece	2010	Part of €1.8-b deal	offset 115% (of €1.2-b) including modernising Greek shipyard for submarine production	\$1.82-b
Germany to Greece	2006-2009	(170) 140 Leopard tanks Part of €1.7-b deal	offset included 40% (of € 1.4-b) in production of components and assembly of 140 in Greece	\$560-m
Germany to Greece	2006-2008	delivery 2006-2009 (12) Buffel tanks Part of €1.7-b deal	offset included 40% in production of components in Greece	\$48-m
Germany to Netherlands	2004-2010	\$420-m deal	offset 100% including production of components in Netherlands	\$420-m
Germany to Portugal	2010	€846-m deal	offset 100%	\$1.11-b
Germany to Spain	2003 2006	(16) Part of €1.9-b deal	Buffel tanks, offset 80% including production of 12 in Spain	\$1.15-b
Germany to Spain	2003-2010	€1.9-b deal	(219) Leo offset 80% including production of 189 in Spain €1.52-b	\$2-b
Germany to Sweden	1996-2002	Part of \$770-m deal	offset 120%	\$462 counting 50% in 2002
Italy to Czech	2010, delivery 2010-2013	CZK3.6 b (\$175-m)	offset 100%	\$175-m
Italy to Finland	2009-2012	\$350-m	offset included assembly of 18 products in Finland and some 28 for Norway and Sweden in Finland	\$350-m
Italy to Greece	2004-2010	€297-m (but 8 instead of 12 delivered)	offset 360% including production of components in Greece	\$356-m
Italy to Norway	2011 2012	Part of \$425 m deal NFH	offset including production of components in Norway	\$425-m
Italy to Norway	2011	Part of \$425-m deal NTH	offset included production of components in Norway	\$42-m
Italy to Poland	2004-2012	\$308-m	offset \$525-m including production of 241 in Poland	\$525-m
Italy to Portugal	2004 2006	\$287-315-m deal	including offset	\$301-m
Italy to Portugal	2010	€47-m (\$62-m)	including offset	\$62-m
Italy to Sweden	2006-2009	SEK1.4 b (\$180-m) deal	including components made in South Africa as offset for South African order for JAS-39 combat aircraft A-109LUH (A-109M) version; Swedish designation Hkp-15; 2 more on loan from 2002 for training	\$180-m
Italy to Spain	2000 2002	\$70-m deal	offset 100% including production of components in Spain	\$70-m
Italy to Spain	2004 2007	€219-m (\$185-m)	offset included production of components and assembly in Spain	\$185-m

Norway to Spain	2002-2003	NOK700-m /8.84 (\$79-m)	offset for Norwegian order of frigates	\$79-m
Norway to Spain	2004	NOK230-m (\$26-m)	offset for Norwegian order for 5 frigates	\$26-m
Spain to Czech	2010	CZK3.5 b (\$170-m)	offset 100-300%	\$340-m
Spain to France	1998-2000	\$90-m deal	offset 100% including Spanish order	\$90-m
Spain to Norway	2006-2009	NOK14-16-b (\$1.5-2.5-b)	offset 100% in ten years including production of components and production in Norway	\$2-b
Spain to Portugal	2008-2012	Part of € 270-m deal	including 100% offset	\$356-m
Spain to Portugal	2008-2010	(3) + (9) Part of €270-m deal	including 100% offset	\$270-m
Spain to Poland	2003-2005	(8) \$212-m deal	offset 100% including production of components in Poland	\$212-m
Sweden to Czech	2005	CZK19.7-b (\$775-m)	offset 130% (originally produced for Sweden but declared surplus)	\$1-b
Sweden to Czech	2005-2007	(90) SEK 204-m (\$29-m) deal	offset 100%	\$29-m
Sweden to Finland	2003-2006	\$176-m	offset included production of components in Finland	\$176-m
Sweden to Finland	2006-2007	€120-m (\$145-m)	offset 50% including production of components in Finland	\$72-m
Sweden to Germany	2009-2010	SEK350-m (\$46-m)	offset included production of components and assembly in Germany	\$20
Sweden to Hungary	2006-2007	\$924-m	offset 110%	\$1-b
Sweden to Italy	2005-2008	(112) €57-m deal	offset for Swedish NH-90 helicopter order	\$57-m
Sweden to Italy	2008-2009	Part of €24-m deal	offset for Swedish NH-90 helicopter order € 24-m	\$31-m
Sweden to Netherlands	2007-2010	€749-891-m deal	offset 100% including production of components and assembly in Netherlands	\$990-m
Sweden to Norway	2000	\$241-m deal	offset \$184-m including production of components in Norway	\$184-m
Sweden to Norway	2012 delivery 2015-2017/2018	Part of NOK 6-m (\$750-m) deal	offset 100% including production of components in Norway	\$750-m
UK to Denmark	2005-2010	\$329-m	offset included production of components in Denmark for Danish and other	\$329-m
UK to Italy	2004-2008	\$275-m deal	offset included production of components	\$275-m
UK to Romania	2004-2005	GBP116-m (\$187-m)	offset 80-90%	\$158-m
Multiple sellers (NHI Industries, EU) to Sweden	2001	Part of \$660-b deal	offset 100% including \$220-m production of parts for 200 NH-90 in Sweden	\$231-b
				\$28.77-b

Most offset benefits

European countries that imported the most defence equipment between 2009 and 2012 give a further indication of the EU MS that presumably received the most offset (Table 3.28).

Table 3.28 Arms imports to the top 13 EU MS (including Norway), 2009-2012

(In US\$m, ranked according to the average over the four years, generated 14 July 2013)

		2009	2010	2011	2012	TOTAL
1	Greece	1 227	659	79	35	1 999
2	UK	443	557	394	598	1 992
3	Norway	570	154	662	163	1 508
4	Portugal	376	965	145	35	1 521
5	Germany	447	331	106	183	1 067
6	Spain	282	279	184	256	1 001
7	Netherlands	248	138	118	260	765
8	Italy	79	85	307	215	723
9	Poland	144	127	83	182	537
10	France	78	120	38	149	374
11	Austria	301	7	9	9	326
12	Finland	43	72	59	92	241
13	Denmark	99	17	0	69	184

A '0' indicates that the value of deliveries is less than US\$0.5-m.

Source: SIPRI (2013d:1-3).

When Greece, Portugal and Austria are excluded from the list because they showed a huge decline in defence procurement, the top importers between 2009 and 2012 include the UK, Norway and Germany. Germany did not require offset in the past, but the UK and Norway are among the countries that will benefit from Directive 81 if they keep selling to EU MS. When they import they may lose offset benefits that they relied on previously.

3.27.2 Offset that EU MS received from non-EU MS

Between 2000 and 2012, eleven EU MS plus Norway received US\$30.68-b in offset (Table 3.29), representing US\$2.35-b worth of annual offset benefits per year that may no longer be received by EU MS after the launch of Directive 81.

Table 3.29 EU MS purchasing and receiving from non-EU MS

(This table continues on to the following two pages)

COUNTRIES	DATE (registers 2000-2012)	VALUE US\$	DESCRIPTION	OFFSET VALUE, US\$
US to Austria	2002	\$183 m deal	offset \$394-m	\$394-m
Switzerland to Belgium	2008-2010 delivery 2008-2015	€700-800-m	offset included production of components and assembly in Belgium, €750-m	\$990-m
US to Finland	2000	\$3-b deal	offset 100%	\$3-b
US to France	2004	Part of \$894 m deal	offset \$440-m	\$440-m

US to Greece	2009-2010	\$2-b	offset 132%	\$2.64-b
	1999-2001	\$266 m deal via France		\$266-m
	2000-2003	\$223-240-m deal	offset 120%	\$277-m
	2002-2002-2004	\$1.1-b deal	offset 120%	\$1.32-b
	2009-2010	\$2-b	offset 132%	\$2.64-b
	2007	Part of \$675- 703-m deal	offset \$845-m	\$845-m
Multiple sellers (NHI Industries) to Greece	2003	€546-m contract (€655-m)	offset 120%.	\$864-m
Russia to Greece	1999-2000	\$519-560m deal	offset 15-20% or 100%.	\$539/15 - 6 = \$324 x 57% = \$184
US to Italy	2002-2012	\$619-m	offset up to \$1.1-b	\$1.1-b
Israel to Netherlands	2006-2011	\$150-225-m	offset including production of components in the Netherlands	\$ 187-m
US to Netherlands	1998-2002	\$686-m deal	offset \$873-m	\$873-m
Israel to Poland	2004-2012	PLN1.49-b (\$425-m) deal	offset \$826-m	\$826-m
US to Norway	1998-2001	\$150-m	offset included production of components and assembly in Norway	\$150-m
US to Norway	2006-2007	\$86-m deal	offset included production of components in Norway	\$86-m
Multiple sellers (NHI Industries, EU) to Norway	2001	\$425-m deal	offset included production of components in Norway	\$425-m
Israel to Poland	2004-2012	PLN1.49 b (\$425-m) deal	offset of \$826-m including production of components and assembly in Poland	\$826-m
US to Poland	2006-2008	\$3.5-b deal \$4.7 b including interest	offset \$6-b, or \$12.5-b including production of components in Poland	\$6-b
Israel to Spain	2009-2010 delivery 2010- 2014	€328-m deal	offset included production in Spain	\$433-m
South Africa to Sweden	2006-2007	ZAR180-m (\$28-m) deal	Part of offset for South African order for JAS- 39 combat aircraft	\$28-m
Canada to UK	2007	Part of \$1.3-b deal	offset 100%, for modification to Sentinel R-1 AGS aircraft in USA and UK with ASTOR radars from USA	\$1.3-b
US to UK	1998-2000	(10) Part of \$1.56 b deal	offset 100%; UK designation Hercules C-4 \$1.56-m 2007 list	Half \$780- m
	1999-2001	Part of \$1.56 b deal	offset 100%, UK designation Hercules C-5	Half \$780- m
	2000-2004	\$2.8-3.95-b	offset 100% included assembly and	\$3.37-b

	delivery 2013-2015	deal	production of components in UK	
	2011	£1-b (\$1.6-b)	FRC Land Lift (Heavy) programme, UK designation Chinook HC-6 (including 5 years support; offset including production of components in UK) (more info was found at http://www.flightglobal.com/news/articles/uk-signs-1631bn-deal-for-chinook-hc6-fleet-361090/)	\$1.65b*
	1999-2007	Part of \$1.3-b deal	offset 100% included production of four systems in UK); for modification of 5 BD-700 transport aircraft from Canada to AGS aircraft	\$1.3-b
	2005-2007	GBP300-m (\$459-490 m)	offset 100% including production of components in UK	\$475-m
	2007-2008	GBP100-m (\$179-m),	offset 100% included production of components in UK	\$179-m
				\$30.68-b

*These figures were estimated according to information on the Internet

Sales by the US to the EU, 2009-2012

Arms deliveries from the US to EU MS included in the SIPRI trade register for 2009-2012 show a total export value of US\$8.57-b, translating into an average of US\$2.14-b per year, with an equivalent amount of offset. These transactions raise the annual offset benefits to EU MS between 2009 and 2012 to US\$4.49-b (US\$2.35-b plus US\$2.14-b). Note that this is a very conservative calculation of offset benefits, considering that information on arms agreements is not generally made public and offset linked to FMS is not available.

3.27.3 Offset that EU MS had to fulfil in non-EU countries

A total of seven EU MS (plus Norway for one transaction) fulfilled offset outside the EU worth US\$27.73-b between 2000-2012 (Table 3.30). Offset regulations outside the EU did not change drastically, and therefore EU MS selling to governments in these countries still have to fulfil about US\$2.13-b of offset per year when selling to non-EU countries. The fact that offset requirements have been shown to increase outside the EU will result in higher offset demands facing EU MS exporters.

Table 3.30 Offset that EU MS had to fulfil in non-EU countries (outflows)

(This table continues on to the following page)

COUNTRIES	DATE (registers 2000-2012)	VALUE, US\$	DESCRIPTION	OFFSET VALUE, US\$
France to Australia	2004-2011	AUD1.3-b (\$670-981-m)	offset included production of components and assembly of 18 in Australia and production of EC-120 helicopter for Asian market	\$300-m*
	2007-2010	AUD1-b (\$760- m)	offset at least \$233-m including assembly of eight in Australia	\$ 233-m
France to India	2011	€1.5-2.2-b deal	offset \$593-m	\$593-m
	2012 delivery 2016- 2023/2025	\$10.4b	offset 50% including assembly/production of 108 in India	\$5.2-b
	2012	€950-m deal	offset 30%, €285-m	\$376-m
France to Saudi Arabia	2002-2004	Part of \$3.4-b	offset 35% \$1.19-b	\$1.19-b
France to Turkey	2000-2003	\$430-m Phoenix-2 deal	offset 50% included assembly of 28 and production of components in Turkey	\$215-m
France to UAE	2008-2010	\$2.04-b	offset 60%	\$1.22-b
	1994-2006; 2008-2010	Part of \$3.4-b deal	offset 60%	\$2.04-b
France to UAE	1997 2004	Part of \$3.4-b deal	offset 60%	\$2.4-m
Germany to Malaysia	2006-2010	MYR6.8-b (\$2-b)	offset included production of at least 30% of components and assembly of four systems in Malaysia	\$1.42-b http://newwars.wordpress.com/warship-costs/)
Germany to South Africa	2000 2005- 2008	€748-m (\$875- m) deal	offset 375-430%	\$402-m
	2006-2007	€924-m (\$0.8- 1.12-b) deal	offset \$3.2-b; \$403-m for arms industry including South African weapons and equipment fitted in South Africa	\$3.2-b
Italy to Canada	2001-2003	\$404-500-m deal	offset 108%	\$488-m
Italy to Israel	2012 delivery from 2014	\$600-m deal	offset 100%	\$600-m
Italy to Malaysia	2005-2006	\$70-75 m deal	offset included assembly of some in Malaysia and technology transfer	\$72-m
Italy to South Africa	2005-2009	\$240-254 m deal	offset \$977-m	\$997-m
Italy to Turkey	2005, delivery 2013 -2017	€180-m	offset 300% including production of components in and assembly in Turkey €540-m	\$713-m

Norway to Australia	2002-2003	AUD76-m (\$36-49 m)	Project Sea-1414 Phase-2 offset including production of warheads in Australia	\$42-m
Poland to Malaysia	2010	Part of \$368-400 m deal	offset \$111-m	\$111-m
	2007-2010	Part of \$368-400 m deal	offset \$111-m, PMC Leguan version	\$111-m
	2007-2010	Part of \$368-400 m deal	offset \$111-m, PT-91M version. Malaysian designation Pendekar	\$111-m
Spain to Brazil	2006-2009	€238-m	\$314-m including offset	\$314-m
Sweden to South Africa	2010	Part of \$1.2-b deal	offset \$8.7-b	\$8.7-b
Sweden to Switzerland	2001-2005	SEK4-b (\$424-m)	offset 100% including 40% in production of components and assembly in Switzerland	\$424-m
UK to Malaysia	2005-2007	GBP220-m (\$400-m) deal	offset included production of components in Malaysia	\$400-m
UK to South Africa	2007-2008	Part of \$620-m deal	offset included assembly from kits in South Africa	\$620-m
	2006	Part of \$1.2-b deal	offset \$8.7-b	Counted under Sweden to South Africa
UK to Thailand	2004	GBP25-m (\$36-m) deal	offset 50%	\$18-m
UK to Turkey	2010-2011	Part of \$500-m deal	offset 50%	\$250-m
Multiple sellers (A400M, thus EU) to Malaysia	2005	delivery 2013-2016, €500-m deal	offset at least €400-m	\$528-m
				\$27.73-b

*These figures were estimated according to information on the Internet

3.27.4 Offset fulfilled or received by non-EU MS

Between 2000 and 2012, offset recorded in the trade registers to and from non-EU MS, amounted to US\$24.17-b, translating to US\$1.85-b per year.

Table 3.31 Offset that non-EU MS received from non-EU MS

(This table continues on to the following two pages)

COUNTRIES	DATE (registers 2000-2012)	VALUE US\$	DESCRIPTION	OFFSET VALUE, US\$
Canada to New Zealand	2003-2004	\$241-388-m deal	offset \$3-m	\$3-m
Indonesia to South Korea	2001-2002	\$120-143-m deal	offset included Indonesian order for KT-1 trainer aircraft and other military equipment from South Korea	\$131

Israel to Turkey	2005-2010	\$183-m deal	offset 30%	\$55-m
Russia to India	2011-2012 delivery 2011-2013 (42)	\$1.3-b deal	offset \$504 m	\$504-m
Russia to Malaysia	2007-2009	\$900-m deal	offset over 33% including \$270-m as barter and included space technology transfer and training of Malaysian astronaut	\$297-m
South Korea to Indonesia	2003-2005	\$60-m deal	offset for South Korean order for CN-235 transport aircraft	\$400-m
US to Australia	2006-2008	AUD1.9-b (\$1.5-b) deal	offset AUD345-m	\$48-m
US to Australia	2011	delivery 2013-2016	AUD2.6-b (\$2.5-b) (\$1.5 b offset)	\$1.5-b
US to Canada	2009, delivery 2013-2014	CAD1.4-b (\$1.4-b) deal	offset 100%	\$1.4-b
	2004 delivery probably from 2013 delayed from 2008	CAD5.7-b (\$4.5-b)	including CAD3.2-b for 24 years of support and training; offset including production of components and assembly in Canada	\$4.5-b
	2004-2010	CAD 507-m (\$510-m) deal,	including production of components in Canada	\$510-m
	2009, delivery 2013-2014	\$1.4-b	Chinook offset 100% including production of components in Canada	\$1.4-b
	2010-2012	(17) \$1.4	Hercules 'FSAP' programme (offset 100% including production of components in Canada)	\$1.4-m
US to Chile	2006-2007	\$660-m	offset 100%	\$660-m
US to India	2008, delivery 2012-2015	\$2-b deal	offset 30% including production of components in India	\$600-m
<u>US</u> to India	2011, delivery 2013-2014	\$4.1-b deal	offset \$1.1-b	\$1.1-b
US to Israel	2004-2006	\$2.5-b	offset 25% including production of components in Israel	\$625-m
	2006-2009	\$2-b	offset \$800-m including production of components in Israel	\$800-m
US to New Zealand	Date unknown	\$185-m deal	offset 36%	\$66-m
US to South Korea	2005-2008	\$4.2-b	offset 65-83% including production of components. 74% offset calculated \$3.1-b	\$3.1-b

	2002	\$54-m deal	offset included production of components in South Korea	\$54-m
	2004	\$39 m deal	offset included production of components in South Korea	\$39-m
US to Switzerland	2007-2010	Probably CHF104-m (\$80-m) deal	offset 100%	\$80-m
	2007-2010	CHF104-m (\$80 m)	offset 100%	\$80-m
US to Taiwan	2008	\$664-m	offset 70%	\$464-m
	2012 delivery 2012-2015	\$664 m deal	offset 70%; ex-US P-3C rebuilt to P-3CUP (possibly including 8 in Taiwan)	\$465-m
US to Turkey	1990-2000	Part of \$1.1-b deal	offset \$705-m including production in Turkey	\$705-m
	1999-2002	\$561-m deal	offset \$110-m	\$110-m
	2010	\$500-m	offset 50%	\$250-m
	2002, delayed from 2007 to 2013	\$1.5- b	\$500-930-m offset including production of components and assembly in Turkey	\$715-m
	2003	\$1.5-b	\$500-930-m offset including production of components and assembly of some in Turkey	\$715-m
	2010-2011	Part of \$500 m deal	offset 50%	\$250-m
				\$24.17-b

Assessment of offset benefits

Between 2000 and 2012 EU MS received an estimated US\$30.68-b of offset from non-EU countries and an estimated US\$28.77-b of offset from other EU MS, while only fulfilling offset worth US\$27.73-b—representing US\$4.57-b offset benefits, and US\$2.13-b offset obligations. These figures show that, collectively, EU MS received more offset than they fulfilled. The obligors and beneficiaries are not the same, meaning that the biggest exporters are more involved in fulfilling offset globally, while the importers primarily receive global offset benefits.

The EU MS that stand to lose the most offset benefits if Directive 81 decreases offset and they keep purchasing defence equipment, include Greece, the UK, Poland, Spain, Portugal, Italy, the Netherlands and Norway. Table 3.32 shows the highest defence imports recorded by EU MS and Norway between 2004 and 2012, based on Table 3.28

and on data in the SIPRI arms trade database showing defence imports to EU MS for this time period (SIPRI, 2013e:1)

Table 3.32 Highest estimated offset benefits received in one year by various EU countries

YEAR	RECEIVED OFFSET	VALUE OF OFFSET US\$
2009	Greece	1.2-b
2010	Portugal	965-m
2011	Norway	622-m
2012	UK	598-m
2008	Poland	580-m
2009	Germany*	447-m
2011	Italy	307-m
2009	Austria	301-m
2012	Netherlands	260-m
2012	Spain	256-m
2004	Denmark	229-m

*Germany had no official offset but did request it

Source: SIPRI (2013d:1-3, 2013e).

Offset benefits to EU for 2008-2010 were calculated at US\$6.8-b (€5-billion) per year (Shanson, 2013j:1; see also Table 4.10). Total offset benefits to EU MS could thus have been as much as US\$9.1-b annually (EU-to-EU US\$6.8-b, non-EU-to-EU US\$2.35). The average annual US\$2.55-b offset (excluding FMS) that EU MS received from the US between 1993 and 2005, as shown in Table 3.19, have not been included in this calculation.

Offset that EU MS fulfilled

The estimated US\$27.73-b offset that EU MS fulfilled in non-EU countries will still be required if similar sales persist. This research suggests that defence budgets in non-EU countries are escalating, together with offset demands. Especially if the export trend for 2012 from the EU to non-EU countries persists, DCs in the EU will be called upon increasingly to fulfil offset in non-EU countries. Non-EU countries that will benefit from offset, based on past figures, include India, South Korea, Pakistan and the UAE. The volume of offset that EU MS fulfil outside the EU is expected to increase.

Non-EU offset figures

Offset between non-EU countries between 2000 and 2012 amounted to US\$24.17-b, which is less than the offset recorded between EU MS, and also less than the offset that EU MS received from non-EU MS.

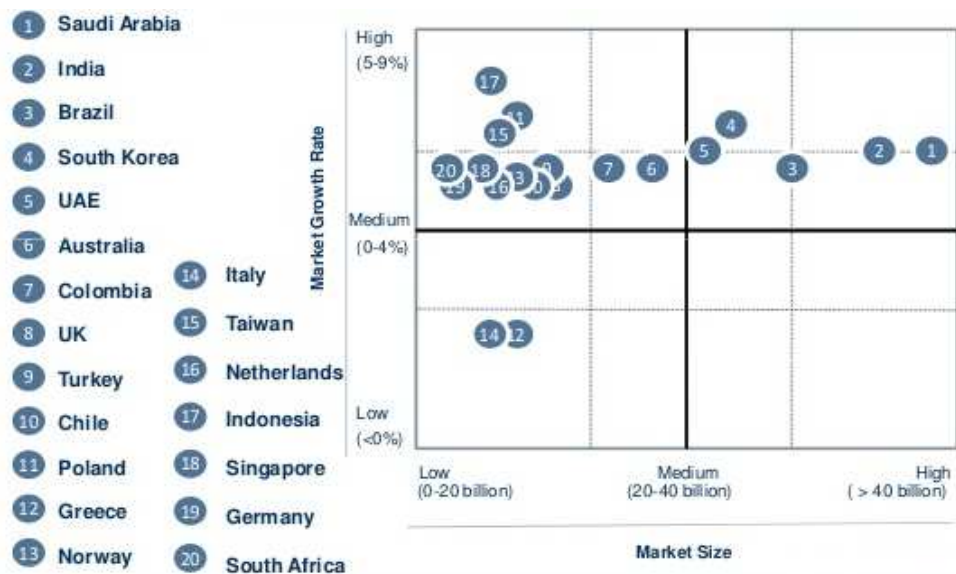
Directive 81 may become less pertinent to much of the global defence market, because, with falling EU defence budgets, few countries will be exporting arms to EU MS. EU MS are expected to export more than they import and will therefore be among the leading fulfillers of global offset outside the EU In non-EU countries, only companies selling to the EU will be affected by Directive 81, and it may be some time before the EU defence budgets increase again.

The sellers of the future may benefit from less stringent offset requirements, while the future purchasers in the EU may lose offset benefits; however, EU MS have to purchase weapons in order to request offset benefits.

The future of global offset

Future offset markets will be determined by where EU-based companies look for sales. Figure 3.24 lists the top 20 projected defence offset markets for 2012-2012.

Figure 3.24 Top 20 military offset markets by country, 2012-2021



Source: Frost & Sullivan, in Kimla (2013:slide 21).

Between 2012 and 2021, the demand for offset is expected to grow at a compounded annual growth rate (CAGR) of 3.5%, with the cumulative value of military offset obligations by the top 20 countries predicted to be US\$424.6-b. A market report by Frost and Sullivan, based on academic reports and secondary sources, shows that in the same period, Saudi Arabia will be the biggest military offset market among the analysed countries, with a CAGR of 3.9% (Shanson, 2013d:6). The country's cumulative military offset obligations are expected to surpass US\$62.6-b by 2021, representing about 15% of the total predicted figure. Saudi Arabia will be closely followed by India, as these two largest offset markets are project to represent a total of US\$112.9-b of offset between 2012 and 2021 (Shanson, 2013d:7).

3.28 FUTURE VIEW OF OFFSET BENEFITS

Future arms production volumes and export strategies will determine how countries are affected by the success or failure of Directive 81. Past statistics suggest that among EU MS, Germany would benefit the most if offset requirements in the EU are relaxed, followed by France, Italy, Sweden and the UK.

However, the financial crisis in the EU is contributing to a changing palette. When EU MS do not purchase much defence equipment, DCs that traditionally supplied the EU need to open new markets outside the EU. Offset will still be a reality and Directive 81 will have no impact on such transactions that go beyond the EU. Only when defence budgets in the EU increase can the impact of Directive 81 be fully assessed.

CHAPTER 4

THE ESSENCE OF DIRECTIVE 2009/81/EC

4.1 INTRODUCTION

Having comprehensively characterised the defence industry and defence market of the EU in its global, contemporary context, this study now turns to the essence and implementation of Directive 81. Chapter 4 discusses the Directive with reference to the following themes: SoS (security of supply), Sol (security of information), sub-contracting provisions, relationship with offset, and exemptions and exclusions in Directive 81. A legal perspective also puts the other relevant EC directives into context. The transposition history of the Directive is detailed, followed by a summary of changes in offset policies and processes in EU MS pursuant to Directive 81. Stakeholder reaction and EC strategies are discussed. The chapter concludes by forecasting possible outcomes of Directive 81, as well as offset management changes and new skills required.

A competitive EDEM and an efficient EDTIB

The aim of the CSDP (Common Security and Defence Policy) is to establish an EDTIB (European Defence Technological and Industrial Base) that can provide the bulk of the equipment need by the European armed forces, with less dependence on non-European sources for key defence technologies. An optimally functioning EDEM (European Defence Equipment Market) needs to ensure military capabilities, the competence to develop new technologies, and competitiveness in a global sense. These three keys are often referred to as the 3Cs (Bekkers et al., 2009:4).

The EC views Europe's competitiveness in a globalised world and its long-term SoS as crucial elements to ensure the EU's strategic autonomy and its ability to act at the international level (EC, 2012f:2). According to the EC, Europe risks losing the industrial and technological capabilities that are necessary to develop and produce what it needs for its security, for the following reasons (EC, 2012f:2):

- lack of major defence equipment development programmes;
- cuts in defence budgets; and

- the tendency among MS to allocate the bulk of defence spending to manpower rather than to procurement of new equipment and to forward-oriented research.

Increasing or even maintaining key strategic assets in times of scarce financial resources will therefore be a major, if not the main, challenge in this policy domain (EC, 2012f:2). In an effort to further strengthen the EU defence market and industry, the EC set up a task force in May 2011 to explore how to reach these goals (EC, 2012f:1). The task force focussed on three priority areas: the Single Market, industrial policy, and research and innovation (EC, 2011a:3).

The Single Market should ideally contribute to the EU's long-term SoS and the approach needs to be based on interdependence and the development of European centres of excellence (CoEs) (Calleja-Crespo and Delsaux, 2012:7). The task force stated that cooperation and specialisation are the only ways to maintain essential capabilities and technologies and that these assets could be lost if restructuring were simply left to market forces and national initiatives. Further restructuring of the industry was necessary, based on a collective understanding of Europe's capability requirements (Calleja-Crespo and Delsaux, 2012:7).

The task force further analysed how to support SMEs in the defence sector and how to ensure that defence R&D is prioritised even when defence budgets are low, enabling constant industry competitiveness. Greater synergies were advocated between dual-use technologies funded in the EC's research programmes and the defence research agenda of the EDA.

Defence companies are surviving on the benefits of past R&D investment and have succeeded in replacing declining domestic orders with exports (EC, 2013g:2). National defence policymakers have to ensure that armed forces retain a breadth of high-tech capabilities to face the wide-ranging security threats affecting most MS. This is often expensive (EC, 2012f:2-3). Only about five European nations can procure as much as 80% of their defence equipment from domestic sources (Shanson, 2013f:2), meaning that EU MS mostly have to rely on non-national suppliers for their defence equipment while seeking to maintain their strategic capabilities.

Investing in emerging third countries may prove to be a more sustainable way for DCs to maintain turnover (EC Services, 2012:2); however, many major export orders demand that production activities be moved to the purchasing country and that technology be transferred. Such localisation requirements pose serious implications for the long-term competitiveness of the EDTIB (EC Services, 2012:2). Offset requirements in non-EU countries may therefore lead to further cutbacks at factories and in employment within Europe (EC, 2012f:2).

Controlling defence industrial capabilities

In 2011, the EC's defence-related task force consulted with the main stakeholders in industry and with trade unions on what actions they believed the EC could take with regard to the restructuring of the defence industry (Calleja-Crespo and Delsaux, 2012:7). The EC stated that in order to ensure the Union's long-term SoS it might be necessary to launch an initiative on the control of defence industrial capabilities (EC Services, 2012:4). It seems that the Defence Package is such an initiative, with both Directives 81 and 43 prioritising SoS, and with offset that advances industries now being scrutinised.

Investments still national

The current fragmented state of Europe's defence industry limits the potential for more cross-border networking and international cooperation between clusters of companies (EC, 2013f:25). Disintegration has resulted in unnecessary duplication of capabilities, organisations and expenditures (EC, 2013f:7). In the land and naval sectors there are 79 different platforms and systems in use in Europe compared to 21 in the US; Europe has 17 active production lines, compared to just two in the US (Abrahams main battle tank and Stryker armoured fighting vehicle). "Cooperation and EU-wide competition still remain the exception, with more than 80% of investment in defence equipment being spent nationally" (Briani, 2013:3).

The EC states that the future of the EDTIB lies in "more cooperation and regional specialisation around and between networks of excellence" in the EU (EC, 2013e:7). Such a strategy, together with clustering, can give SMEs a means to achieve a critical mass and improve their ability to compete in international markets (EC, 2013f:25). The

EC's view is that the creation of a Single Market for defence requires a robust legal framework and a "tailored" European industrial policy.

Protectionist strategies

The defence market has specific requirements seldom found in other areas of procurement (Arrowsmith, 2010:263), including SoS, Sol, national sovereignty and national security interests. National security is particularly essential when consolidation is prioritised, because the state claims to be the highest form of political organisation, possessing most of the legitimacy and capacity to act in the name of security (Buzan, 2004:1). In past public procurements the protection of national security interests was mostly achieved through protectionist strategies, such as offset. Specific national defence arrangements have to date caused EU policy initiatives by the EC and EDA in relation to the EDEM and EDTIB to be mostly ineffective; they have not advanced the current size, structure and performance of the EU's defence industries or the policies of national governments (Bekkers et al., 2009:27). In this context, the phasing out of offset became particularly important (Calleja-Crespo and Delsaux, 2012:7).

The Article 346 TFEU derogation

The deviations from EU law that allow trade barriers such as offset are based on specific articles in the EU treaties that involve public security, including Articles 36, 45, 51-52, 65, 72-73, 346 and 347 TFEU (Treaty on the Functioning of the European Union). Derogations provided under Articles 346 and 347 can apply to the whole treaty and are considered "safeguard clauses" (Arrowsmith, 2010:267). Article 346 TFEU (referred to henceforth simply as Article 346) allows MS to exempt defence and security contracts if the application of European law would undermine their essential security interests. In the case of production of or trade in arms, munitions and war materials, MS may take measures that they consider necessary to protect essential security interests, as stipulated by Article 346(1)(b) (Eur-Lex 2006:4, 6), including not disclosing information that the MS deems confidential (Sol) (Article 346(1)(a)).

Article 347 states that in the event of serious internal disturbances affecting the maintenance of law and order, war, or serious international tension constituting a threat of war, or in order to carry out obligations that it has accepted for the purpose of maintaining peace and international security, a MS may take measures that may affect

the functioning of the Single Market (Eurostep Europe External Policy Advisors [EEPA], 2013:1). This exemption offers MS a possibility to depart from the treaty or EU regulations (Europa, 1957:77; Andresen, 2011:1).

The Article 346 exemption can be applied to dual-use equipment, used for both military and non-military security purposes, if the application of Community rules would oblige a MS to disclose information prejudicial to the essential interests of its security (Taylor, 2011:8; Eur-Lex, 2006:6). However, Article 346 further stipulates that protection measures shall not adversely affect the conditions of competition in the Single Market regarding products not intended for specifically military purposes (Eur-Lex, 2012b:194), meaning that they should not interfere with trade regimes in the commercial market (Eriksson et al., 2007:27). Aims of a purely economic nature cannot justify restricting the free movement of goods or capital or the freedom to provide services (Heuninckx, 2011:56-7).

Automatic application

However, before Directive 81, most defence and security authorities and companies did not apply EU rules and procurements remained to a large extent outside the Single Market (De Rynck, 2009:22). MS procured from their preferred, usually national, suppliers (Maelcamp, 2012:1). The purported legal basis for the exemptions was an almost automatic application of Article 346 by MS (Andresen, 2011:1) to protect their national interests. MS also required non-defence benefits in the name of offset, ensuring that they could obtain skills, improve processes and develop infrastructure to such an extent that the country would reach a level where it could receive and further develop defence technology.

Until August 2011 when Directive 81 was launched, in some MS as little as one percent of the annual defence procurement was awarded in accordance with EU rules (Andresen, 2011:1). Defence procurement in MS was in effect “reserved for national legislation”, resulting in little harmonisation (Weiner, 2012:16). The situation resulted in widely differing procedures and criteria in the EU, possibly limiting market access for non-national suppliers and therefore hampering intra-European competition (Eur-Lex, 2006:1).

Some critics argue that national policies allowed by Article 346 affect the development of the EDEM and EDTIB in that they retain key national defence industrial capabilities that can develop the EDTIB (Hartley, 2011:110) and that, conversely, the elimination of Article 346 is necessary in order to create an EDEM (Bekkers et al., 2009:35).

EDA Code of Conduct first capped offset

The parameters of Article 346 were limited in 2008 by the EDA's Code of Conduct (Code) and in 2011 by the EC's Directive 81 (Anderson et al., 2013:23). The voluntary Code was successful in bringing all subscribing EDA members (all EU MS except Denmark) to agree not to require offset in excess of the contract value, showing that MS are to some extent committed to harmonising elements of offset in the EU.

The Code addresses defence contracts procured outside the framework of EU law (Export.gov, 2011:1) and may be applied only to offset that is justified on the basis of Article 346 (EC, 2012d:9) and to defence procurement opportunities worth €1-million or more (Weiner, 2010:slide 31). The Code therefore comes into play only in cases where Directive 81 does not apply (Graber-Soudry and Labbett-Ainsworth, 2012:21) and where offset may be required.

Conflicting views

The Code took a different view of offset from that of the EC, stating that national security considerations and the state of the EDTIB might require defence offset in the interim to support the development of key defence industrial capabilities, ensure SoS and operational sovereignty and obtain key defence technologies (EDA, 2010, 2012c:1). In this way, offset “will help shape the aspired EDTIB of the future, notably by facilitating the development of globally competitive CoEs and avoiding unnecessary duplication” (EDA, 2008:3).

The EC believes that offset has to be eliminated to develop capabilities and cannot contribute to competitiveness. It is difficult to understand how two organisations that work together so closely can have such directly opposing views on offset and on how the EDTIB is to be realised. However, it may just confirm the fact that offset can be a blessing or a curse—depending on who is making the rules.

4.2 EU DIRECTIVES

The future of Directive 81 depends on how various levels of EU law are applied and it is therefore important to understand the legal context of how directives function. The TFEU, which includes the Article 346 exemption, constitutes primary EU law, while EU directives form part of secondary EU law. Article 288 TFEU provides that regulations, directives and decisions are “binding” and therefore legally enforceable (Pearson Education, 2010:64). An EU directive is binding upon each MS to which it is addressed, with national authorities deciding on the form and methods of implementation (Article 288, paragraph 3) (Pearson Education, 2010:64). Even though EU law prevails in MS, the EU depends on national courts and enforcement agencies to implement it (Pearson Education, 2010:58).

Direct effect

Although the application of an unimplemented directive is not explicitly mentioned in any of the EU treaties, the ECJ has established the principle of direct effect, meaning that directives have applicability even if not implemented in national law (Gabriel and Weiner, 2011:1). The ECJ ruled that individual provisions of a directive may have a direct effect in a MS without requiring an act of transposition in cases where the following occur (Naglic and Papadopoulou, 2012:3):

- the period for transposition has expired and the directive has not been transposed or has been transposed incorrectly;
- the provisions of the directive are imperative and sufficiently clear and precise;
- the provisions of the directive confer rights on individuals.

Most of the rights provided by Directive 81 meet these requirements and are therefore directly applicable in MS, even if it has not been implemented into national law (Gabriel and Weiner, 2011:1). In fact, even when the provision concerned does not seek to confer any rights on the individual, the ECJ's consistent case law states that the authorities in MS have a legal duty to comply with the untransposed directive (Naglic and Papadopoulou, 2012:3-4).

On 21 August 2011, the rights granted in Directive 81 became enforceable before national courts and automatically resulted in MS liability (Naglic and Papadopoulou, 2012:4). Bidders can challenge any decision by MS' contracting authorities resulting from the lack of implementation or the incorrect implementation of Directive 81,

irrespective of whether the provisions of Directive 81 have been implemented into national law (Gabriel and Weiner, 2011:2). Failure to implement a directive or partial or improper implementation of a directive often leads to a complaint by the EC to the ECJ under Article 258 TFEU (EC, 2012g:3).

Criminal liability

Directives cannot, independent of national law, have the effect of determining or aggravating a liability in criminal law if persons contravene their provisions (Pearson Education, 2010:83). An act of transposition is required to ensure that the objectives laid down in directives become applicable to individual citizens (Naglic and Papadopoulou, 2012:3). If the lack of implementation of the directive by MS results in damage to an individual party, MS are obliged to pay damages to the injured party because they did not provide the rights granted in the directive (Shanson, 2011e:3). However, the ECJ has refused to extend the direct effect of directives to allow for claims by individuals against other private individuals, including private employers (i.e. horizontal direct effect) (Eurofound 2011b:2). An employee of the State can therefore not individually be held liable for rights or obligations stipulated in directives. Individuals can be held criminally liable only if they contravene provisions of the directive as reflected in the national law.

4.3 DIRECTIVES 2004/17/EC AND 2004/18/EC

Prior to the publication of Directive 81 on 21 August 2011, no EU law specifically addressed procurement in the fields of defence and security. Technically, defence procurement was subject to the common provisions of European procurement law as stipulated in the TFEU and the European directives on procurement, namely Directive 17 (Directive 2004/17/EC, the Classic Directive) and Directive 18 (Directive 2004/18/EC, the Utilities or Public Procurement Directive) These directives stipulate award processes for public procurement outside of defence and security (Weiner, 2012:16).

Directive 17

The scope of Directive 17 is the coordination of procurement procedures by entities operating in the water, energy, transport and postal services sectors. The Directive *inter*

alia excludes contracts awarded in the fields of defence and security (Europa, 2012a:4), but includes, for instance, government contracts for nuclear or other energy plants or the purchase of aircraft.

Table 4.1 Amended thresholds for Directive 17, 18 and 81

	New Threshold	Previous Threshold
<u>Directive 2004/18/EC</u>		
Public supply and service contracts awarded by sub-central contracting authorities	€ 207 000	€ 200 000
Public supply and service contracts awarded by central government authorities	€ 134 000	€ 130 000
Public works contracts	€5 186 000	€5 000 000
<u>Directive 2004/17/EC</u>		
Supply and service contracts	€ 414 000	€ 400 000
Works contracts	€5 186 000	€5 000 000
<u>Directive 2009/81/EC</u>		
Supply and service contracts	€ 414 000	€ 400 000
Works contracts	€5 186 000	€5 000 000

Source: OJEU (2014:1).

Thresholds for contract awards are amended every two years. On 1 January 2014, the EC amended the thresholds for Directives 17, 18 and 81 (OJEU, 2014:1). Although the directives do not apply to contracts below the thresholds, the general principles of the TFEU will apply “if the procurement has a cross-border interest potential” (Ellison and Baudrihayé, 2012:4).

50% foreign content

The “Preference” principle in Article 58 of Directive 17 allows contracting entities to reject a tender where the proportion of the products originating in third countries exceeds 50% of the total value of the products constituting the tender. In the case of two equivalent tenders, the one exceeding 50% non-Community products shall be rejected (De Beaufort, 2011b:slide 15; Sylvain, 2011a:slide 3). The provisions of this article automatically cease to apply if an agreement ensures comparable and effective access for EU suppliers (De Beaufort, 2011b:slide 15).

Directive 18

The public sector was successfully opened to European competition in the 1990s with several directives (92/50, 93/36 and 93/37) coordinating procedures for the award of public service contracts and works contracts (Moussis, 2011a:1). These directives were

replaced in 2004 with Directive 18, which aims to open general public procurement to competition, requiring contracting authorities throughout the EU to advertise their contract notices (Moussis, 2011b:1).

Procurement of non-sensitive and non-military equipment, works and services by contracting authorities in the fields of defence and security is also covered in Directive 18 (Heuninckx, 2011:37). The directive forms the basis for over 80% of non-defence-related procurement. It includes no relevant EU preference (Holman Fenwick Willan, 2012:2) and allows sellers to sub-contract a minimum of 30% of the contract value to third parties and any proposed sub-contractors. Tenderers are free to increase the minimum percentage (OJEU, 2004:134, 150).

Many MS regarded the rules of Directive 18 as unsuitable for awarding contracts in the defence sector and most of them avoided applying the EU procurement rules. In some MS as little as one percent of the annual defence procurement was awarded in accordance with the EU rules (Andresen, 2011:1).

4.4 COMPETITION LAW

The principle of undistorted or free competition has always formed a fundamental part of EU public procurement rules, offering a proper legal basis on which to build the basic elements of a more pro-competitive public procurement system (Graells, 2010:14). EU competition law prohibits two main types of anti-competitive activity (Pinsent Masons, 2010:2):

- abuse of dominant market position by businesses with significant market shares, unfairly exploiting their strong market positions; and
- anti-competitive agreements that prohibit arrangements and concerted business practices that appreciably prevent, restrict or distort competition and affect trade in the EU.

Isolating a part of the market

Public procurement regulations tend to establish a market mechanism that isolates a part of the market, in a sense artificially creating a “public sub-market” that is highly regulated by the public procurement rules themselves and can result in restrictions or

distortions of competition (Graells, 2012:1). The markets of high-technology industries in the aeronautical, energy, transport and telecommunications sectors, for example, should not be isolated (Moussis, 2011b:1).

While public buyers do not always prioritise the assessment of competition distortions in procurement, it is advocated that pro-competitive and unrestricted competition would more fully allow the public buyer to obtain value for its money (Graells, 2012:3). However, the argument is still made that the defence sector is not part of the common commercial domain.

State aid and the TFEU

Articles 107-109 TFEU include specific provisions restricting the ability of MS to grant aid (of whatever form) that “distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods in so far as it affects trade between MS” (Ellison and Baudrihaye, 2012:6). Broadly, the provisions are intended to stop MS from unfairly supporting their own companies to the detriment of competing companies from other MS. MS have an obligation under the treaty to notify the EC of all state aid measures, including aid in the pure military sector. They may derogate from this obligation if they can prove that non-notification is necessary for reasons of essential security interests under Article 346 (EC, 2013e:6).

Competition policy

An effective competition policy against public restraints is still underdeveloped, except for the general public procurement rules aiming to fight collusion between tenderers that may include bid-rigging or private restrictions to competition (Graells, 2010:2). There is no EU competition rule generally applicable to public procurement activities as such, even though the promotion of effective competition in public procurement markets has been a constant goal across the four generations of EU public procurement directives. The development of effective competition in the field of public contracts was expressly stated as an objective in the preamble to both Directives 17 and 18 (Graells, 2010:11).

Openness and growth

However, when assessing the goals of the EU, which include the “opening up” of the EU defence market and an increase in intra-EU trade to grow the market, and the route that

it has chosen to achieve them, one must question whether the EU has made valid inferences related to competition and growth. An economy is deemed to be open to trade if average tariff rates are below 40% (Sachs and Warner, 1997:5), and according to these criteria the defence and security market is deemed open if offset requirements are below 40%. It is not clear whether such a quota would be considered by contracting authorities when they require offset for defence procurements. Since openness may affect growth through many channels, there is no single, universal measure that measures all the aspects of how trade affects growth. It is widely disputed whether international trade causes growth or growth causes trade (Andersen and Babula, 2008:13-14). It is therefore uncertain whether increased intra-EU trade will advance or “grow” the EDTIB.

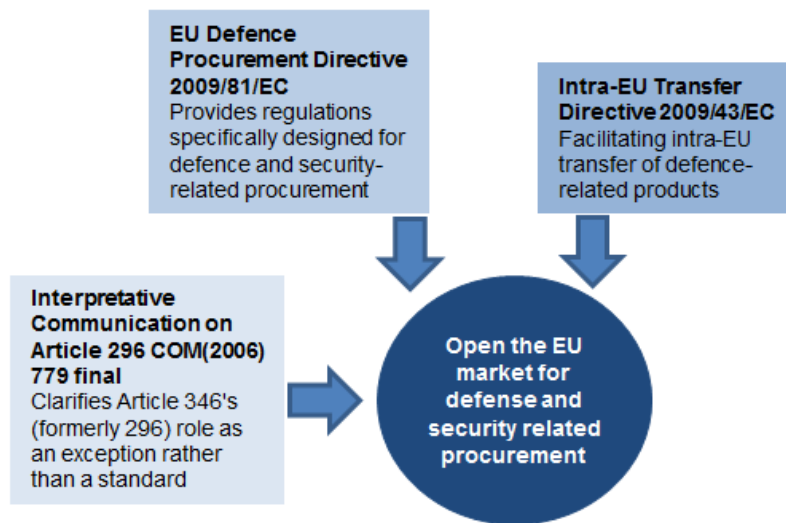
When measures in a market are taken based on biased and inconsistent estimators and invalid inferences (Andersen and Babula, 2008:14), they could result in conclusions that deem offset a market inhibitor instead of a market opener, leading in turn to legislation that disadvantages the EU defence and security sector. Policy makers cannot assume that they can simply liberalise world trade and that then “all countries of the world will automatically converge towards a high-growth trajectory in the long run” (Andersen and Babula, 2008:14).

Perhaps developing countries may gain the most from trade liberalisation, but there is a further risk that the countries mostly in need of economic development will not benefit from “openness” due to a lack of complementary inputs, relevant institutions, general knowledge and capital.

4.5 DIRECTIVE 81

The EU considered that previous procurement rules dealt primarily with civil procurement and did not take sufficient account of the complexity and sensitivity of defence- and security-related contracts (EC, 2013e:2). The EC launched the Defence Procurement Directive (Directive 2009/81/EC) and the Intra-EU Transfer Directive (Directive 2009/43/EC) with the ultimate objective of strengthening European defence to meet the challenges of the 21st century. These two directives constitute “the cornerstone of the European defence market” (EC, 2013e:4).

Figure 4.1 Regulatory reforms for defence procurement



Source: Analysis by CSIS Defense-Industrial Initiatives Group, in Hofbauer et al. (2011:28).

Rationale

Directive 81 seeks to address the specific requirements of the defence and security sector, including key aspects that differ from “traditional” EU procurement rules (Graber-Soudry and Labbett-Ainsworth, 2012:19). The Directive seeks to eliminate circumstances that justify invocation of Article 346 as a means of claiming exemption from EU law. In an effort to ensure compliance through legally binding and enforceable means (Weiner, 2010:slide 9), the Directive prioritises the following aspects (Europa, 2009; EC, 2013e; Bustin et al., 2010:661):

- fair and transparent rules to enable companies to access defence and security markets in other EU countries;
- the publishing of a contract notice as a standard procedure (Article 26);
- contracting authorities’ right to include safeguards that require bidders to protect classified information against unauthorised access (SoI), as well as ensuring SoS that guarantees the timely and reliable execution of contracts and the continued availability of maintenance, repair and upgrade capabilities;
- special rules on sub-contracting that make it possible for contracting authorities to ensure competitive procurements for subcontractors up to a maximum of 30% of the contract value, potentially improving market access for SMEs;

- the negotiated procedure that allows contracting authorities the flexibility to negotiate all features of complex contracts post-tender;
- specific rules on R&D contracts that strike a balance between the need to support innovation and the need to retain competitiveness in production markets;
- national review procedures that provide remedies for protecting the rights of companies taking part in the award procedure; and
- remedies that protect certain defence and security interests, which in the event of significant violations of EU procurement rules may result in the cancellation of contracts, fines to the contracting authority or the shortening of the contract duration (Article 60).

Coordinating national procedure

“In general, the Directive has the potential to bring arms, munitions and war material as well as sensitive security equipment into the Single Market” (Vind and Hanson, 2009:9). The diversity of procurement rules in the defence sector will be reduced and replaced with an overarching coordination of national procedures (Vind and Hanson, 2009:9). Directive 81 contains one set of rules for defence and sensitive security procurement.

The EC states that MS now have at their disposal EU-wide rules that balances security interests and treaty principles (Vierlich-Jürcke, 2011a:5). In aiming to eliminate offset, the EC hopes to ensure that access to the European market will be more attractive for suppliers and that they will have the chance to participate in supply chains of prime suppliers in the context of sub-contracting (Noble, 2013:2).

The most conspicuous feature of Directive 81 is what it lacks: there is no explicit mention of offset (Shanson, 2010a:1). The explanation is that offset fits the EU definition of an “obstacle to trade” and is therefore incompatible in principle with EU law (Georgopoulos, 2011b). However, when offset is viewed as the biggest obstacle to the EU Single Market, it is senseless not to address the practise directly.

Table 4.2 The EC's Defence Package

Directive	Approved / implemented	Measures
Defence procurement directive (Directive 2009/81/EC)	2009 / 21 August 2011	The procurement directive applies to all service and supply contracts worth more than EUR412,000 and works in relation to contracts exceeding EUR5.15 million. Exemptions under the national security prerogative include products related to intelligence, encryption tools, satellites and nuclear stocks.
Military transfers directive (Directive 2009/43/EC)	2009 / 30 June 2011	Simplifies and accelerates intra-EU transfers of equipment and systems via general export licenses and other instruments, easing the way for cross-border business transactions.

Source: Anderson et al. (2013:26).

Directives 81 and 43 are known as the EC's Defence Package. Directive 43 was launched to streamline the transfer of defence-related products in the EU, offering general and reliable EU-wide transfer arrangements in order for EU MS to guarantee SoS among themselves (Cassier, 2010:30). See headline "Directive 43: Intra-EU exports".

Scope

Directive 81 is applicable to contract awards made by contracting authorities or entities, including the State, regional or local authorities, bodies governed by public law and associations formed by such authorities or bodies (EC, 2010c:3). The scope of the Directive and the definition of what constitutes a public contract are identical to the wording in the Public Sector Directive (Directive 18), and the applicability depends only on the subject matter of the contract (Andresen, 2011:1). Directive 81 had to be transposed in each MS' body of legislation and new procurement contracts awarded after 21 August 2011 have to comply with EU law (Export.gov, 2011:1).

Guidance notes

In November 2010, the EC published important guidelines on topics related to Directive 81 (Maelcamp, 2011a:3). The EC guidance notes explain the seven important aspects of Directive 81: the field of application, offset, exclusions, R&D, SoS, Sol and rules on sub-contracting (Export.gov, 2011:3). The notes are not legally binding upon EU MS, but they present the EC's views on how certain controversial aspects should be considered under EU law (Maelcamp, 2011a:3).

Threshold

Currently, Directive 81 applies to supply and service contracts with an estimated value of €414 000 or more, and to work contracts with a value of at least €5 186 000 (see Table 4.1). Procurements that exceed the EU thresholds have to follow the detailed procedures prescribed in Directive 81 and have to be put out for bids on an EU-wide level (Laurila 2011:4). Works, supplies and services contracts are mutually exclusive; even if a particular contract includes a combination of elements, a contract can be of only one type (Ellison and Baudrihayé, 2012:3).

Norway covered by Directive 81

Although Norway is not an EU MS, as a member of the EEA (European Economic Area) it is implementing Directive 81 (Shanson, 2013c:1). The EEA agreement allows non-EU members Iceland, Liechtenstein and Norway to participate in the EU's Single Market. Non-implementation of Directive 81 could have resulted in Norway being "evicted" from the EU defence market (Shanson, 2013c:1).

Coverage

Directive 81 applies to the supply of military equipment and sensitive equipment, including arms, munitions and war material (plus related services) as included in a Council Decision of 1958 (Council of the European Union, 2008:1-3). The List of Arms, Munitions and War Material adopted at the 1958 Council (referred to as the List of 1958), to which the provisions of Article 346 also apply (Maelcamp, 2011a:2), includes only equipment with a purely military nature and purpose.

However, security has become an increasingly complex concept, with new threats blurring the traditional distinction between military and non-military or external and internal security dimensions (Eur-Lex, 2006:5-6). The list should be interpreted broadly in the light of the evolving character of technology, procurement policies and military requirements and should also cover products initially designed for civilian use that are later adapted for military purposes (Heuninckx, 2011:45-6). Non-military security may therefore fall within the scope of Directive 81 if it has similar features to those in military procurements and is equally sensitive (Graber-Soudry and Labbett-Ainsworth, 2012:19).

A “liberated” market

Directive 81 acknowledges that national security remains the sole responsibility of each MS (OJEU, 2009a:1); however, it establishes a new paradigm in defence procurement in that it aims to move a protected, secretive industry into the commercial domain. The most dramatic change resulting from Directive 81 concerns domestic preferences in the form of offset (Weiner, 2012:16). The EC states that Directive 81 takes into account security-related justifications for offset. The legislation’s provisions on SoS and sub-contracting offer a non-discriminatory alternative that allows MS to protect their legitimate security interests. The EC further states that the Directive increases competition in the supply chain of successful tenderers without infringing EU law (EC, 2010b:1).

In the past, 18 MS maintained offset policies requiring some form of compensation from non-national suppliers when they procured defence equipment abroad (EC, 2012d:8). The new approach moves away from compensation logic, focusing on capability and security requirements rather than economic compensation (Schmitt, 2011:slides 9-10). Directive 81 requires companies and contracting authorities to rethink their offset policies and “find new ways to achieve goals that in the past may have been reached by using offset” (Weiner, 2012:16).

Sensitive procurements still uncompetitive

By transposing Directive 81, MS agreed to open the market “in its less sensitive segments” and to limit the use of Article 346 to exceptional cases (EC, 2010c:2). The derogation clause under Article 346 may still result in sensitive procurements being conducted in a traditional, uncompetitive way (Terlikowski, 2011:37), including requirements for offset. The EC confirms that Article 346 is available to ensure protection of necessary security requirements, but warns that it should not be overstretched to justify requirements that follow old logic. “Article 346 is no blank cheque”; rather, the need for security requirements must be demonstrable (Schmitt, 2011:slide 10).

The MS concerned must ensure, and be able to demonstrate if requested, “that the concrete measure taken is objectively suitable for the protection of the essential security interest identified and that in qualitative and quantitative terms, it does not go beyond

what is strictly necessary for that purpose” (EC, 2010c:2). If the EC, subsequent to the launch of Directive 81, investigates a defence procurement case that required direct offset, the contracting government may be compelled to prove before the ECJ (European Court of Justice) the link between offset and the country’s national security interests (Shanson, 2011h:5).

Four-part test

The EC has defined a four-part test to be applied on a case-by-case basis by MS wishing to invoke the Article 346 exemption. This means in particular that contracting authorities requesting direct offset have to evaluate (Eur-Lex, 2006:5):

- Which essential security interest is concerned?
- What is the connection between this security interest and the specific procurement decision?
- Why is the non-application of the Directive in this specific case necessary for the protection of this essential security interest? and
- Does the use of the exemption adversely affect the conditions of competition in the common market (regarding products not intended for specifically military purposes)?

The EC has not been forthcoming on how the four-part test will be interpreted in reviews of MS’ decisions, because it will not provide guidance on the possibility of invoking Article 346 (Shanson, 2013i:5). The main considerations are what MS deem to be their essential security interests, and the percentage of offset that is likely in the EU after Directive 81.

Defining essential security interests

If “national security interests” mean something different to every MS, Directive 81 will not succeed in harmonising defence procurement in the EU. However, it is difficult to come up with a common set of definitions across a wide area of Europe (Shanson, 2013i:4). For example, while Germany and France hardly purchase anything from abroad, Norway has to import 70% of its defence equipment (Shanson, 2013i:4). Norway has a common border with Russia and there is a Russian naval base at Murmansk, placing Norway in a strategically important area for NATO. National security requires the country’s industry to deliver capabilities to the Norwegian forces and coast

guard, and it is perhaps facing one of the biggest challenges within Europe among the smaller MS (Shanson, 2013i:4).

Sweden's concern with essential security interests relates to the performance of equipment systems and the conditions and climate in which they are used, while Finland is dependent on foreign suppliers and prioritises SoS. Denmark uses offset to advance R&D programmes and to ensure that local companies are integrated in the supply chains of large, foreign companies. Restrictions on using offset would harm the Danish industry (Shanson, 2013i:4-5). In the Netherlands, Directive 81 has brought considerable uncertainty and the MoD has been tasked to decide on the nature of essential security interests (Shanson, 2013i:4). With the TFEU approving the exemption of defence and security procurement from EU law under certain circumstances, and Directive 81 prioritising a Single Market, the aims and rights of primary (treaty) and secondary (Directive 81) EU law are in contradiction as long as the definition of "essential national security interests" is not clarified. The decision may also influence the sovereignty of MS.

The future percentage of offset

According to an EDA study, 40% of offset transactions to fulfil obligations in defence contracts were direct, with the remaining 60% constituting indirect offset transactions (indirect military 35% and civil 25%) (Eriksson et al., 2007:4) (see 2.2 What is offset?, heading "Direct and indirect offset"). If Directive 81 is implemented as the EC intends, the indirect portion of offset requirements is most likely to be challenged in the future.

Indirect offset

Recital 45 of Directive 81 states that "no performance conditions may pertain to the requirements other than those relating to the performance of the contract itself" (EC, 2010b:4). Recitals form part of a legal document that explain its purpose and give other factual information. Offset requirements unrelated to the subject matter of the contract may be challenged by a prospective bidder as an illegal restraint of trade under EU law (Campos et al., 2012:2). The numerous defence offset deals that have prevailed in the past decades in sectors such as education, telecommunication, the agro-food industry and other unrelated areas may come to an end with the advent of Directive 81, unless

MS apply Article 346 and can argue successfully that *inter alia* infrastructure and skills contribute to the protection of national security interests.

The 'attack' on indirect provisions is contained within the recitals rather than in the Directive itself, making implementation uncertain, but unlikely in markets with a penchant for indirect accords (Anderson, 2009:4). The increased use of dual-use items in the military domain, the integration of the defence and security industries, the removal of boundaries between the civil and military arenas and the concentration on cyber-defence may result in direct offset activities taking place in non-defence domains. Nevertheless, with fewer offset obligations in the EU, MS will not be as readily able to swap offset obligations.

Curtailing offset

Directive 81 aims at limiting, if not preventing, the use of Article 346. Procurement authorities may no longer select a supplier based on nationality (Shanson, 2012g:1). When placing a contract under the new procurement rules, procurers may not actively seek offers of industrial participation (IP), nor may they include IP or offset in either the award criteria or contract conditions (MoD UK, 2011:9). Competition before the selection is crucial and the suppliers need to be selected based on performance (Shanson, 2012g:1).

Discretion

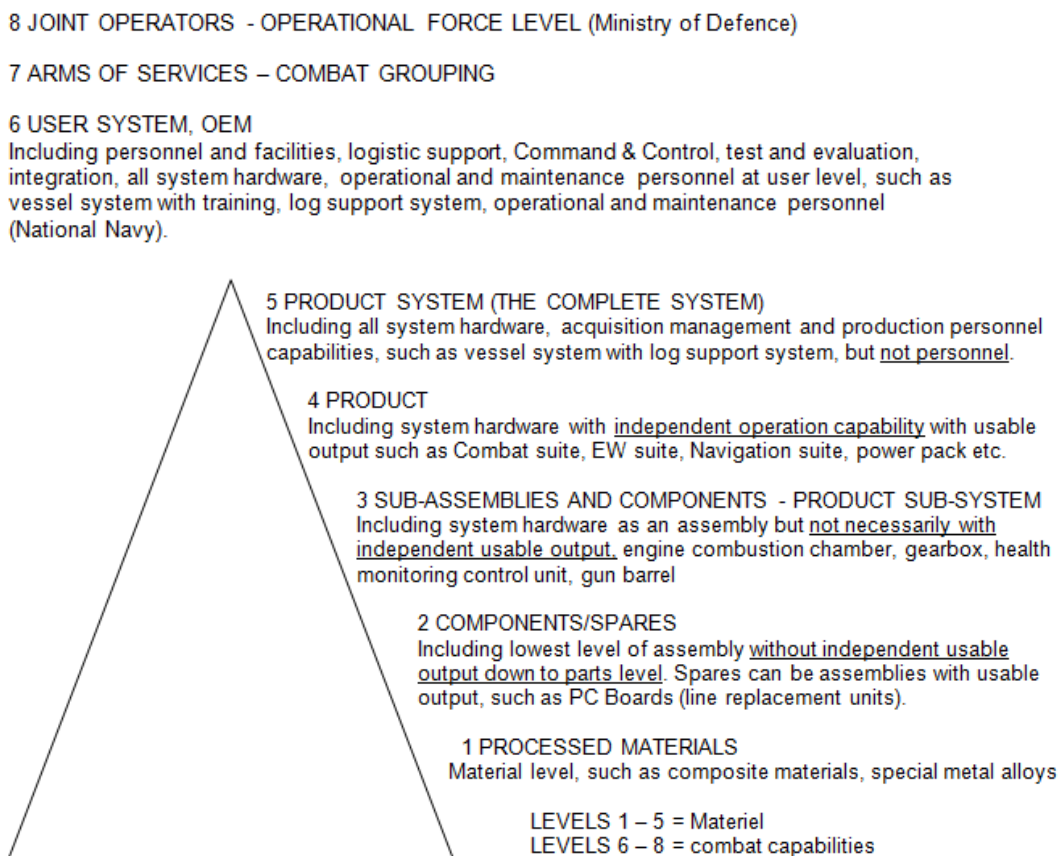
The wording of Article 346 is unchanged and has not been amended in any way before or after the launch of Directive 81 (Andresen, 2011:1). "It is the exclusive prerogative of each MS to decide every time whether they want to apply Article 346," a senior EDA executive stated (Shanson, 2011h:5). In April 2014, at a global offset conference in Barcelona, an EC defence expert stated, with regard to the interpretive communication on Article 346, that it is up to MS to define their national security interests, which can be assessed only on a case-by-case basis. "I don't think that we need much more clarity", the expert said. However, contracting authorities should not try to stretch EU law to the maximum (Shanson, 2014e:2). Furthermore, Directive 81 governs only the activities of contracting authorities, leaving tenderers free to make unsolicited offers.

Directive 81 has spawned much uncertainty about its application; some MS delayed in taking action and faced daily fines for not transposing the Directive on time. It seems that, mostly based on public proclamations made by EC representatives after the launch of Directive 81, MS started doubting the discretion afforded to them. Against the background of available interpretations of Directive 81, all MS that required offset in the past started to review their policies (Shanson, 2012g:1), generally stating that they retain the right to apply Article 346 to protect their national security interests. Future ECJ rulings are needed in order to interpret how to set boundaries regarding exclusions to protect national security interests. Whether these rulings take place will depend on how many cases the EC and defence contractors decide to pursue (Edwards, 2011:9).

System hierarchy

In the meantime, purchasing governments may opt to use a system-level hierarchy (Figure 4.2) to determine the elements of the purchase that contribute to the protection of national security interests.

Figure 4.2 The System-Level Hierarchy



Source: Furter (2014).

This hierarchy can also be used by offset managers when considering offset solutions. It categorises the components or aspects included in each of the eight system levels and can also be used to separate purchasing, sub-contracting and maintenance contracts. Levels 1-5 include materiel, while levels 6-8 also include combat capabilities.

A purchasing country may require that all materials be purchased locally, in order to ensure future SoS and increase compatibility (Level 1). At Level 2, components such as printed circuit boards, camera lenses or seats may be purchased anywhere because they are commonly available and have no bearing on national security. The purchasing country would prioritise Level 3 activities to ensure that sub-assemblies that contribute to the effectiveness of the system can be manufactured locally or that imported components can be assembled completely; for example, special equipment and skills are required to manufacture a gun barrel for a compact tank gun.

Level 4 represents products that have an independent operation capability and normally support key capabilities of the system. The system cannot achieve its proposed scope without these products and they have to be compatible with the complete system. With the increase in dual-use technology these items may be commonly available in the market, but not all products will be compatible with the system. If compatibility can be ensured, the purchasing country may not require localisation. In cases where it is important to be able to integrate and disintegrate the product system, the purchasing country would prioritise involvement in Level 5.

While OEMs (original equipment manufacturers) may prefer to deliver complete user systems, including provision of the necessary training facilities and having their training personnel spend time in the purchasing country, the sensitivity of defence purchases results in having foreign sellers mostly involved up to Level 5. The purchasing country retains sovereignty as long as it can guarantee the best interests of its own citizens and therefore wants to control the operation and maintenance of defence and security systems. (See the Further National Security Chart© in Figure 7.1, and 3.5 Defence policy).

Fragile equilibrium

The Directive 81 provisions are built on an equilibrium between security interests of MS and principles of the Single Market. Since security and defence represent “areas of national sovereignty where European integration is at best rudimentary, this equilibrium is inevitably fragile” (De Rynck, 2009:22). The necessary safeguards required for SoS and Sol have previously been decided independently by the MS and there is no experience on how to transpose or apply the key provisions in Directive 81 (De Rynck, 2009:22).

National sovereignty vs. shared sovereignty

Common institutions and processes established by the EU should ensure that MS agree with common policies or at least accept them. In the case of Directive 81; however, it could be postulated that MS agreed to procurement legislation the full consequences of which they did not understand—especially since offset is not addressed or even mentioned in the legislation. Even though European integration has led to an ever-growing convergence of national interests between MS (Eur-Lex, 2006:6), there is still no CSDP and MS protect their varying security interests, which are based on geographical or historical circumstances (Eur-Lex, 2006:5). National security remains a fundamental principle of MS’ sovereignty (Graber-Soudry and Labbett-Ainsworth, 2012:19).

The three special provisions in Directive 81 that relate to SoS, Sol and sub-contracting will now be put into perspective.

4.6 SECURITY OF SUPPLY

Due to the nature and applications of defence and security equipment and services, especially during a crisis or in armed conflict, a government wants to ensure the reliable and timely delivery of sufficient quantities of materiel, as well as the continued availability of support, maintenance, repair and upgrade capabilities under all circumstances (Bossaert et al., 2011:3; Maughan, Negishi and Whelan, 2010:3).

National awards to ensure security of supply

The easiest way for countries to accommodate SoS has often been to award defence contracts only to national companies, placing the purchasing nation in a position to completely operate, manage and repair defence equipment. Procuring authorities used offset to guarantee SoS, ensuring that they could cope with urgent surges in demand, effectively manage unexpected operational requirements to counter new threats, and operate in specific terrains not envisioned when the equipment was initially procured (Arrowsmith, 2010:263).

Article 18 TFEU contains a general prohibition of “any discrimination on grounds of nationality” (EC, 2010b:3). The EC’s Guidance Note on Offset indicates that the “nationality of a supplier cannot by itself be considered as a SoS requirement” (Maelcamp 2012:7) and that “SoS requirements must not be formulated in a way that only national suppliers can fulfil them” (EC, 2010a:3). Directive 81 calls for the replacement of the security-related justifications for offset with SoS and subcontracting provisions (see 4.8, Subcontracting and Directive 81 below) (Graber-Soudry and Labbett-Ainsworth, 2012:21). However, increased mutual dependence for supply of defence goods needs to be matched by increased mutual assurance of that supply. MS have to be sure that there is sufficient security when they entrust delivery of supplies to a company from another country (Secades, 2011:34).

Selection criteria or conditions

Directive 81 requires bidders to demonstrate that they can meet SoS requirements with regard to the following considerations (Maelcamp, 2011a:4):

- the location and organisation of its supply chain;
- its capacity to meet additional needs and maintenance requirements;
- the capacity of its national authorities to support the fulfilment of additional needs;
- and
- the indication of security or export control restrictions attached to the supplies.

The EC’s Guidance Note on SoS states that the bidder has to indicate “the geographical location when it is outside the territory of the Union”, implying that location in third countries can be relevant to the assessment of a tenderer’s capability to perform the

contract and ensure SoS (EC, 2010a:8). SoS requirements may take the form of conditions for the performance of a contract or may be used as selection or award criteria (Weiner, 2010:slide 11).

Bidders may provide commitments regarding SoS, including assurances that they are able to do the following (MoD UK, 2011:5; Maelcamp, 2011b:slide 19):

- ensure that changes in their supply chain during the performance of the contract will not adversely affect the SoS requirements;
- carry out the maintenance, modernisation or adaptation of the supplies covered by the contract;
- provide all necessary licences and information to produce spare parts, components, assemblies and testing equipment in the event that the supplier is no longer able to provide these supplies;
- commit to establishing or maintaining the capacity required to meet additional needs resulting from a crisis; and
- submit documentation demonstrating that the organisation and location of the bidder's supply chain will allow it to comply with the requirements concerning SoS.

Assurances

SoS is recognised as a legitimate ground that may justify national preferences and constitute exceptions to the freedoms guaranteed by the EU treaty (EC, 2010a:19) The EC acknowledges that a MS government may consider it an essential security interest to have key industrial capabilities in certain strategic sectors on their own territory rather than depending on non-national suppliers (EC, 2010a:2). It has been suggested that the provisions regarding SoS in Directive 81 are non-exhaustive and purposely vague, therefore allowing governments to take procurement decisions based on broader strategic SoS concerns (Maelcamp 2012:4). As mentioned, the transformation of the industry further multiplies possibilities.

EU-wide security of supply

After launching its Defence Package, the EC started a consultative process together with the EDA, aimed at bringing about a political commitment by MS to mutually assure the agreed supply of defence goods, materials or services (i.e. SoS) for use by MS' armed forces (EC, 2013c:11). Directive 43 aims to further improve the SoS between MS

by establishing a new licensing system that facilitates the movement of defence items within the Single Market (EC, 2013e:7).

Directive 43: Intra-EU exports

EU companies can deliver defence equipment to other MS only if their home country's national authorities grant the necessary export licence. Licences for transfers within the EU are hardly ever refused, but there is no guarantee that they will always be granted, especially if supplies in the exporting country are limited during a crisis (De Rynck, 2009:22).

The Preamble to Directive 43 states that the laws, regulations and administrative provisions in MS concerning the transfer of defence-related products within the Community contain disparities that may impede the movement of such products and that may distort competition within the Single Market, thereby hampering innovation, industrial cooperation and the competitiveness of the defence industry in the EU (OJEU, 2009b:1). "Such restrictions on the movement of defence-related products within the Community cannot be abolished generally through direct application of the principles of the free movement of goods and services provided for by the Treaty", because treaty principles may be exempted by MS (OJEU, 2009b:1).

Directive 43 on Intra-EU Transfers of Defence Equipment and Technology introduced a set of new laws that aim to reform European licensing procedures for the transfer of military equipment included in the EU Common Military list (1958 list). It sets forth common criteria for the certification of defence companies (Export.gov, 2011:2). The objective of the directive is a harmonised European licensing system that reduces the number of individual licences and prioritises the benefit of general licences that allow for the freer circulation of defence equipment between EU MS (Export.gov, 2011:2).

The new types of licences provide a preapproved authorisation framework by bundling certain categories of transfers into a single licence. Consequently, this licensing system will introduce a greater level of predictability for transfers, satisfying SoS concerns, reducing bureaucratic procedures and eliminating time and cost for most transfers (Hofbauer et al., 2012:30).

Directive 43 and security of supply

MS had to transpose Directive 43 by 30 June 2011 and apply it from 30 June 2012 onwards. In the future, intra-European transfers of military goods will no longer be considered as exports—eliminating time-consuming and costly administrative procedures to acquire licences and certificates for export, import, delivery and end use (Cassier, 2010:30). However, the problem is not resolved since the Directive still does not establish a licence-free zone (De Rynck, 2009:22). A zero percent denial rate for such transfers does not assure safety in a crisis situation, nor can it guarantee SoS throughout the EU.

EU advantage

The intra-EU transfer licences particularly benefit large European industrial entities with production lines established in various MS that often need to transfer equipment quickly between these States (Maelcamp, 2011a:4). The provisions on SoS may grant European bidders a comparative advantage in certain procurements if they hold an intra-EU transfer licence (Maelcamp, 2011a:4). The provisions may have a negative impact on the circulation of US equipment in the EU, creating a comparative disadvantage for the US industry and thus not resulting in fair competition in EU-wide defence acquisition (Export.gov, 2012:2). In order to comply with US law, US bidders are required to obtain an export licence for each intra-EU transfer of military equipment covered under the ITAR (International Traffic in Arms Regulations) (Maelcamp, 2011a:4). However, the protectionist nature of ITAR causes the US—the world's biggest defence market—to be essentially closed to imports from Europe (EC, 2013e:15).

4.7 SECURITY OF INFORMATION

Countries want to avoid making the characteristics and specifications of their defence equipment available to potential enemies and are therefore often reluctant to show transparency in their defence budgets and procurement processes, fearing that this information may reveal something about their operational priorities (Arrowsmith, 2010:263). The highly competitive nature of the defence equipment market further motivates the industry to protect the results of its R&D (Arrowsmith, 2010:263). Article 346 stipulates that in defence procurement a MS does not have to disclose or supply

information the disclosure of which it considers contrary to the essential interests of its security (OJEU 2009a:94).

Each MS may determine, under its national rules, the categories of information that it feels the need to protect, the relevant security clearances needed to access such information, and any measures to protect the confidentiality of the information (Graber-Soudry and Labbett-Ainsworth, 2012:20).

In order to exclude the application of the Article 346 exemption, Directive 81 sets out to protect the confidentiality of information and prevent unauthorised access to sensitive information. The provisions make any participation in the procurement procedure subject to the pre-contractual commitment of tenderers to ensure Sol (EC, 2010e:2). Contracting authorities may impose requirements on a bidder to provide assurances that such information will be protected, also extending compliance to any sub-contractors (Graber-Soudry and Labbett-Ainsworth, 2012:20). Taken in combination, the Sol provisions in Directive 81 (Articles 7, 13, 20, 22, 29 and 42) allow requirements “for the protection of classified information to be applied throughout all phases from the beginning of the contract award procedure until the end of contract execution” (EC, 2010e:1). A security clearance granted by the national authorities of the MS serves as evidence of the tenderer’s ability to safeguard appropriately all classified information (De Rynck, 2009:22).

Directive 81’s Sol clauses enable contracting authorities to evaluate bidders at the selection stage based on their track record and ability to handle such information, assessing their proposed means of performing the contract and their compliance with conditions for performance. According to this assessment, contracting authorities may decide to exclude certain bidders (Maelcamp, 2011b:slide 18).

4.8 SUB-CONTRACTING AND DIRECTIVE 81

Special conditions relating to performance

A prime contractor often includes smaller companies in a supply chain. Such supply clusters may form part of networks of excellence that also include research institutes and other academic sectors (EC, 2013e:9). The EC states that the sub-contracting

provisions in Directive 81 “will create a true Internal [Single] Market for the defence sector” (Shanson, 2014d:2). Directives 81 and 43 offer new opportunities for SMEs to participate in the establishment of a European defence market (EC, 2013e:9), aiming to spread benefits to different levels of the supply chain and ensuring that best practices in defence procurement are disseminated (Graber-Soudry and Labbett-Ainsworth, 2012:20). In transposing the sub-contracting aspects of Directive 81, MS may decide to make the sub-contracting mandatory or they may leave it to the discretion of the contracting authority (Graber-Soudry and Labbett-Ainsworth, 2012:21).

The new regulations permit contracting authorities to take the following steps (MoD UK, 2011:5-6):

- to require tenderers to indicate what part of the contract activity they propose to sub-contract;
- to oblige successful tenderers to award all or a certain portion of its proposed sub-contracts to third parties through advertising in OJEU; and
- to require tenderers to indicate any planned changes in sub-contractors before or during the life of the contract.

The contracting authority imposing a sub-contracting request will provide a minimum and maximum range to be sub-contracted, with the maximum percentage not exceeding 30% of the value of the contract (Vind and Hanson, 2009:6). Sub-contracting should not jeopardise the proper functioning of the successful tenderer’s supply chain (OJEU, 2009a:81).

Options for sub-contracting

These “innovative provisions” at the sub-contracting level are proposed as an alternative to the imposition of a domestic supplier (Maelcamp, 2011a:4). Through Directive 81, the EC wants to ensure that MS do not organise their supply chains on a purely national basis.

The 30% sub-contracting clause in Directive 81 refers to “third parties” and is seen as an opportunity to include non-national companies globally. Preamble 3 of Directive 81 states that “MS should also contribute to the in-depth development of the diversity of the European defence-related supplier base, in particular by supporting the involvement of SMEs and non-traditional suppliers in the EDTIB, fostering industrial cooperation and promoting efficient and responsive lower tier suppliers” (OJEU, 2009a:76). It can be

argued that the requirements for “equal treatment and non-discrimination” determine that the nationality of the sub-contractor will play no role, as long as it is not a national company. The EC’s Guidance Note on sub-contracting; however, states that sub-contracts awarded via competitive bidding must also be organised on a EU-wide level and in a fair and transparent way (Directorate General Internal Market and Services, 2010a:2). If MS accept the EC’s interpretation that only SMEs in the EU may be included in the supply chain as sub-contractors, SMEs will face more cross-border competition for EU contracts, but will not gain additional global business opportunities (De Rynck, 2009:23).

Table 4.3 Various options in sub-contracting

(This table continues on the following page)

	CONTRACTING AUTHORITY	SUCCESSFUL TENDERER	MS TRANSPOSITION REQUIREMENT (fixes only the upper limit at 30% of the contract value)
Option A*, Article 21 (1) and (2)	only verifies reliability and security of the supply chain	determines how much, which parts and to whom to sub-contract	MS have to transpose provision; MS can require contracting authority to use sub-contracting opportunities or leave it up to contracting authority to decide
Option B*, Article 21 (2) and (3)	indicates in the contract notice its intention that it may want to make use of the sub-contracting option; decides <u>which of the intended sub-contracts</u> to award in competition (some or all)	Indicates its intention to use sub-contracting; determines how much and which parts to sub-contract	MS’ transposition of the provisions required; MS can require contracting authority to use sub-contracting opportunities or leave it up to contracting authority to decide
Option C*, Article 21 (4)	decides how much to sub-contract in competition and specifies minimal percentage	decides which parts to sub-contract in competition to fulfil requirement and whom to sub-contract to	MS do not have to transpose provisions; if they decide to use the option, they can leave it to the contracting authorities to use these provisions or can require them to do so

Option D*, Article 21 (3) and (4)	the contracting authority specifies in the contract notice a minimum percentage to be sub-contracted in competition and, in addition, imposes competition for sub-contracts that the successful tenderer intends to award on top of the minimum percentage; based on the tenderer's proposal, it requires that some or all of the proposed sub-contracts above the required percentage are awarded	indicates which parts it intend to sub-contract to fulfil the minimum percentage and beyond; indicates which parts of its offer it intend to sub-contract beyond the required percentage	not all of the Directive's provisions related to this option have to be transposed; MS can decide to transpose them all or can leave it up to the contracting authority to use the option or can require the contracting authority to do so
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*All sub-contracts concerned by this provision must be awarded in a transparent and non-discriminatory procedure under the rules laid down in Title III of Directive 81.

Source: Furter 2014, derived from Directorate General Internal Market and Services (2010a:3-4)

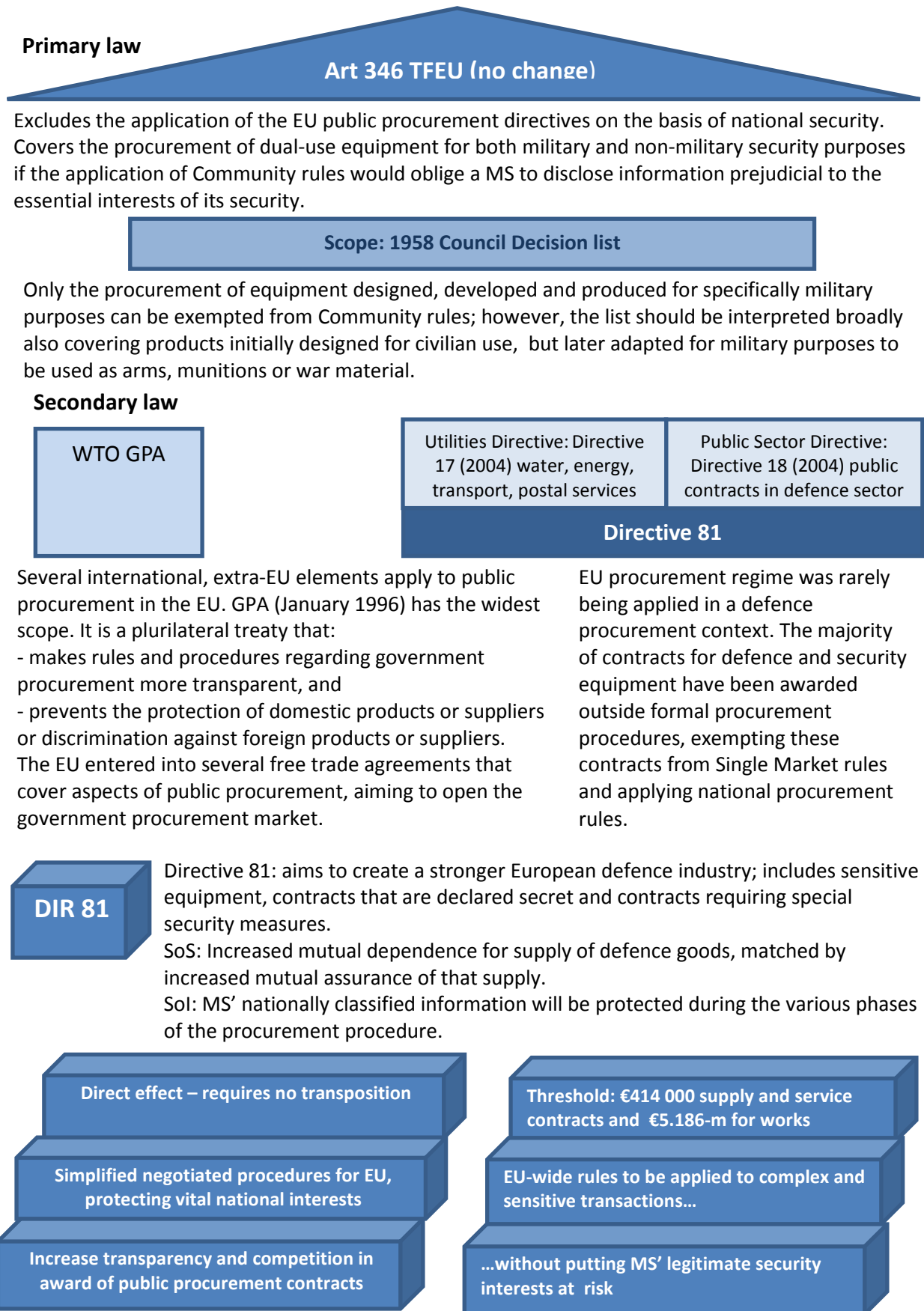
Tenderers are required to indicate which part of the tender is intended to be sub-contracted to meet the requirement (Weiner, 2010:slide 14) and tenderers may propose a higher share of sub-contracting, in which case the application of Directive 81 rules on sub-contracting only apply for the required range of sub-contracts, which is 30% (Weiner, 2010:slide 15).

MS sub-contracting transposition choices

The Belgian approach to sub-contracts is to include a 30% sub-contracting clause in RfQs only when Belgian industry can compete in the sub-contracting process. The Norwegian MoD's legal advisor stated that the requirement for 30% of contract value to be offered competitively in all MS could raise difficult questions of liability, may be challenged and could lead to delays (Shanson, 2013l:2).

Norway stated that the sub-contracting provisions in Directive 81 were brought in at a very late stage by the EC "to replace offset", because stakeholders who took part in drafting Directive 81 did not want to include anything related to offset in the Directive text. The sub-contracting clauses are "therefore the result of a very heady compromise, which we have found is very difficult to utilise in practice" (Shanson, 2013l:5). Finland is also wary of the Directive's sub-contracting provisions (Shanson, 2013l:5).

Figure 4.3 The Directive 81 window



Source: Furter, 2014.

4.9 LEGAL PERSPECTIVES

To exercise the Union's competencies, the institutions adopt regulations, directives, decisions, recommendations and opinions (Pearson Education, 2010:64).

Treaty principles

The EU treaties form one of the seven components of EU law, which include (Pearson Education, 2010:56):

- the principal EU treaties (the TEU and TFEU);
- secondary legislation made under the EU Treaties, including directives;
- "soft law", including non-enforceable instruments that may aid the interpretation and/or application of EU law;
- related treaties made between the MS;
- international treaties negotiated by the EU under powers conferred on it by the EU treaties;
- decisions of the ECJ; and
- general principles of law and fundamental rights upon which the constitutional laws of the MS are based.

In the EU, public procurement law is based upon the general principles set out in the TFEU (Ellison and Baudrihayé, 2012:1). The EC is enforcing the ECJ's rule that certain general principles set out in the TFEU are to be applied in all situations in which a public authority procures works, supplies or services from a third party. This means that, subject to certain limitations, the TFEU principles have to be considered when running an award process subject to a directive, as well as when the award falls outside a directive for some reason, such as when the threshold value is not reached or in the case of a service concession (Ellison and Baudrihayé, 2012:1). Therefore, the TFEU applies to all procurement activity regardless of value, as well as to contracts that are exempt from the application of Directive 81 (Scottish Government, 2012:1).

The TFEU principles of relevance that apply throughout all stages of an award procedure within the EU require the following behaviours (Arrowsmith, 2010:265):

- non-discrimination on the grounds of nationality (Article 18, TFEU);
- transparency, implying sufficient advertising;

- proportionality, implying that any derogation must remain within the limits of what is appropriate and necessary to achieve the aim intended;
- the equal treatment of tenderers, implying some form of competition and reviewing the impartiality of procurement procedures; and
- mutual recognition, giving equal validity to qualifications and standards from other MS where appropriate (Scottish Government, 2012:1).

The application of the TFEU principles can significantly extend the scope of coverage of the public procurement regime. Article 346 is an example (Ellison and Baudrihayé, 2012:1).

Jurisdiction

Defence contracts covered by Directive 81 will become subject to investigation by EU authorities (the EC) and will come under the jurisdiction of the ECJ (Ellison and Baudrihayé, 2012:2). The ECJ has the following responsibilities (Diaz, 2011:slide 29):

- assessment of the suitability and effectiveness of any measures that the MS have taken in compliance with the original judgement;
- establishing whether a MS has failed to comply with the judgement of the court or to fulfil its obligations under the EU treaties; and
- discretion in determining penalties to be paid by a MS.

When the EC brings an action in relation to TFEU principles, the burden of proof is on the EC to show that the TFEU obligations are applicable (Ellison and Baudrihayé, 2012:2). The ECJ has no scrutiny over tests of necessity and will simply look for security measures invoked by MS; also, it has no test of proportionality and will not assess whether less restrictive measures could have achieved the same result (Pourbaix, 2011:slide 9).

4.10 PROPOSAL FOR A NEW PUBLIC PROCUREMENT DIRECTIVE

In December 2011 the EC issued proposals for two new public procurement directives, one to replace the Public Sector Directive (Directive 18) and one to replace the Public Procurement Directive (Directive 17) (Ost and Vanderstraeten, 2013:1). The objectives of this reform are more efficient procedures that offer contracting authorities more

flexibility, benefitting all economic operators and facilitating the participation of SMEs and cross-border bidders (EC, 2011d:2). An amended Public Sector Directive should deal with the evolving political, social and economic context (EC, 2011c:2), but will not result in any changes in Directive 81 on defence procurement or in the Remedies Directive (89/665/EEC as amended by 2007/66/EC) (Kallio, 2012b:slide 5).

4.11 AWARD PROCEDURE

Contract award criteria

Award criteria need to ensure that tenders are assessed in an impartial, objective manner and under conditions of effective competition (Kallio, 2012a:slide 2). However, a contracting authority may exclude a non-EU candidate from the bidding process if it considers that the geographical location of non-EU sources “could compromise their ability to comply with its requirements, in particular those related to SoS” (EC, 2010a:8). Any sub-contractor can be excluded on the same grounds (EC, 2010a:8).

Open versus restricted procedure

It is accepted that open procedure is not considered appropriate when dealing with defence contracts (Graber-Soudry and Labbett-Ainsworth, 2012:20). Open procedure in public procurement allows a contracting authority to invite providers to bid directly for a contract in response to a public invitation to tender.

All interested contractors are permitted to request the specifications and submit tenders and the winning provider is selected from those bidding (European Telecommunications Standards Institute [ETSI], 2011:7).

Publication ensures competition

The Directive 81 procedure requires the advertising of a contract notice (DLA Piper, 2011:2) and contracting authorities are obliged to publish a contract notice on Tenders Electronic Daily (TED), inviting at least three candidates to submit tenders (Andresen, 2011:2). Contracting authorities have to ensure competitive tendering and enter into negotiations with as many parties as possible. DCs can no longer react to a tender that is not advertised publically and have to know what procedure will be used to negotiate the award.

Prior to negotiating with the tenderers, the contracting authorities still have to draft the specifications on which the tender is to be based, with the negotiations serving the limited purpose of adapting the submitted tenders to the contracting authority's requirements (Andresen, 2011:2). Directive 81 allows for exemptions if services can be provided by only one offeror or if goods have to be procured during a crisis or for an R&D contract (DLA Piper, 2011:3).

Procedures

Directive 81 recognises the need to restrict the flow of information (SoI provisions) and ensure SoS (Andersen 2011:2). Contracting authorities may use the negotiated procedure with prior publication without restriction or they may use the restricted procedure; the negotiated procedure without prior publication may be used only in certain exceptional cases (Europa, 2012d:2).

Negotiated procedure

Negotiated procedure with publication is the standard contracting procedure for contracts covered in Directive 81. At least three companies should bid, and contracting authorities may consult the companies of their choice and negotiate terms of the contract with them (Maelcamp, 2011a:2). The procedure involves a pre-qualification stage and a negotiation stage with the pre-qualified group of tenderers (Ellison and Baudrihayé, 2012:5).

Restricted procedure

Restricted procedure constitutes a procedure under EU procurement directives whereby expressions of interest are invited through a notice in the OJEU and other appropriate media. Any economic operator has the right to express interest, but only those who meet certain qualification criteria are issued the full tender documentation and invited to submit tenders (EC, 2010d:14). This procedure implies that the rules have been laid down in advance for weighting the criteria for selecting the candidates invited to tender and that publication is required (EC, 2010d:12, 20). The first stage of the process is the selection of suitable bidders. The second stage is the evaluation of the tenders (ETSI, 2011:7). The contracting authority has the right to apply criteria of qualification and selection and to restrict the number of tenderers. It may assess the tenderer's technical and/or professional capacity, its economic and financial situation, and SoS concerns,

while any history of participation in criminal organisation or corruption is a reason for exclusion (Europa, 2012e:107)

A free choice can be made between the restricted procedure and the negotiated procedure with publication of a contract notice (Weiner, 2010:slide 10). Invitations need to include the contract documents, the deadline for receipt of tenders and an indication of any additional documents to be annexed (Europa, 2012d:3). For every contract or framework agreement, the contracting authorities have to draft a written report describing the selection procedure chosen, as well as information concerning the candidates (Europa, 2012d:3).

Competitive dialogue procedure

The competitive dialogue procedure can be used for particularly complex contracts where the standard procedures are not sufficient. Any economic operator has the right to candidate and the contracting authority can then engage in a dialogue with selected candidates to identify one or more solutions suitable to answer its needs. Following pre-qualification, the procurement authority discusses the possible form of the contract and the technical specification with at least three bidders before issuing the tender. When the procurer considers that a proposed solution meets its requirements, the dialogue ends and the bidders submit tenders based on the solution achieved (ETSI, 2011:7).

For the purpose of recourse to the competitive dialogue procedure, a public contract is considered “particularly complex” where the contracting authorities (OJEU, 2004:128):

- are not objectively able to define the technical means capable of satisfying their needs or objectives in accordance with Article 23(3)(b), (c) or (d); and/or
- are not objectively able to specify the legal and/or financial make-up of a project.

In practice, the availability of the negotiated procedure and the requirement to justify the use of the competitive dialogue procedure may render it superfluous (Graber-Soudry and Labbett-Ainsworth, 2012:20).

Negotiated procedure without publication

The “negotiated procedure without publication” is allowed only in specific cases where the negotiated procedure with publication of a contract notice may be inappropriate,

such as for products manufactured only for research or experimentation; in cases of urgency, crisis or armed conflict; for G2G contracts; for reasons connected with the protection of exclusive rights; or for additional deliveries by an original supplier to overcome disproportionate technical difficulties in operation and maintenance. In these cases the additional orders need to be made within five years of the original contract (Maelcamp, 2011a:2; Graber-Soudry and Labbett-Ainsworth, 2012:20).

Research and development procedure

The negotiated procedure without publication is to be used for R&D contracts up to the technical demonstration stage (Maelcamp, 2011a:5). Contracts for the production phase that derive from the research need are to be re-tendered competitively, eliminating any automatic contractual link between the developer of the research and the commercialisation of the product of research. The provisions aim to encourage EU MoD to consider cheaper, off-the-shelf options already available on the market in other EU MS, rather than duplicating effort (Maelcamp, 2011a:5).

Limitations on contracting flexibility

The strict obligation to treat the participants in the negotiation on equal terms, together with the substantial resources required when negotiating with three or more parties, somewhat limit the flexibility deriving from the “negotiated procedure with publication of a contract notice” (Andresen, 2011:2).

The flexibility offered by Directive 81 is further diminished by the fact that, in contrast with Public Sector Directive 18, Directive 81 does not allow the use of open procedure (Andresen, 2011:2). Just how far Directive 81 opens the market to greater competition will have to be determined and may depend to some extent on the use of exemptions that result in direct awards to national suppliers (DLA Piper, 2011:3).

MEAT (most economically advantageous tender)

In order to ensure awards on the basis of objective criteria that comply with the principles of transparency, non-discrimination and equal treatment, and that assess tenders in a transparent and objective manner under conditions of effective competition, only two award criteria are available: the lowest price and the most economically advantageous tender (MEAT) (OJEU, 2009a:85).

In the case of a MEAT, the four conditions with which a tender needs to comply include the following (Kallio, 2012a:slide 9):

- it must be linked to the subject matter of the contract;
- it should not confer an unrestricted freedom of choice on the contracting authority; the criteria for the award of the contract need to be expressly mentioned in the tender documents or in the notice; and
- the tender must comply with all the fundamental principles of EU law.

Under MEAT, economic and quality criteria (OJEU, 2009a:85) linked to the subject matter of the contract may be considered, including quality, price, technical merit, functional characteristics, running costs, operational characteristics, life-cycle costs, after-sales service, cost-effectiveness, delivery date, SoS and interoperability (OJEU, 2009a:112).

Environmental or social considerations may also be considered (OJEU, 2009a:97) in response to needs defined in the specifications of the contract—for instance, disadvantaged groups of people who benefit from the works, supplies or services awarded (Kallio, 2012a:slide 10). Sub-criteria do not need to be of a purely economic nature but, as a whole, are applied to determine the tender that offers the best value for the money (Kallio, 2012a:slide 5).

MS' scope of discretion in relation to implementation

Directive 81 contains numerous facilitation clauses that *inter alia*:

- allow MS to determine how Directive 81 should be implemented in the specific context of their own defence and security markets (OJEU, 2009a);
- give MS discretion to decide how to transpose the sub-contracting aspects (Graber-Soudry and Labbett-Ainsworth, 2012:21); MS may make them mandatory or leave them to the discretion of the contracting authority in each case, and the practical effect of this part of Directive 81 is likely to depend on the details of the legislation adopted by each individual MS; and
- permit MS to recognise, by way of exception, “illegal” award procedures in cases where are predominant (DLA Piper, 2011:3); and
- allow MS to decide whether or not to allow “economic operators from third countries to participate in contract award procedures”; they should make that

decision on grounds of value, recognising the need for a globally competitive EDTIB, the importance of open and fair markets, and the pursuit of mutual benefits (OJEU, 2009a:78).

In the latter case, the European Economic and Social Committee stated that in its view establishing a European preference is not synonymous with protectionism, but rather a necessary step in rebalancing international defence industrial and technological cooperation, especially in relation to the US (OJEU, 2009d:116).

4.12 CASE LAW

Case law generally indicates that exemptions to the treaty, such as Article 346, should be interpreted conservatively (Bratanova, 2004:16). The EC states that MS are not allowed to depart from the provisions of the treaty by simply referring to national security interests (EC, 2010c:2); however, available ECJ case law does not include a huge number of judgements directly on point. The fact that the biggest percentage of defence contracts was awarded in the past outside EU law shows that decisions by MS to apply the Article 346 derogation were seldom questioned.

No general exemption

In 1999, in *Commission vs Spain*, the court for the first time dealt specifically with Article 296(1)(b) TEC (now Article 346(1)(b) TFEU) and decided that there was no general exemption from the treaty (Bratanova, 2004:16).

Protecting MS sovereignty

The 2003 case of *Commission vs Kingdom of Belgium* (Case 252/01) gives some indication of past rulings on Article 346. Belgium unfairly awarded a service contract, involving coastal surveillance by means of aerial photography, by negotiated procedure without prior publication of a notice, and it failed to give prior notice to the EC of its intention to use that procedure (Pourbaix, 2011:slide 6). The ECJ accepted that coastal surveillance by means of aerial photography is associated with national security and could be exempted from the relevant EU law. A low standard of scrutiny over security measures was required and the ECJ simply accepted Belgium's argument that the

contract required special security measures and dismissed the case (Pourbaix, 2011:slide 6).

Dual-use items

In the April 2008 judgement of the Grand Chamber in *Commission vs Italy* (C-337/05, Agusta and Agusta Bell helicopters) the EC stated that even though light helicopters procured by Italy for the use of police forces and the national fire service had to have certain characteristics similar to those of military helicopters, the helicopters could not be treated as military supplies (Infocuria, 2008:5). The EC argued that Italy had not established a legitimate reason for using the Article 346 derogation and therefore offset could not be required. The court ruled against Italy.

State aid

Case T-26/01 of 30 September 2003—*Fiocchi munizioni SpA vs Commission of the European Communities, supported by Kingdom of Spain*—was based on a complaint regarding the inadmissibility of granting state aid to an arms production undertaking (Europa, 2003:2). The applicant alleged that subsidies worth ESP35 000-m (€201.4-m) had been granted to the Santa Barbara company between 1996 and 1998 (Europa, 2003:4). The court indicated that Article 346 confers on MS a particularly wide discretion in assessing the need to protect the essential interests of their security (Europa, 2003). The state aid rule applied in this case indicates that the rules of competition do not apply in cases where a MS adopts some form of aid in favour of production or trade in arms on the basis of considerations linked to essential internal security interests (Hancher, Ottervanger and Slot, 2012:134). In cases where the MS' reliance on Article 346 procedure is *prima facie* credible, the Commission is not required to examine the case (Hancher et al., 2012:135). The Commission has to ensure only that the measure does not adversely affect the conditions of competition in the common EU market regarding products that are not intended for specifically military purposes (Hancher et al., 2012:134).

In-house arrangement

In its judgment in Case 107/98, *Teckal Srl v Comune de Viano and Azienda Gas-Acqua Consorziale (AGAC) di Reggio Emilia* (15 December 2009, paragraph 72), the ECJ recognised that in some cases a contracting authority may directly award a contract “to

a legally distinct third party who, in practice, is not an independent body”, without a competitive tendering process. The applicable test is twofold (Ellison and Baudrihayé, 2012:5):

- the control test requires that the control that the authority exercise over the third party receiving the contract must be “similar to that which it exercises over its own departments”; and
- the function test requires that the third party “carries out the essential part of its activities” for the authority.

When these conditions are met, the contract will be treated as an in-house administrative arrangement, falling outside the scope of Directive 81 (Ellison and Baudrihayé, 2012:5). Such an example would apply to defence contractors that are fully owned by the government and requested to supply defence equipment to the government, such as the Finnish government awarding a defence and security contract to Patria.

The derogation and dual use

The judgment in Case 615-10, *Finland vs EC* (2012), involving the company Insinööritoimisto InsTiimi Oy, is of great importance for any procurement of equipment of a dual-use nature that relies on the derogation in Article 346. In this case the ECJ ruled that even dual-use items can be exempted if they are modified in such a fashion so as to have a purely military application. MS procuring dual-use items and wishing to require offset for such purchases may be expected to prove how these items were modified to represent a purely military application, and how they protect a national security interest (Kunicki, 2012:1).

The ruling in *Finland vs EC* indicated that there are generally no grounds for using the derogation with respect to dual-purpose products, “except for products that are subject to substantial modifications for military purposes” (Kunicki, 2012:1). The material, by virtue of its intrinsic characteristics and also because of the substantial modifications made for military purposes, may be regarded as having been specially designed and developed for defence (Infocuria, 2012:6). If a dual-purpose product is modified for a specific military purpose and the final form of the product has only a military use, it is no longer a dual-purpose product after modification (Kunicki, 2012:2). Thus the absence of a specific product from the 1958 list of war materiel does not automatically preclude

application of Article 346 to a contract to supply the product. The list is “open-ended”, presenting only examples of types of products and guidelines (Kunicki, 2012:2). The court stated that the contracting authority had to answer the questions in the four-part test (see the discussion in this chapter under the heading “Four-part test”) in order to identify the essential security interest that required protection (Kunicki, 2012:2); however, it also stated that the referring court had to make a ruling (Infocuria, 2012:6).

4.13 THE REMEDIES DIRECTIVE (2007/66/EC)

A truly open market needs to provide a system by which tenderers may review the procedure before the conclusion of the contract (Rosenkötter and Fritz, 2008:8). The new Remedies Directive (2007/66/EC) improves the rights of bidders participating in public and utility sector tender processes, and the effectiveness of review procedures concerning the award of public contracts (McEwan, 2008:1; Graber-Soudry, 2011:slide 2). Article 56 of Directive 81 stipulates the requirements for review procedures, offering MS discretion in relation to some aspects (OJEU, 2009a:115-6).

The directive applies to all procurements commencing on or after 20 December 2009, establishing the following additional remedies (Ellison and Baudrihayé, 2012:6):

- contracting authorities have to provide a debriefing to all tenderers;
- following ECJ case law, the decision to award a contract falling within the scope of Directive 81 may be concluded only after the expiry of the mandatory standstill period, which is at least ten calendar days (OJEU, 2009a:117);
- the contract award is suspended automatically if proceedings are brought against the contracting authority’s award decision, and the burden to apply to the court to lift the injunction is now on the contracting authority; and
- the “ineffective contracts” remedy is a post-award countermeasure that may provide for retroactive cancellation of all contractual obligations, including the prospective cancellation of all unperformed obligations, coupled with a fine on the contracting authority; or, in situations where cancellation is inappropriate, alternative penalties such as contract shortening or fines or both may be used, per Article 61(2), as long as the process does not seriously endanger MS’ security interests.

Public authorities only

All four directives mentioned above (Directives 17, 18, 81 and the Remedies Directive) apply only to procurement activities performed by contracting authorities. These are defined as the State, regional or local authorities, bodies governed by public law, and associations formed by one or several of such authorities or one or several bodies governed by public law (Heuinckx, 2011:38).

4.14 INFRINGEMENTS AND REVIEWS

The EU's intention to open its defence markets to greater competition and fairness gives obligations and rights to MS (Anderson et al., 2013:23) and relevant authorities. As the enforcer of EU law, the EC has the responsibility to investigate potential infringements of the law before or after contract signature, in response to third-party complaints or on its own initiative (Ellison and Baudrihayé, 2012:2). An infringement procedure can be initiated when a MS breaches a provision of primary law; a norm of secondary law, which is a binding Act of the EU Institutions; an international agreement concluded by the EU; or general principles of law (Diaz, 2011:slide 10).

The EC can be informed about an alleged infringement through various means: complaints by individuals; the media; national official journals covering industrial matters; petitions or enquiries by the European Parliament; a decision of the ECJ; or other sources such as conformity studies (Diaz, 2011:slide 16). If a national preference in public procurement is not satisfactorily justified by the purchasing government, the EC has the authority to investigate and, if necessary, bring an infringement action against the offending MS in the ECJ (Campos et al., 2012:4). In the case of domestic preferences, violations occur where a request for offset is in breach of the Article 346 provisions and the contracting authorities are not able to demonstrate why the offset requirement is the only way to safeguard their particular security interests (Weiner, 2012:18). Contracting authorities are not allowed to consider unsolicited offers of offset when making award decisions (Weiner 2012:18). Similar to the uncertainty regarding the discretion allowed to MS, the discretion of the EC is also not clear.

The subject of the bid protest determines whether the contracting authority has violated a claimant's individual rights. If an award decision is set aside, the tenders would have

to be re-evaluated. A procurement authority can be ordered to reconsider and repeat the tendering process. Alternatively, aggrieved bidders may have private rights of action in the national courts of the relevant MS, invoking general principles of EU competition law (Campos et al., 2012:5).

Motions

MS have to take steps to ensure that the EU contracting authorities' decisions may be reviewed effectively and as rapidly as possible (Green, 2009:2). If a bid process is deemed to be non-compliant and a claim is filed, the bid protest has a suspensive effect, prohibiting the award of the protected contract until a final decision is reached (Weiner 2012:18). However, contracting authorities may be granted permission to award the contract prior to a resolution of the protest. Reviewing bodies have to be given sufficient time for effective review of the contract award decisions taken by contracting authorities (Article 57) (OJEU, 2009a:117). MS may request contracting authorities to supply in writing, within 15 days, reasons for the rejection of an application or tender (OJEU, 2009a:105).

Infringement process

Stages in the infringement proceedings include the receipt of a complaint received by the EC; the investigation; an informal letter (or EU Pilot Project in some MS); a letter of formal notice; a reasoned opinion; and finally an ECJ hearing, although many of the cases are closed before reaching this stage (Graber-Soudry, 2011:slide 5). The reasoned opinion defines the subject matter of the dispute in the eventual litigation phase, prescribing a time limit of normally two months within which the MS must put an end to the infringement (Diaz, 2011:slide 20). The reasoned opinion includes a coherent and detailed statement of the reasons leading the EC to believe that the MS in question has failed to fulfil its obligations under the treaty, and it indicates the measures to be taken to remedy the infringement.

Decisions that do not comply with Directive 81 can be challenged before national courts during the procedure, during the standstill period or after contract award. Aggrieved bidders may request that an award procedure be halted (Maelcamp, 2011a:6). Any illegal decision can be set aside (prior to contract award only) and damages can be awarded pre- or post-award. Once the complaint is submitted, the complainant has no

further involvement and it becomes a case between the EC and the MS. If the EC decides to act (Akritidis, 2012:slide 2), it will challenge the MS before the ECJ and MS can be tried for violating EU directives or treaty principles and forced to remedy their breach (Maelcamp,2011b:slide 12).

In cases of continuous failure to remedy the situation, fines may be levied (Weiner, 2010:slide 21). Protests have to be submitted within time limits (Graber-Soudry, 2011:slide 4). Before the contract has been signed, the following remedies are available: interim measures, the setting aside of decisions (including award decisions) and damages. Damages may be difficult to prove and may include only a claim for expenses in many cases (Akritidis, 2012:slide 5).

After the supply contract has been signed it may be too late to undo the decision and there are fewer possible remedies, including damages and declaring ineffectiveness (cancellation) of the contract (taking into account Article 60(3) (Graber-Soudry, 2011:slide 4). The complaint can still result in the award of damages and can disturb the relationships between the transgressor and awarding authorities (Akritidis, 2012:slide 5). The consequences of a contract being considered ineffective shall be stipulated in national law (OJEU 2009a:118).

All contractual obligations may be cancelled retroactively or the scope of the cancellation can be limited to obligations that still have to be performed. Where an illegal contract is maintained because of overriding reasons related to defence and/or security interests (OJEU 2009a:118), MS are required to provide for the application of alternative penalties, including fines and the shortening of the contract period, as per Article 61(2) (Green, 2009:2-3). The EC takes government authorities and not companies to court. Judgements of the ECJ supersede all national court decisions (Maelcamp, 2011a:7).

Penalties

Ultimately a violation may result in a penalty, in the form of either lump-sum or daily fines against the MS, or the contract may be terminated (as in Case C-503/04, *European Commission vs Germany*) (Graber-Soudry, 2011:slide 6). The penalties are not intended to compensate for the damage caused by the MS concerned, but have a

corrective purpose in placing the MS under economic pressure, inducing it to put an end to the breach established (Diaz, 2011:slide 28). The minimum fixed lump sum differs in various MS: in Germany it may be €27-m, in the UK €11-m, in Hungary €1.5-m, in Poland €3.6-m and in Spain €7.4-m. Penalties for each day of violation can be based on the seriousness and duration of the violation. Maximum daily penalties are for Germany €914 000, the UK €791 000, Hungary €108 000, Poland€260 000 and Spain €530 000 (EC, 2012g).

4.15 EXEMPTIONS AND EXCLUSIONS

Defence and security equipment is vital both for the security and the sovereignty of MS and for the autonomy of the EU. As a result, purchases of goods and services in the defence and security sectors are often of a sensitive nature (OJEU, 2009a:1). For example, some contracts may entail such extremely demanding requirements in terms of SoS or may be so confidential and/or important for national sovereignty that even the specific provisions of Directive 81 would not be sufficient to safeguard a MS' essential security interests (EC, 2010c:2).

The role of the EC

The EC will not get involved in the assessment of MS' essential security interests, nor assess what military equipment they choose to procure to protect those interests (Eur-Lex, 2006:6). The EC confirmed that the definition of the security interests of the MS is the MS' prerogative, but the EC reserves the right to investigate the use of the exemption in confidence. When the EC investigates a defence procurement case, the MS concerned may be expected to furnish evidence that, under the specific conditions of the procurement at issue, application of Directive 81 "would undermine the essential interests of its security" (Eur-Lex, 2006:6).

List of exclusions

In addition to Article 346, which grants MS a specific right to protect their national security interests, these principal exclusions are included in Directive 81 (Article 12 and 13) (OJEU, 2009a:94-5):

- contracts awarded pursuant to international rules and which have to be awarded by a MS in accordance with those rules; or concluded between one (or more) MS

- and one (or more) third countries; or relating to the stationing of troops and concerning the undertakings of a MS or a third country; or where an international organisation is purchasing for its own purposes;
- contracts for which the application of the rules of Directive 81 would oblige a MS to supply information the disclosure of which it considers contrary to the essential interests of its security;
 - contracts for the purposes of intelligence activities (Article 13(b));
 - contracts awarded in the framework of a cooperative programme based on R&D for the development of a new product, involving at least two MS;
 - contracts awarded in a third country, including those for civil purchases, when forces are deployed outside the territory of the EU and transactions take place in the area of operations (Article 13(d));
 - contracts relating to immovable property;
 - government-to-government contracts relating to the supply of military equipment or sensitive equipment and works and services directly linked to such equipment;
 - arbitration and conciliation services;
 - financial services, with the exception of insurance services;
 - employment contracts; and
 - R&D services, where the benefits do not accrue exclusively to the contracting authority for its use in the conduct of its own affairs, on condition that the contracting authority fully pays for the service.

International organisations

The EU public procurement directives aim to harmonise procurement law within the EU and are binding only on EU MS, not international organisations or agencies (Heuinckx, 2011:255). An international organisation with a separate legal personality from its MS does not have the obligation to implement a directive in its internal procedures (Heuinckx, 2011:85). The application of this provision depends on three conditions (Directorate General Internal Market and Services, 2010b:3):

- the contract to be awarded must be covered by an international agreement or arrangement;
- that agreement or arrangement (including international treaties and memorandums of understanding, or MoUs) must be concluded between the government of one or more MS and one or more third countries; and

- the agreement or arrangement must contain specific procedural rules governing the award of the contract in question.

Thus, when international rules set out procedural requirements for the award of a contract, this precludes the use of award procedures under Directive 81 (OJEU, 2009a:94). The main peculiarity of this area of international law is that it is specific to each organisation (Heuninckx, 2011:63). The interrelationships between EU law and the institutional law of international organisations are among the most difficult issues to resolve (Heuninckx, 2011:256), because of the conflict between regional and international legal systems.

According to ECJ case law, MS may not assume obligations under international law that might affect EU rules or alter their scope. For the purpose of Directive 81, EEA members are not considered as third countries; thus, when assessing these exclusions, Iceland, Norway and Liechtenstein will be treated similarly to EU MS (Directorate General Internal Market and Services, 2010b:2-3). International organisations or agencies in the EU would still have to comply with the procurement principles flowing from the EU treaties, except if non-EU MS control their decision-making (Heuninckx, 2011:3). Directive 81 exemptions exclude collaborative defence procurement performed through an international organisation (Heuninckx, 2011:104), such as NATO, the United Nations or the Shanghai Cooperation Organisation (SCO). Directive 81 will apply in award procedure if:

- the international organisation has only EU MS as members;
- the procurement concerns military off-the-shelf (MOTS) equipment for which there is no significant R&D; or
- a single EU MS requires the international organisation to procure military equipment on its behalf.

Collaborative defence procurement

In some cases MS agree to procure commonly equipment or services for their armed forces, sharing development costs and ensuring economies of scale (Heuninckx, 2011:3). As stated, in 2009, collaborative defence equipment procurement represented 22% of total procurement in the EU (EDA, 2012b:1). The following three international

organisations or agencies perform collaborative defence procurement in the EU (Heuninckx, 2011:3):

- the Joint Organisation for Armaments Cooperation (OCCAR);
- the NATO Maintenance and Supply Agency (NAMSA); and
- the European Defence Agency (EDA).

Such procurements have to comply with certain procurement rules (Heuninckx, 2011:3) that may be a mixture of EU and non-EU law, depending on the nationalities of members and the contract clauses. An organisation whose decision-making process is not controlled by EU MS, such as NAMSA, would likely not qualify as a public authority and could probably avoid compliance with EU procurement law (Heuninckx, 2011:257).

Treaties

International organisations of which only EU MS are members would most likely have to comply with the EU treaties' procurement principles if they qualify as public authorities (Heuninckx, 2011:105). However, the application of the EU treaties has to be confirmed on the basis of the relevant legal provisions and relevant international law, such as the privileges and immunities of the organisation (Heuninckx, 2011:255-6).

Government-to-government awards

When a public authority awards a contract of a non-commercial nature to another public authority (a "leading" authority) it does not have to comply with EU public procurement law (Heuninckx, 2011:110). G2G contracts are addressed in Article 13(f) of Directive 81 and are among the specific exclusions resulting in the non-applicability of the Directive (OJEU, 2009a:94).

When MS purchase US military equipment and services through the FMS procedure in which the US government acts as an intermediary between US suppliers, foreign governments are not bound by Directive 81 and purchasing governments may require offset from US suppliers. The authority has to prove that such a contract is the culmination of a process of cooperation, aiming to ensure the completion of a public task that all public authorities have to perform, even if the public authorities awarding the contract do not exercise any control over the leading authority (Heuninckx, 2011:110).

Research and development

Directive 81 does not apply to contracts awarded in the framework of a cooperative programme based on R&D, conducted jointly by at least two EU MS for the development of a new product and possibly for the later phases of the life-cycle of this product (European Economic and Social Committee, 2012:1). Upon the conclusion of such a cooperative programme, MS need to indicate to the EC the share of R&D expenditure relative to the overall cost of the programme, the cost-sharing agreement, and the intended share of purchases per MS, if any, in accordance with Article 13(c) (OJEU, 2009a:94-5). Cooperative programmes can include the participation of non-EU states as long as at least two MS are involved (Edwards, 2011:9).

In practice, this means that national offset rules will be valid and that MS involved in the project will be able to ensure returning benefits for their inputs, be they investments, payments, technology transfer or sub-contracting. Increasing the number of cooperative programmes in the EU may therefore increase the harmonisation of military equipment but would have little effect on protectionism, because offset may still be requested (Edwards, 2011:9-10).

The R&D phase proves that the product involves new technology and will develop new equipment (Maelcamp, 2011a:3) and is not simply an off-the-shelf product receiving modification (Edwards, 2011:9). The exclusion does not cover off-the-shelf equipment “even if technical adaptations are made to customise the equipment” (Edwards, 2011:9). Directive 81 requires that the production phase following the R&D must include competition (Directive 81, recital 55, note 13) (Graber-Soudry and Labbett-Ainsworth, 2012:20).

Exclusive rights clause 52

When only one economic operator is able to execute a contract within the scope of Directive 81, because it holds exclusive rights or for technical reasons, the contracting authority may award contracts or framework agreements directly to that economic operator (OJEU 2009a:83). The authority has to rigorously define and justify any technical reasons on a case-by-case basis, proving that another contractor could not achieve the required goals and does not have the specific know-how, tools or means (OJEU 2009a:83).

The procuring MS should prove that there is a strict technical impracticability preventing a candidate other than the chosen economic operator from achieving required goals, or that there is a necessity to use specific know-how, tools or means that only one operator has at its disposal. Technical reasons may also derive from “specific interoperability or safety requirements, which must be fulfilled in order to ensure the functioning of the armed forces or security forces” (OJEU 2009:83).

4.16 LEGAL LOOPHOLES

Directive 81 has specific exclusions; however, there may also be clauses in the Directive that present loopholes and may serve as motivations for offset. Some examples are enumerated in this section. Article 47 of Directive 81 and Article 346, for example, describe the criteria on which contracting authorities need to base their contract awards, allowing them to consider aspects such as technical assistance, SoS and interoperability when awarding contracts (OJEU, 2009a:112). These articles offer MS ample rights to request offset to protect their national security interests.

In the case of a MEAT award, the contracting authority may assess various criteria linked to the subject matter of the contract in question. Aspects such as interoperability (which is an element of technical merit), as well as operational and maintenance cost and technical assistance, may favour local suppliers.

MS could argue that complex communication, detection, stealth or weapon systems, or nuclear weapons are integrated to such a level in platforms such as main battle tanks, aircraft carriers and air supremacy fighters that they could not practically be split into separate contracts representing different levels of security (Edwards, 2011:9). In this way all sub-systems of the platform will relate to the platform and activities related to such systems would constitute direct offset.

An in-house administrative arrangement falls outside the scope of Directive 81 if the party receiving the award is a legally distinct third party, but not an “independent body” (see 4.12 under “In-house arrangement above; Ellison and Baudrihayé, 2012:5). Contracting authorities could give national prime contractors the responsibility to

procure on behalf of the government (Shanson, 2013l:6), making public procurement private.

Such a scenario will exclude the application of Directive 81. Arrangements of this sort could become an alternative way to incorporate offset. Arrangements related to the supply chain can further be seen as motivations for offset. Bidders could team up with local sub-contractors and present the arrangements as the most efficient supply chain solutions (Shanson, 2013j:4).

4.17 COMPARING THE VARIOUS DIRECTIVES RELATED TO PUBLIC PROCUREMENT

This section compares the application of the various EC directives that manage public procurement.

Table 4.4 Application of Directives 81 against the background of the TFEU

	Directive 81	TFEU
Defence and security contracts	Directive 81 applies	TFEU applies
Procurement outside of the scope of Directive 81	Directive 81 does not apply	TFEU applies
Defence and security contracts that require the protection of the essential security interests of a MS	Directive 81 does not apply	TFEU applies

Source: Furter, 2014.

Directive 81 contains a number of provisions that are intended to ensure that contract award procedures in general, “and all requirements put on candidates, tenderers and successful tenderers in particular, are fully in line with primary law principles and requirements” (EC, 2010b:3).

Application of Directives 17 and 81

It can be said that Directive 17 and 81 allow direct offset on an EU scale, for civil and defence contracts, respectively (Sylvain, 2011a:slide 3). Directive 17 makes it possible to reject tenders that include more than 50% non-EU content, while Directive 81 allows for the inclusion of third parties in sub-contracting, to the maximum of 30% of the contract value. However, the EC interprets this right purely in reference to SMEs in the EU.

Application of Directives 18 and 81

If Directive 81 applies, then Directive 18 does not apply. Directive 18 applies to public contracts awarded in the fields of defence and security, with the exception of contracts to which Directive 81 applies and contracts to which Directive 81 does not apply pursuant to its exemptions, subject to Article 346 (Heuninckx, 2011:40). If the procurement falls outside the scope of Directive 81, Directive 18 could apply if its applicability is not excluded through the use of one of its own exemptions (Heuninckx, 2011:40). Finally, if the procurement fits within the scope of Directive 81, but the latter does not apply because of one of its exemptions, then none of the directives will apply (Heuninckx, 2011:40-1). See Table 4.5 for a graphical representation of these possibilities.

Table 4.5 Application of Directives 18 and 81

	Directive 18*	Directive 81
Defence and security contracts	Does not apply if Directive 81 applies	
Defence and security contracts linked to particular procedure of an international organisation	Does not apply	Does not apply
Procurement outside of the scope of Directive 81	Could apply if not excluded through the use of one of its exemptions	
Procurement within the scope of Directive 81	Does not apply if Directive 81 does not apply because of an exemption	
Exemption from EU Law allowed	Article 14, when contracts are secret or require special measures or to protect the essential interest of the MS	Specific exemptions listed in Directive 81 or the Article 346 exemption
Defence and security contracts that require the protection of the essential security interests of a MS	Does not apply	Does not apply

*Directive 18 applies as soon as the Remedies Directive applies.

Source: Furter, 2014.

Article 14 of Directive 18 sets out exceptions to the application of this directive on grounds of secrecy, security and other essential interests of an EU MS, stating that Directive 18 does not apply to public contracts (OJEU, 2004:132):

- declared to be secret;
- whose performance must be accompanied by special security measures in accordance with the laws, regulations or administrative provisions in force in the MS concerned; or
- when the protection of the essential interests of that MS so requires.

The omission of a similar clause in Directive 81 might be motivated by the inclusion of the new rules regarding Sol, but considering that these new rules arguably do not differ substantially from Directive 18, the lack of a similar exclusion in Directive 81 is noteworthy (Andresen, 2011:2).

Table 4.6 Application of the Proposed Public Sector Directive and Directive 81

	Proposed New Public Sector Directive	Directive 81
Public sector procurement	Does not apply if Directive 81 does not apply	
Defence and security contracts	Does not apply if Directive 81 applies	Applies
Procurement within the scope of Directive 81	Does not apply if Directive 81 does not apply because of an exemption	
Procurement outside of the scope of Directive 81	Could apply if not excluded through the use of one of its exemptions	
Contracts that oblige MS to supply information the disclosure of which it considers contrary to the essential interests of its security	Does not apply	Does not apply

Source: Furter, 2014.

Similar to Directive 81, the new Public Sector Directive shall apply to public contracts and design contests only if the protection of the essential security interests of a MS can be guaranteed in a procurement procedure. If such interests cannot be guaranteed, the MS may call upon the Article 346 exemption (EC, 2011g:46).

Table 4.7 Application of Directives 81, Article 346 and the national offset rules in MS

Defence and security contracts that require the protection of the essential security interests of a MS (Article 346)	Article 346 applies	Directive 81 does not apply, but the EDA's Code of Conduct applies	MS national offset rules apply; if a MS has no offset rules, negotiations between the MoD/ government and DCs determine offset fulfilment on a case-by-case basis
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Source: Furter, 2014.

Whenever a contracting authority awards a defence and security contract in the EU, there is an interplay between Directive 81, Article 346 and MS' offset rules.

Non-EU countries

Directive 81 does not alter the position in relation to the arms trade with non-EU countries. Such contracts remain governed by relevant legislation and regulations in the various countries.

4.18 CONCERNS AND CHALLENGES

Significant differences in transpositions

There remains the possibility that the transpositions of Directive 81 by various MS will result in significant differences, which would reduce the expected benefits of the reform (Liberti, 2011:30).

State-of-the-art military technology

In recent years, many new and often unforeseen threats, risks and opportunities have made the global and regional security situation increasingly complex and uncertain (Gill, 2012b:1). Security agendas related to external military threats have broadened considerably with the emergence of non-traditional threats.

Although interstate wars have mostly disappeared, the number of civil conflicts has increased dramatically, especially in unstable regions of the world (Yilmaz, 2011:11). It is foreseen that established powers in the world system, especially the US and its major transatlantic allies, will face continued constraints primarily imposed by budget austerity measures (SIPRI, 2012c:2).

A new wave of mergers may see a number of civil companies entering the defence industry from sectors as diverse as communication, technology and services (Cassier, 2010:27). This will further intensify the competition in the defence market. It is not clear how the EU will ensure state-of-the-art military technology or ensure that EU companies have a competitive advantage.

The financial crisis in Europe may motivate MS to purchase MOTS items and increase the integration of commercial-off-the-shelf (COTS) items. The increased use of MOTS products will slow down the technology advancement that comes with the development and execution of new defence projects, while the increased use of COTS products may

result in defence companies becoming primarily integrators. In many third-country (non-EU) markets, several European suppliers compete with one another, making it difficult from a European perspective to support a specific EU supplier (EC, 2013e:15).

Phasing in of Directive 81

It is stated that the legislative changes to Directive 17 and 18 were premature and that more time was needed for the application of the Remedies Directive and the phasing in of Directive 81 (Beuter, 2011:39).

Definitions of national security interests

The EC states that the new legislation offers negotiated procedures that aim to protect vital national interests “without sacrificing MS control over essential defence and security interests” (EC, 2013i:1). However, if MS’ definitions of national security interests are discarded or if the definitions provided by the various MS and by the EC all differ, the new legislation will have little value.

Conflicts

Contracting authorities, DCs, sub-contractors and offset managers may have different aims with regard to offset. DCs with strong export strategies may be pleased to be rid of offset, MS with defence budgets may be set on ensuring offset benefits, MS with less-developed defence industries may need offset to ensure the viability of the local industry, and certain offset managers may want to keep offset as a deal sweetener. However, with the defence market moving away from the EU, non-EU countries at the moment pose more challenges than offset managers can easily cope with.

Protectionism

Directive 81 is not intended as a protectionist measure (Maelcamp, 2011b:slide 7), but the stipulation in Preamble 18 that allows EU MS to exclude non-EU DCs from bidding represents even more protectionism than has been experienced in the industry previously. With the launch of Directive 81, EU secondary law started moving closer to offset-like practices, with the proviso that the national focus is replaced by an EU-level focus. With the EU as a whole now requiring the offset benefits that were national up to now, protectionism has moved from the national to the EU level.

Dancing around offset

It is notable that Directive 81 appears to dance around the issue of offset rather than tackling it directly (Anderson, 2009:3). Some stakeholders within the sector believe that Directive 81 is likely to take “many years” to achieve its aims (Anderson, 2009:4). In launching a directive that envisions the abandonment of offset, while never using the term “offset” and not addressing the required process, the EC seems not so much to be addressing the national security interests of MS as constructing a mechanism for political power plays.

Time

Clarification of the current legislation can be provided by ECJ judgments; however, while the EC is ensuring compliance with Directive 81, the EU courts will likely take their time to rule on any cases that arise (Akritidis, 2012:slide 6). The EC is not scheduled to report on the success of Directive 81 until 2016.

Competition or cooperation?

The EC states that Directive 81 is designed to increase competition within the EU defence industry. However, the current economic climate in the EU limits growth and will therefore result in fiercer competition. The creation of CoEs (centres of excellence) in the EU defence industry will result in MS competing feverishly to retain leading positions and therefore resisting EU cooperation, perhaps even possibly opting for partnerships with non-EU partners to ensure new markets. Cooperation and competition are two distinctive concepts and it is not clear which one Directive 81 is prioritising.

The emergence of CoEs in the EU may have nothing to do with Directive 81, but may come about because lower defence budgets motivate defence ministries globally to focus on critical capability areas instead of spending excessively on all segments. For example, budget constraints have pushed the French government to focus primarily on developing its capabilities in the areas of ballistic missile defence, ISR (intelligence, surveillance and reconnaissance) systems, training and force preparation (Mehta, 2012:2).

This focus may ensure that France becomes a CoE in certain of these capabilities. On the other hand, CoEs may result in monopolies and less competition. Products oriented

toward the civilian market may not be reliable and could affect supply security negatively, while the role of SMEs in defence and security can be problematic because of their lower survival rate when competing against military-oriented firms (Fonfria, 2013:2). The question has to be asked whether EU competition will ensure global competitiveness.

Offset could go underground

The defence contract notices, the requirement for non-discrimination in tenderer assessment criteria and the obligation to disclose information about national offset-related priorities and practices are steps in the right direction if the aim is to increase transparency. However, if the EC allows MS no discretion in decisions regarding their national security interest or no bargaining power in negotiations with the EC, the Directive may well cause offset to go underground.

The success of Directive 81 will depend heavily on MS' reasonable use of the security policy provisions (Bossaert et al., 2011:2). "Many share the view that the success of the new measures will depend mostly on the EC and bidding companies' readiness to intervene and challenge MS' routine use of the [Article 346] exemption" (Bossaert et al., 2009:3). The EC may feel encouraged by the fact that the EU governments agreed to the two directives included in the Defence Package. However, amid such a severe economic downturn the Commission may want to choose to save its political capital for battling protectionist impulses in other, less sensitive sectors (Cassier, 2010:39-40).

No firm ruling

Nearly three years after the launch of Directive 81, there is extensive advanced elaboration of its provisions but no firm rulings (Akritidis, 2012:slide 7) and it still remains to be seen how case law will develop. Protectionist actions may be exposed only after all the regulatory changes are fully implemented and scrutinised (Hofbauer et al, 2012:33).

The impact on the US and other nations remains to be seen (Hofbauer et al., 2012:33) and it cannot be stated yet whether the EU's Defence Package (Directives 81 and 43) has progressed toward a less fragmented European defence market, allowing more

access to business opportunities for the European defence industry, as well as increased EU-wide competition.

Confusing statements on the directive

The EC states that with the adoption of Directive 81, the defence and security markets are formally recognised as “different” but nevertheless as part of the Single Market (Schmitt, 2009:1) Statements such as these create confusion regarding the character, importance and domain of the defence and security sector. The Guidance Note on exclusions states that Article 12 of Directive 81, on international rules, “does not explicitly refer to defence, nor does it exclude security.

In practice; however, it mainly concerns the field of defence, since the international arrangements/agreements and organisations mentioned in the provision typically exist in the defence domain” (Directorate General Internal Market and Services, 2010b:2). This rather complicated guidance note on Directive 81 may create more confusion than clarification.

Supranational

Directive 81 is the EC’s first supranational legal act, which explicitly deals with integrating the trade and the production of military goods and services (Genschel and Jachtenfuchs, 2014:31).

Figure 4.4 Offset moves from the political-economic realm to a sovereign domain governed by the EC

POLITICAL ECONOMY	SUPRANATIONAL POLICY
NATIONAL PREFERENCE - PRIOR TO DIRECTIVE 2009/81/EC	SINGLE MARKET - POST DIRECTIVE 2009/81/EC
ROLE OF OFFSET AUTHORITY OFFSET RULES & REGULATIONS Guardian of the offset rules and regulations Communicate and share information Assess and approve offset plans Negotiate with obligors Monitor fulfilment and performance Grant credits	ROLE OF EUROPEAN COMMISSION OFFSET RULES & REGULATIONS Guardian of the Treaties; establishes institutions as per the Treaties Develops Single Market, creates European defence equipment market (EDEM) Recently entered the regulation of the defence market Promotes intra-EU cooperation Monitors implementation of Directives Receives complaints re non-compliance with Directives Wants to eliminate offset May investigate a defence procurement case in EU
OFFSET MANAGERS Comply with national rules in purchasing countries Negotiate offset agreements Responsible for implementing offset solutions Follow offset process in defence companies Form international partnerships Ensure offset performance Manage sub-contractor relationships Devise and implement acceptable offset solutions Prioritise value-add Protect company's market and intellectual property Maintain strong business relationships with offset authorities	EU MS GOVERNMENTS Complies with EU law Negotiate with EC re offset requirements Responsible for national security Follow national processes and regulations, may require offset Form international partnerships Use Art 346 TFEU to protect its essential security interests Defence policy remains the sole prerogative of the State Intergovernmental decision-making — balancing EU requirements Expected to develop the EDTIB Determine MS's essential security interests Increasing liaison with defence suppliers
OFFSET RATIONALE Protects national security interests Offset policies induce industrial relations Develops capabilities A form of industrial compensation = condition of purchase Entrenched in global trade Assists importing country in developing its exports Develops national defence technological and industrial base	ESSENCE OF DIRECTIVE 81 Introduces competitive defence purchasing on the principles of transparency Establishes Common procurement process across the EU Defence-specific measures (SoS, Sol, sub-contracting) Amends Directives 2004/17/EC and 2004/18/EC Art 346 TFEU and exclusions can still exclude the application of Directive 81 Relevant to the supply of military & sensitive equipment and related services Had to be transposed by 21 August 2011

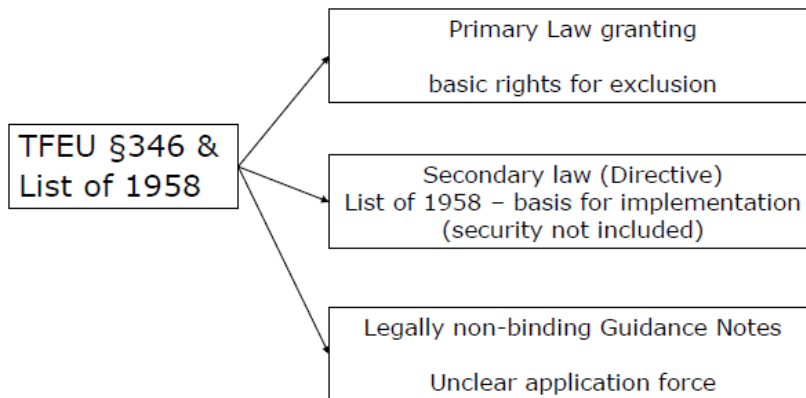
Source: Furter, 2014.

The new legislation can be interpreted as part of the EU's transformation from a political economy to a supranational policy, with EU MS expected to go along with decisions related to security and defence.

Legal challenges

The implementation of Directive 81 poses challenges, as illustrated by Figure 4.5 on the following page.

Figure 4.5 Directive 81 poses interpretation challenges



Source: Szilágyi (2010:slide 10).

Various levels of law (primary and secondary), a mixture between national, regional and international law, multiple exclusions in defence and security public procurement, and the legally non-binding guidance notes from the EC (Szilágyi, 2010:slide 10) come together in a confusing palette that could become more like a maze.

4.19 CIVIL OFFSET

Non-defence public procurement

The GPA (General Procurement Agreement) is the main instrument in the World Trade Organisation (WTO) that provides a framework for the conduct of international trade in government procurement markets among the participating countries (WTO, 2012:4).

The EU has also entered into several free trade agreements that cover aspects of public procurement such as the EU-Korea Free Trade Agreement (2011) and various Economic Partnership Agreements (Ellison and Baudrihaye, 2012:2).

The GPA is a plurilateral treaty including 42 WTO members (as of February 2014: Armenia, Canada, the 28 EU MS, Hong Kong (China), Iceland, Israel, Japan, South Korea, Liechtenstein, Aruba, Norway, Singapore, Switzerland, the US and Chinese Taipei) (WTO, 2014:1). The scope of the GPA in principle covers non-sensitive security contracts, whereas contracts relating to arms, munitions and war materiel are excluded voluntarily. It has no direct effect on the EU legal order (Akritidis, 2012:slide 10).

The GPA is designed to make laws, regulations, procedures and practices regarding government procurement more transparent, preventing the protection of domestic products or suppliers or discrimination against foreign products or suppliers (Ellison and Baudrihayé, 2012:2). In compliance with Article VII(3)(b) of the GPA, contracting authorities may decide which suppliers to invite to submit a tender (Europa, 2010:2). Article V of the GPA explicitly prohibits the use of (civil) offset, including measures to encourage local development or improve balance-of-payments accounts by means of domestic content, licensing of technology, investment requirements, countertrade or similar requirements.

GPA protects national security interests

However, Article 23 of the GPA allows parties to the agreement “to derogate from the principles of national treatment, transparency and non-discrimination, when such derogations are necessary to protect their national interests and security” (De Beaufort, 2011a:192). Developing countries may also negotiate, at the time of their accession, conditions for the use of offset, provided that these are used only for qualification to participate in the procurement process and not as criteria for awarding contracts (WTO Secretariat, 2011:1).

The GPA provisions do not refer to any mandatory scaling down of offset, but the offset regime is “framed” and parties may impose a time limit for maintaining offset as a basis for negotiations (Poulain, 2011:slide 9). The new GPA terms, for instance, give Israel a fifteen-year extension (until 2026) to phase out its civil offset programme and domestic content requirements (Shanson, 2012f:7). Until 2024, offset has to be scaled down from 35% to 20% of the total amount (Poulain, 2011:slide 10). Article XVI(2) requires objective and non-discriminatory conditions and a limited scope of application.

To ensure more clarity in the offset regime, it is proposed that MS agree to these provisions (De Beaufort, 2011b:slide 21):

- specifying the conditions for using offset on an international scale (WTO);
- including offset principles systematically in free trade agreements (FTAs); and
- establishing national guidelines.

While the reciprocity principle is a cornerstone of the GPA, it is also a source of conflict, “especially during times of economic crisis when governments tend to turn to more

protectionist measures” (De Beaufort, 2011a:191). In contrast to the EU’s commitment to honouring free-market principles, many third countries are reluctant to open their public procurement markets to international competition (Ellison and Baudrihayé, 2012:2). In strictly applying WTO rules and relevant European laws, European companies have to contend with non-EU competition in their home markets, while being subjected to direct restrictions on access to government procurement contracts in non-EU countries (De Beaufort, 2011a:190).

4.20 RECIPROCITY AND TRADING WITH NON-EU COUNTRIES

EU directives and regulations address the market access rights of companies established in EU territory. Current EU provisions on the terms of access for non-EU goods and services are not complete (De Beaufort, 2011a:197) (see 4.11 Award procedure, heading “MS’ scope of discretion in relation to implementation”). The EC stated that Europe will continue to promote free, fair and open trade, while at the same time asserting its interests in a spirit of reciprocity and mutual benefit in relation to the world's largest economies (EC, 2012e:2).

However, third countries have introduced protectionist policies in order to limit external goods and services (Holman Fenwick Willan, 2012:2). As a result, the EC believes that EU companies have been negatively affected by their inability to access procurement markets in third countries. Positive reciprocity is a very controversial issue and Europe is preparing to defend itself if other countries do not reciprocate (Shanson, 2013g:3).

Protectionism in general public procurement

In general public procurement, some MS have developed specific “local mechanisms” that include different kinds of national reciprocity clauses, such as the following (European Parliament, 2013b:10).

- Austria, Italy and Spain: excluding suppliers due to their origin;
- Belgium: excluding tenders due to the origin of goods; and
- the UK: excluding access to remedies.

Buy European

The originally proposed version of Directive 81 advised against a “buy European” (or “European preference”) or a reciprocity clause. However, in April 2012, the EC drafted a regulation that will allow a EU contracting entity to reject bids that consist of more than 50% of non-EU-based goods or services in cases where contracts have an estimated value of €5-m or above (Shanson, 2012e:7). Despite denials that the regulation is protectionist in nature, it will allow EU public bodies to discriminate against some foreign bids if they wish to do so (Maughan, 2012:1). The EC went to some lengths to justify the proposal on the basis that the EU is not restricting its market, but that certain third countries prefer restrictive procurement policies (Shanson, 2012e:7).

The legislation will also allow the industry or MS to ask the EC to investigate whether a lack of substantial reciprocity exists; if such is found to be the case, a nine- to fifteen-month cooling-off period will allow the EC time to try to negotiate its way into the market (Shanson, 2013g:3). Approval of the European Parliament and the Council of the EU by qualified majority is required for this draft regulation to become law. The proposal has been championed by France, while the UK and Germany argue that the proposal “sends the wrong protectionist signals to EU’s trading partners” (Shanson, 2012g:3). While the EC is doing everything in its power to eliminate offset, such a proposal will ensure EU local content, thus leading to virtually the same outcome as offset benefits.

Buy American Act

By comparison, the Buy American Act, which applies to procurement of supplies and construction materials for the US government, stipulates (in Title 41, Section 10a) 50% US content as a general requirement, although this requirement is often waived by the US DoD (CTO Data Services, 2014a:292). The US Government has on several occasions insisted that military systems developed outside the US be built within the US, using US contractors (CTO Data Services, 2014a:292). The foreign manufacturers of the systems had to find US industrial partners to produce the items or a significant portion of the components, using American labour (CTO Data Services, 2014a:292).

As a result of MoUs and other international agreements, the US DoD has determined that it is inconsistent with the public interest to apply restrictions of the Buy American statute or the Balance of Payments Programme to acquisitions by certain countries. The

US has signed reciprocal defence procurement MoUs with these "qualifying countries": the UK, Germany, France, Sweden, Italy, Spain, Portugal, Belgium, the Netherlands, Luxembourg, Greece, Denmark, Czech Republic, Finland and Poland, along with non-EU countries Norway, Switzerland, Turkey, Australia, Canada, Egypt and Israel (Maelcamp, 2011a:3). For these countries, the restrictions under the Buy American Act are fully waived (US Department of Defense, 2013:1), allowing them to participate in US federal defence contracts and ensuring treatment no less favourable than that accorded to US industrial enterprises (Maelcamp, 2011a:3). The other half of the EU MS, which have no such reciprocal arrangement, may make a sovereign decision as to whether to allow US suppliers in their bidding contests (Maelcamp, 2011a:3). The agreement signed with Austria has a purchase-by-purchase exception only. (See also heading "Transatlantic Trade and Investment Partnership" below).

4.21 THE EC's LATEST ACTION PLAN TO STRENGTHEN THE SINGLE MARKET FOR DEFENCE

In July 2013, the EC stated that it would take specific measures to ensure that Directive 81 is correctly applied and fulfils its objective. Actions include the following (EC, 2013e:5-7):

- monitoring how the procurement rules are applied via the EU's TED;
- clarifying the limits of certain exclusions;
- ensuring the rapid phasing out of offset;
- ensuring that all necessary conditions are fulfilled when Article 346 is invoked to justify state aid measures;
- ensuring that MS politically commit to SoS when supplying defence goods, materials or services for end use by other MS' armed forces;
- optimising the defence transfer regime by *inter alia* establishing a central register on general licences and promoting their use;
- promoting best practices in managing intra-EU transfers; and
- issuing a Green Paper on the control of defence and sensitive security industrial capabilities, with the possible result of establishing an EU-wide monitoring and management system.

Promoting competition

Other areas on which the EC plans to focus in promoting a more competitive defence industry include the screening of raw materials that are critical for the defence sector within the context of the EU's overall raw materials strategy, mapping current and future skills (EC, 2013e:9-10), and developing hybrid standards for civ-mil products that will incentivise cooperation between MS (EC, 2013e:16).

The EC further announced in 2013 that it will focus on (EC, 2013e:14):

- establishing a dialogue with stakeholders on how to support the European defence industry in third markets, exploring ways of mitigating possible negative impacts of offset on the Single Market and the European defence industrial base;
- energy efficiency and renewable energy;
- outlining a long-term vision for EU strategic export controls aligned with the latest technological, economic and political conditions; and
- examining how EU institutions could promote European suppliers in situations where only one company from Europe is competing with suppliers from other parts of the world.

The last point is unlikely to arise frequently given that many EU-based DCs will have to prioritise non-EU markets.

The action plan of the EC, as proposed in the July 2013 communication, included the following considerations (EC, 2013e:16):

- to become effective, the CSDP needs to be underpinned by a fully-fledged Common European Capabilities and Armaments Policy as initially mentioned in Article 42 TEU;
- Europe needs a strategic approach covering all aspects of military and non-military security, with decisions on investments and capabilities for security and defence based on a common understanding of threats and interests;
- the CSDP has to be closely coordinated with other relevant EU policies;
- to be credible, the CSDP needs a strong EDTIB and the strategy for this base has to be based on a common understanding of the degree of autonomy that Europe wants to maintain in critical technology areas;

- a competitive industry capable of producing the needed capabilities at affordable prices needs a strong Single Market for defence and security, allowing European companies to operate freely in all MS; and
- austerity measures call for a decrease of operational costs, pooling demand and harmonising military requirements.

EC regulations

Whereas previously DCs had to comply fully with intricate and demanding offset regulations in EU MS in order for their bids to be recognised, they are currently struggling to make sense of the new legislation. EU defence contractors may find it difficult to compete against the lower production costs of companies in some emerging countries, but low defence budgets in Europe require them to focus their sales strategies on non-EU markets to ensure viability. Given these considerations, the development of the EDTIB is by no means ensured through Directive 81.

The power of the EC

Legislation offers discretion and rights to MS to ensure the development of their national infrastructure to protect their national security interests. In a globalised world, these rights should be amplified rather than diminished. It seems that the most fundamental question in the case of Directive 81 is not whether specific contracts may be excluded from the scope of the Directive 81, but what legal standing MS have to resist the overall ruling power of the EC. Even though MS may be able to cite and defend exemptions to Directive 81 to require direct offset to ensure their national security interest, they may have no recourse to the absolute power of the EC.

Therefore, if MS need returning benefits for military procurements (offset) to protect their national security interests, they may act outside the scope of Directive 81, completely separating offset-like benefits from their public procurement. Exclusions cited in Directive 81 may assist in such cases, or MS may have to establish a defence and security industry development portfolio, project or fund that aims to advance the defence sector and is in no way linked to military procurement contracts.

4.22 THE IMPLEMENTATION OF DIRECTIVE 81 AND POSSIBLE OUTCOMES TRANSPOSITION HISTORY

Not all MS have welcomed Directive 81 and the idea of a common European defence market (Tokaji-Nagy and Kadic, 2012:23). In fact, the transposition of Directive 81 was not accomplished until March 2013, eighteen months after the 21 August 2011 deadline (EC, 2013f:14). Even in June 2013 various MS were “chipping away at the Directive in its own way and facing continuing uncertainties”, although there was no evidence that any of them were winning (Shanson, 2013f:2).

More than nearly three years since Directive 81 was implemented, the implementation in many EU MS is still not a *fait accompli*, and not all the offset policies of EU MS have been updated or amended. Some MS merely state that they will require offset for defence procurements only when justified under Article 346 (ECCO News, 2013b:1). In 2013, 80% of defence procurements in Europe were still from domestic sources, “a ratio the Directive has not changed at all” (Shanson, 2013f:2).

By the beginning of August 2011, it was predicted that at least 20 MS would not meet the transposition deadline of 21 August 2011 (Shanson, 2011d:1). “The reason for this lack of preparation is the Directive’s lack of clarity. MS do not understand when they may rely on Article 346 or what is expected of them, particularly with regard to sub-contracting requirements” (Shanson, 2011d:1). A survey done by the publication *CTO Countertrade & Offset* just before the transposition deadline showed that 11 MS stated that they needed to take no further action, 13 more were unprepared, and no information was available from four MS (Estonia, Romania, Slovakia and Spain) (Shanson, 2011d:1-3).

Infringements

If the EC considers that EU rules are not being properly applied, it may open infringement proceedings against the MS in question; however, only the ECJ can rule definitively that a breach of EU law has occurred (EC, 2014c:1). If a MS fails to notify a measure in implementing a directive, the EC opens an infringement case for “non-communication”. The letter of formal notice is the first stage in the pre-litigation procedure, in which the EC requests a MS to submit its considerations on the matter within a given time limit. The “reasoned opinion” constitutes the second stage in the

procedure before referral of the case to the ECJ. In this stage the MS is requested to give a clear indication of proposed measures, including a timetable (EC, 2014a:1). National authorities have two months to reply to reasoned opinions, or the EC can refer the matter to the ECJ and request the payment of financial penalties (EC, 2012b:1).

From the launch of the Directive until June 2012, MS were merely required to “communicate” transposition of the Directive to the EC; they were not required to demonstrate their compliance, and the EC did not check whether their actions were adequate. In September 2011 the EC acknowledged complete transposition by four countries and opened infringement procedures for non-communication against 23 others (EC, 2012d:3). By March 2012, 15 of these 23 had completed their transposition and the EC issued reasoned opinions to the remaining eight.

As of July 2012, four MS had still not notified the EC of any transposition measure, and since “a majority of MS [had] transposed the Directive with a considerable delay”, the EC was still verifying whether the national implementing measures complied with Directive 81 (EC, 2012d:4). Infringement procedures related to non-conformity were finally initiated in July 2012, after the EC evaluated the measures taken and assessed all legal aspects to determine whether the MS had abolished or amended its offset rules (Vierlich-Jürcke, 2011b:slide 7).

The EC stated that “the vast majority [22] of MS have also transposed the non-mandatory provisions on sub-contracting that aim in particular at enhancing competition in the supply chains of successful tenderers” (EC, 2012d:2). As of 6 July 2012, Germany, Austria and the UK were judged to have completed only partial transposition of Directive 81 into their national legislation. The Netherlands, Luxembourg, Poland and Slovenia had not established any measures. All seven of these MS faced possible infringement proceedings in the ECJ, which might have resulted in the imposition of financial penalties.

Daily penalty payments

In September 2012, the EC requested the ECJ to fine Poland, the Netherlands, Luxembourg and Slovenia for failing to fully implement Directive 81 (Europa, 2012c:2). Slovenia had transposed part of the required provisions by that point, while the other

three MS had not notified the EC of any national implementing measures (Shanson, 2012k:1). The EC further requested the court to “impose daily penalty payments on the four MS until they fully implement Directive 81 (Europa, 2012c:2). The fines remain at the Court’s discretion (Shanson, 2012k:1); however, the EC proposed a daily penalty payment of about €70 000 (US\$90 800) for Poland; about €57 000 for the Netherlands; about €8 000 for Luxembourg; and about €7 000 for Slovenia. The EC stated that the recommended fines took into account the duration and the gravity of the infringement and the size of the MS. The penalties would have had to be paid from the date of the court’s affirmative ruling, until the MS concerned notified the EC that they had fully implemented the rules within their national law (Shanson, 2012k:1).

Subsequent progress in 2012-2013

In September 2012, the situation was still fluid and uncertain (Shanson, 2012j:5). The status of the implementation of Directive 81 in the various EU MS was as follows (CTO Data Services, 2012c):

- the UK was the first MS to establish a new offset policy, introducing the Defence and Security Industrial Engagement Policy (DSIEP), which encouraged overseas-based suppliers to invest in the UK’s defence and security sector;
- Austria decided to not publish official offset regulations;
- Sweden stated that it would not apply any particular offset policy, but would deal with offset on a case-by-case basis following the provisions of the treaty and the relevant directives, with the published guidelines viewed only as a guideline (CTO Data Services, 2012c:287);
- six EU MS generally had no offset policy or other regulations concerning any kind of compensation: Cyprus, Germany, France, Ireland, Latvia and Malta;
- Slovakia indicated that it had discontinued its offset policy;
- Greece and Lithuania introduced new defence and security procurement laws in June and July 2011, respectively (CTO Data Services, 2011b:92, 320);
- ten EU MS gave some indication of anticipated policy changes: Belgium, Bulgaria, Czech Republic, Finland, Hungary, Italy, Norway, Poland, Slovenia, Spain; and
- seven EU MS did not report any amendments to their policies: Denmark, Estonia, Luxembourg, the Netherlands, Portugal and Romania.

In January 2013, the Netherlands announced anticipated offset policy changes stating that procurements would be considered individually to determine whether they may qualify for industrial benefits under Article 346. The offset guidelines available in the country were “not being fully applied and in some cases the Ministry will not ask for anything at all. ... The IP policy remains under review and details will be made known in due course” (CTO Data Services, 2014a:171). Poland and Luxembourg officially adopted transposition measures by February 2013 to fully implement Directive 81. It was reported that the EC was still evaluating whether those measures were complete (Shanson, 2013a:4).

In April 2013, Germany stated that the MoD reserves the right to introduce fair “work-share equals cost share” arrangements in cooperative programmes. As the German government requests no indirect offset, the relative part of direct offset equals 100% in this case (CTO Data Services, 2013b:84).

Transposition in all 27 MS was finally accomplished by March 2013, 19 months after the launch of Directive 81 (EC, 2013f:14), at which time the EC stated that it was too early to draw conclusions regarding the impact of Directive 81 on the openness of defence markets (EC, 2013f:14). The evaluation of national texts was ongoing (Shanson, 2013c:7) and the EC would refer cases of missing or partial transposition to the ECJ. In January 2014 Romania published some amendments to its offset policy, setting the quota at 80% of the contract value and not once mentioning Directive 81 in the amendments (CTO Data Services, 2014a:209-21). The policy for Luxembourg still stated that offset requirements would be detailed in its RfPs (CTO Data Services, 2014a:155).

4.23 SUMMARY OF CHANGES IN OFFSET POLICIES IN EU MS

This section briefly summarises the changes that EU MS have made to their offset policies since the launch of Directive 81 in 2011.

Austria

Austria did not want to test Directive 81 and stated it would wait to see how the EC reacted to other MS (Shanson, 2011d:2). In 2013, the country indicated that

“requirements will comply with Directive 81. Offset will be direct, and indirect defence-related” (CTO Data Services, 2013b:18). Austria anticipated that some procurements will continue to qualify under Article 346, particularly those for major systems such as wireless security and for exceptional security systems, but not general hardware purchases such as basic helicopters and vehicles (Shanson, 2011d:1). The objective of offset in Austria is to ensure “high local content of the military products that have been purchased” (CTO Data Services, 2013b:18).

Belgium

In October 2013 Belgium decided that its offset guidelines would remain in force for the time being, but would be used only if Article 346 is applicable and essential security interests can be proved (CTO Data Services, 2013c:19). The Council of Ministers decides whether industrial benefits will be requested for a defence acquisition and can allocate a weighting, not exceeding 15%, to offset by way of award criteria to be used in the evaluation process (CTO Data Services, 2014a:21). When the RfP for the purchase includes an offset requirement, the tenderer is invited to submit an “economic offer” (i.e. an IP programme) together with its bid for the supply contract. The economic offer is optional, and a bid that does not contain an offset benefit will *not* be judged as irregular. Such a bid remains valid and will still be considered by the MoD, but the bidder will achieve zero points on this criterion (CTO Data Services, 2014a:21). The chances of winning in a competitive field will thus be diminished if the contractor does not offer offset or fails to offer less than 80% of the contract value (CTO, 2014a:21-2). On the other hand, “once the tenderer introduces an offset proposal the tender party is bound by it whether or not it is relevant to winning the contract” (CTO Data Services, 2014a:19).

Bulgaria

In September 2011, Bulgaria decided in principle to cite Article 346 as grounds for requiring offset for most future defence procurements (Shanson, 2011f:2). The country’s offset-related ordinance underwent substantial revisions in 2012. In April 2013, a new ordinance to establish the offset regulations in Bulgaria was under consideration by the Council of Ministers, but was unlikely to be ready for some time (Shanson, 2013c:7). The ordinance did not require parliamentary approval. Bulgaria stated in 2013 that it would not enforce a threshold when its new offset policy has been decided (Shanson,

2013c:7). In the meantime, no regulations were in force. As of February 2014, the EDA portal on offset stated that Bulgaria's offset policy was under review (EDA, 2014:Bulgaria).

Czech Republic

Czech offset guidelines were not governed by statute, but by a framework document known as a resolution that allowed for considerable adaptability in the application of offset. In the Czech government's opinion, no legislation was needed to implement Directive 81, but only a different approach was required (Shanson, 2013l:2). The Czech Republic had purchased four military transport aircraft in 2009, directly awarding the public contract without following EU-wide tendering procedures (Shanson, 2012b:3). Following subsequent infringement proceedings, the EC in 2010 considered referring the Czech Republic to the ECJ, but instead closed the case (Shanson, 2012b:2). Although the EC believed that the 2009 purchase of aircraft should have been subject to EU-wide tendering procedures, the contract had already been fully performed (Shanson, 2012b:3).

In August 2013, even though offset was deemed permissible under the Article 346 exemption, the Czech Republic decided not to request offset until the EC legislation became more clear (Shanson, 2013h:3). An official at the MoD explained that while each MS interprets Directive 81 differently, the Czech Republic would await the outcome of the first case ruled on by the ECJ before it reconsidered its position (Shanson, 2013h:3).

Later in 2013, the Czech Republic scrapped its offset guidelines, stating that all offset negotiations between the MoD and DCs would take place on a case-by-case basis whenever offset can be justified under Article 346 (CTO Data Services, 2013c:69). Such case-by-case decisions will prove to be time-consuming, while national decisions made for each new project may differ, complicating the task of the offset manager who needs to plan for fulfilment.

Denmark

In June 2013 it was reported that northern EU MS were making a determined effort to preserve their industrial cooperation (IC) policies. Some of these countries' level of

engagement with the EC was significantly more robust than that of other MS except perhaps Poland (Shanson, 2013f:1). In the same year, Danish officials tried to convince the EC that the country complied with Directive 81, but the issue was not settled at the time (Shanson, 2013f:1). Denmark was requesting offset on a case-by-case assessment basis with the objective of securing added value for Danish companies. It is the responsibility of the Danish Defence Acquisition and Logistics Organisation (DALO) to assess the essential security interest of an acquisition. With regard to national security interests, the quota is for 100% offset (Shanson, 2013f:3).

In 2013 Denmark included a 100% offset requirement in an RfP for new Armoured Personnel Carriers (APCs), deeming it a procurement in progress, and indicating that it would also demand offset for both the helicopter and the forthcoming fighter aircraft programmes (Shanson, 2013a:4). The APC supply contract, for between 250 and 450 vehicles, was valued at about US\$450-m, with the foreign contractor required to subcontract work to Danish SMEs (Shanson, 2013a:5). To facilitate localisation, a new APC group was formed in Denmark, comprising eight local SMEs. The fighter aircraft contract also required 100% offset (Shanson, 2013a:5).

In November 2013, significant differences remained between Denmark and the EC over interpretations of Directive 81 (Shanson, 2013l:3). One publication commented, “It may be that Denmark is one of the last countries standing up [against Directive 81] and saying ‘no’, it is too tough for our industry” (Shanson, 2013l:4). By the end of 2013, uncertainties made negotiations delicate for the government, as well as for contractors that had to submit their binding proposals under the prevailing offset regulations (Shanson, 2013l:4).

Denmark subsequently assessed the importance of the domestic defence industry for its national security interests. An inter-Ministerial committee was established and “decided that Danish enterprises must have access to cooperation with foreign suppliers of defence equipment” (Shanson, 2013l:4). Denmark reiterated that IC (industrial cooperation) will be required for defence procurements when justified under Article 346 (CTO Data Services, 2014a:67). After the government had presented its case at the EU Heads of State meeting in Brussels in December 2013, the Defense Offset Bill drafted by the Ministry of Business and Growth reached the Danish Parliament in February

2014. As of May 2014, Denmark's parliament was preparing new guidelines and had rescinded the country's IC regulations. Without legislation governing IC, large procurement contracts cannot be signed (Shanson, 2014f:1). The country was still determined to continue to work with offset and desired to agree on an approach acceptable to the EC. It seemed that Denmark was finding a way to fulfil its goals. The director of the Danish Defence and Security Industries Association (FAD) stated that in his view the new guidelines would sustain and develop a national defence industry. The MoD was reportedly working very hard to get the guidelines finalised so that Denmark could make major purchases (Shanson, 2014f:1).

Estonia

Estonia has indicated an intention to comply with Directive 81, but also to maintain offset practices as permitted by Article 346, ensuring improved maintenance capabilities related to the procured equipment. The quota is for 100% of the supply contract value. Estonia does not have a defence industry and therefore production of weapons system would qualify, however the procurement of items locally is not required. In September 2013, Ingvar Pärnamäe, undersecretary for defence investments and national armaments director at the Estonian MoD, stated that the European market would be "free" (meaning open) only when Estonian companies had the same chance in British defence procurements as was provided to British companies (Shanson, 2013i:9). His message was that the sector rules must apply equally to everyone and that a free market needs to apply the same degree of scrutiny in G2G procurements and state aid throughout Europe (Shanson, 2013i:9). In February 2014, the EDA portal on offset stated that Estonia's offset policy was under review (EDA, 2014:Estonia).

Finland

Although Finland had no official legislation or regulations dealing with offset, the overall IP (industrial participation) requirement—as offset is referred to in Finland—was set in the annual defence budget. Traditionally Finland has required 35% to 45% of its offset obligations to be defence-related, with the balance being civil (indirect). In Finland, Directive 81 could have been implemented either by amending the Act on Public Contracts or by passing a separate Act. The country opted for the latter and did not request any offset in new contracts from August to December 2011 (Raiha, 2011:slide 2). Under the law, however, offset can be required for defence procurements when

there is justification under Article 346 (Shanson, 2013c:7-8); future offset requirements will be exclusively defence-oriented, providing a tough challenge for DCs (Shanson, 2012a:5).

The MoD decided, against considerable resistance, to have national thresholds several times lower than those recommended by the EU. If the contracting authority applies Article 346, the contractor will still face obligations from the national legislation (Shanson, 2013l:4-5). The reasons behind this decision were not explained (Shanson, 2012a:5). Whenever the Finnish contracting authorities make a procurement over the national threshold of €100 000 they have to follow the provisions in the national legislation, and when the procurements are worth more than €400 000, the Directive is applied (Shanson, 2013l:4).

Finland is geographically very different from other EU MS, especially considering its frontier of 1 200 kilometres with Russia. “We have to think about all eventualities and SoS is something that is very, very important”, stated a Finnish representative (Shanson, 2012a:5). Locally available defence industrial support is an integral part of national defence capability and preparedness. The four-step approach (described in 4.5 above) to determine whether procurement is justified under Article 346 will be applied (CTO Data Services, 2014a:78).

The IP quota is unlikely to be 100% of contract price and will be assessed for each procurement and detailed in the invitation to tender (CTO Data Services, 2014a:80). According to Finland, transactions requiring IP would include the following (Raiha, 2011:slide 6):

- direct IP (i.e. offset);
- technology transfer related to essential Finnish security interests;
- other requests for the technological development of Finnish defence industries where essential security interests are at stake; and
- public procurement in the defence, dual-use and security industries, with the civil sector totally excluded.

The Finnish industry was concerned whether Directive 81 would really open the defence market in Europe and was not sure how future competition would be managed (Raiha,

2011:slide7). If Directive 81 does not open the market, Finland's own defence industry is in great danger should the country lose offset, which ensures SoS and defence capability (Shanson, 2012a:5). The new rules would increase the workload for both the contracting authorities and tenderers. The fact that offset requests are subject to court appeals poses the risk of delays in capability development, as well as possible additional costs (Raiha, 2011:slide 7).

France

France is largely self-sufficient in military supply. The French government supports measures to discontinue compensation practices and has no offset policy. However, major acquisitions from overseas suppliers have occasionally been subject to offset requirements (CTO Data Services, 2014a:82). In December 2013, France launched two new major land programmes for up to 2 328 wheeled armoured vehicles as part of an army modernisation programme, with the RfQ restricting bidding to French companies (Belan, 2014:1-2). French defence industry sources stated that the French defence procurement agency (DGA) “pushed” France's largest land systems firms—Nexter, Renault Trucks Defence and Thales—“to form an industrial consortium to submit a joint offering in response to the tender”. The aim was “to avoid infighting and secure France's defence industrial base and workforce” and it was stated that “restriction of the tender to domestic firms is permitted under Article 346” (Belan, 2014:2). Such an action is pure protectionism.

Germany

Germany has no offset regulations, but it announced after the launch of Directive 81 that it reserves the right to ask for direct offset (work-share) in cooperative programmes (CTO Data Services, 2014a:83).

Greece

In 2013, the Greek MoD declared that it did not foresee maintaining offset requirements, but it also has national requirements, regulated under a Ministerial Decision of December 2006 that could call for exclusion of the Directive 81 provisions. These requirements apply in the following circumstances (CTO Data Services, 2013c:90):

- when national security reasons are invoked in accordance with Article 346;
- in cooperative programmes, for the R&D phase of a project;

- for G2G sales such as FMS and NATO Maintenance and Supply Agency (NAMSA) surplus supplies.

All Greek defence procurements will be reviewed and approved by a Parliamentary Committee, while a Court of Audit will monitor all phases of the procurement, including the contract award (CTO Data Services, 2013c:90).

Hungary

Hungary's constitution requires that offset policies be regulated by decrees. The country provides an illustration of the complexities involved in making changes to comply with Directive 81 (Shanson, 2011f:3). With modifications more or less agreed to in September 2011, the MoD presented a modified decree to parliament for approval (Shanson, 2011f:3). Hungary, though clashing with the EU and the International Monetary Fund over other "sovereignty issues", decided not to take on the EU over the transposition of Directive 81 (Shanson, 2012b:1). The government changed its procurement decree by abolishing the offset clause, but specified all the exemptions in Directive 81 and stated that "the exemptions, if applied, would allow Hungary to ask for offset" (Shanson, 2012b:1). It introduced something called a "specific unique procedure" that will be implemented whenever the country makes a decision to develop the capabilities of the national defence industry (Shanson, 2012b:1). A Committee for Unique Procedures replaced the former Offset Committee. In January 2014, the offset guidelines had yet to be amended and the former 30% investment requirement was deleted (CTO Data Services, 2014a:85). The government will decide on a case-by-case basis whether to apply Article 346 and consequently demand offset (Shanson, 2011f:3). The new guidelines will focus on the technologies that Hungary wants to develop in the defence and security sectors (CTO Data Services, 2014a:85).

Italy

In April 2012, Italy indicated that its offset policy remained under review and would be changed to comply with the requirements of Directive 81. Italy would continue to implement a defence offset policy at every opportunity where it can be justified under Article 346 (CTO Data Services, 2012a:141). In May 2013 it was announced that the Italian government had concluded informal discussions on a draft of new offset guidelines to be submitted to the EC (Shanson, 2013e:1). The quota will be for 70-100% of contract value; while there would be no penalties for non-fulfilment, delinquent

obligors could be excluded from future procurements (Shanson, 2013e:1). In January 2014 the government stated that offset requirements, terms and conditions will be embedded in the main procurement contract that is managed by the relevant General Directorate. Whenever offset is required, a clause to such effect will be included in the RfP (CTO Data Services, 2014a:118).

Lithuania

The Lithuanian Commission on Compensation Matters approved guidelines for IC agreements (offset) in April 2004 and these guidelines still regulate the mandatory application of offset when purchasing military goods (CTO Data Services, 2014a:151). The country intended to produce a draft of proposed changes to the offset law by August 2010, but nothing was published. It seems that foreign suppliers have to undertake to purchase products and/or services representing 100% of the contract value from Lithuanian companies (CTO Data Services, 2014b:153). In April 2014 no amendments had been made and the EDA portal on offset stated that Lithuania's offset policy was under review (EDA, 2014:Lithuania).

Luxembourg

Luxembourg, which has no army, is a member of the EEA. The country's 2009 rules state that the Grand Duchy of Luxembourg may require offset on an occasional basis for larger defence procurements, generally to support NATO requirements (CTO Data Services, 2014a:155). The Ministry of Economy and Foreign Trade in Luxembourg established an offset division. In August 2011, the Ministry stated that it did not understand the implications of Directive 81 and was studying it (Shanson, 2011d:2). The rules have not been amended since the launch of Directive 81, and offset may still be required in RfPs (CTO Data Services, 2014a:155), which means that Luxembourg will assess procurement on a case-by-case basis.

The country also rejected the implementation of Directive 43, which is meant to simplify the terms and conditions of transfers of defence-related materiel within the EU. In April 2014, the EDA portal on offset stated that Luxembourg's offset policy was under review (EDA, 2014:Luxembourg). The EU has expressed its displeasure with the disparity between the legal situation in the Single Market of the EU and that of the EEA (Shanson, 2013c:2).

Netherlands

The Netherlands parliament agreed to changes in its procurement law only in January 2013; the country stated that procurements would be considered individually to determine whether they may qualify for industrial benefits (offset) under Article 346 (CTO Data Services, 2014a:151). The IP policy remained under review and the guidelines available at the time, which required 100% offset, were described as still fully applicable, although in some cases the Ministry would not ask for any offset (CTO Data Services, 2014a:171). “The conditions of the procurement will be negotiated individually when they do qualify” (Shanson, 2013c:8).

In December 2013, the Netherlands’ commissioner for military production mapped out proposals for a future IP policy, suggesting that it was something like Polonisation (Shanson 2013q:1). He indicated that his ministry would recommend a requirement that benefits Dutch industry by up to 60% of the purchase contract value whenever defence procurements claim an exemption from EU law. “The policy would apply to projects directly relevant to the purchase, as well as for related defence and security sectors that are of critical importance for the protection of the state” (Shanson 2013q:1). The commissioner was not enamoured with the competitive ethos in the European defence market (Shanson 2013q:1).

IP would be used as an essential tool to promote the development of Dutch industry, causing foreign DCs to invest in development of the Netherlands defence market (Shanson 2013q:1). The policy was scheduled for consideration during 2014 (Shanson 2013q:2). In April 2014, the EDA portal on offset stated that Netherland’s offset policy was under review (EDA, 2014:Netherlands).

The Netherlands states that it is entitled to a national DTIB that ensures national security. The MoD’s RfP will set out any IC requirement and will invite companies, by separate notification, to submit their proposals (CTO Data Services, 2014b:170-1). The country will seek to emphasise synergies and innovation in dual-use technologies, as well as cooperative initiatives in Europe, even though it believes that the European defence sector displays a lack of transparency and is inefficient (De Brabander-Ypes, 2014:slides 5-6).

Norway

As a member of the EEA, Norway is obliged to adopt all EU legislation related to the Single Market, including Directive 81 (Shanson, 2011d:2). The EEA's competition rules are equivalent to the rules in the EU—prohibiting agreements and conduct that distort or restrict competition (Shanson, 2012c:2)—and the EEA Treaty allows Norway to veto Directive 81, but that would result in the Norwegian defence industry not being allowed to engage fully with the European market. However, the country can delay transposing Directive 81 into law (Shanson, 2012c:2).

Norway's motivation for its IC policy (as offset is referred to in Norway) is to ensure that its defence industry can compete on equal terms with other European nations. That has not historically been the case, as some of the bigger markets have been closed to Norway (Shanson, 2011i:6). The Norwegian MoD's legal advisor responsible for transposing Directive 81 into Norwegian law stated in November 2013 that Norway supports the establishment of an innovative and open European defence market, provided that there are exclusions for essential national security interests: "As a small nation our biggest concern is to end up in a situation where offset disappears but nothing else changes" (Shanson, 2013l:2). Norway has a long and rugged coastline and the coastal waters include vast adjacent ocean areas that are strategically important and of increasing global economic importance to Norway (Thengs, 2013: slide 7).

In compliance with the prevailing offset regulations, the 2012 procurement of new and modified CV90 fighting vehicles and other military equipment for the Norwegian Army included a requirement for offset equal to 100% of the value of the purchase contract (Shanson, 2012f:4), estimated at about US\$1.74-b.

Norway is determined to safeguard the right to protect essential national security interests and planned to retain requirements for industrial participation, though reducing its application (Shanson, 2013f:1). The country also intended to continue to accept indirect offset (Shanson, 2013f:2). Norway's revised regulations, which took effect on 1 January 2014, require suppliers of major defence procurements to provide contracts to Norwegian industry (CTO Data Services, 2014a:182). The scope of acceptable IC activities was broadened to include defence and security-related projects. IC is

requested on a case-by-case basis when Article 346 justifies it for national security interests (CTO Data Services, 2014a:182). However, IC is not taken into consideration in the evaluation criteria. Maintenance and development of industrial competence and capacity in the defence and related service sectors are also prioritised, but should be relevant to the materiel procured (CTO Data Services, 2014a:182, 184).

Poland

Prior to Directive 81, Poland was a model for CEE countries in using offset returns to invigorate defence industrial development and wider economic growth (IHS Janes, 2013b:29). Poland's discomfort with the implementation of Directive 81 gave rise to significant distress for its government and its industries. Defence unions, worried and confused about how the regulations would impact their future, were set to hold strikes and demonstrations (Shanson, 2011h:4).

However, the country's predicament laid the foundation for a new and perhaps even more determined defence offset policy (Shanson, 2011h:5). In December 2013 Poland stated that forthcoming projects would no longer be managed by the Ministry of Economy (Shanson, 2013m:2), but that responsibility would be transferred to the MoD. In Poland, offset is managed in accordance with the offset law by the Minister of Economy. An amendment in law is required if the responsibility for offset needs to be transferred to the MoD.

The anomaly in Poland is that the law calls for applying offset whenever there is a defence procurement over €5-m. This requirement is now incompatible with the Law on Public Procurement that transposed Directive 81. Poland now requires "Polonisation", which it describes as a contractual obligation regulated on a case-by-case basis by the awarding authority (Shanson, 2013m:2) for procurements driven by national security imperatives (CTO Data Services, 2014a:206). No legal foundation is required for Polonisation, but it requires a benefit equivalent to IP, with the usual technology transfer expectations (CTO Data Services, 2014a:206). The government's message was loud and clear: "If you do not Polonise, don't come to the party" (Shanson, 2013m:3). Even though "Polonisation will not be legislated because then the EC will 'crucify' Poland" (Shanson, 2013m:3), companies were getting the unwritten message as to Poland's expectations.

In 2013, rotorcraft manufacturer Eurocopter and engine manufacturer Turbomeca, the bidders interested in delivering the 70 EC725 Caracal helicopter to Poland, committed to establish two separate assembly lines in Poland if selected (Shanson, 2013c:5). They offered a comprehensive in-country industrial work package that includes training for local employees and a comprehensive MRO (maintenance, repair and overhaul) capability that should be sustainable beyond the duration of the purchase contract. Eurocopter described its offer as “an unmatched industrial commitment” (Safran Group, 2013:1). In the same year, Poland’s reactivation of its advanced jet trainer programme indicated that offset demands would continue “in a fashion” (IHS Janes, 2013b:12).

At the end of 2013, Poland decided to sign a production agreement with the German company MTU Friedrichshafen, resulting in a new centre in Poland for the manufacture and upgrade of military engines (Shanson, 2013k:3). The Defence Minister stated that the agreement was a symbolic and important moment for the new approach to procurement by the Polish army. “This is an example that we are not interested in huge foreign purchases without real technology transfer to Poland”, he said (Shanson, 2013k:3).

In January 2014, the Polish Armament Inspectorate concluded two contracts with the Thales group of companies to supply equipment for building an offshore patrol vessel. *The Ministry of Economy signed offset agreements with Thales Netherlands for the delivery of an integrated combat system and with Thales Electronic Systems for an integrated communications system.

The Ministry of National Defence stated that the offset was worth €83-m. Polish companies and military units will receive “technologies concerning servicing, repairing systems and a training package for operators of the ship’s crew”. The ministries referred to offset agreements rather than Polonisation (Shanson, 2014a:4).

Portugal

Reports that Portugal was set to abolish its offset rules and close down its Offset Commission were dismissed by a senior executive in September 2012 as “media hype” (Shanson, 2011f:6), stating that the decree that established the CPC made no provision

for its abolition and that there was no mechanism to do so. The mandate gives preference to the Ministry of Economy over the MoD (Shanson, 2011f:7).

In March 2013, the EC sent a “reasoned opinion” to Portugal, requesting full implementation of Directive 81. The EC cited EU infringement procedures and warned that if no measures were adopted within two months the EC might have to refer Portugal to the ECJ. It was stated in December 2013 that Portugal did transpose Directive 81 (Gomes, 2013:1). In April 2014, the EDA portal on offset stated that Portugal’s offset policy was under review (EDA, 2014:Portugal).

Romania

Romania has a low military budget and was planning no significant defence purchases (Shanson, 2013h:3). In January 2014, the country published some amendments to its offset policy, requiring 80% offset (CTO Data Services, 2014a:210). Romania stated that the agreement between the obligor and the offset agency would characterise the nature of direct and indirect offset, with the definitions being integrated into a business plan (CTO Data Services, 2014a:209).

Romania seems to be the only MS endeavouring to establish a national definition for direct and indirect offset. The threshold is set at US\$2-m, and the objectives of offset are to maintain employment within the defence industry and improve Romanian defence capacities within the Romarm group of defence industries (Romarm is a state-owned holding company comprising 15 firms and a research institute). Long-term defence infrastructure development is required, including the export of Romanian products, and technology transfer, mostly for military application (CTO Data Services, 2014b:206).

Slovakia

Slovakia had a mandatory offset policy since 2007, but in January 2011 it suspended the practice of offsets effective immediately, citing the negative attitude toward offset of the EDA and EC, as well as that of the Slovak Ministry of Finance (Shanson, 2011f:7). Many seemed unaware of this U-turn; even the web portal of the Ministry of Economy continued to promote the former policy, and the Deputy Chairman of the non-governmental Slovak Atlantic Commission expressed surprise when informed of it

(Shanson, 2011f:7). In April 2014, the EDA portal on offset stated that Slovakia's offset policy was under review (EDA, 2014:Slovakia).

Slovenia

In April 2012, draft offset guidelines submitted by Slovenia's Ministry of Economic Affairs for approval by the National Assembly stated that the new rules complied with Directive 81 (CTO Data Services, 2014a:230). In June 2012 the EC issued a reasoned opinion, giving Slovenia two months to announce the measures that it was taking to transpose Directive 81 and threatening a referral to the ECJ. (Shanson, 2012i:7). In November 2012, Slovenia was ordered, pursuant to Article 260(3) TFEU, to make a daily penalty payment of €7 038, calculated from the day on which judgement was given.

By April 2014 the recommendations before the National Assembly were still not finally approved and were subject to change (CTO Data Services, 2013a: 263). The EDA portal on offset stated that Slovenia's offset policy was under review (EDA, 2014:Slovenia). Slovenia did indicate that it foresees direct and dual-use benefits equal to 100% of the value of the purchase agreement (CTO Data Services, 2014a:230). In order to acquire defence and security technologies leading to long-term economic links and export to new foreign defence markets, Slovenia aims to integrate the domestic industry into its supply chains (CTO Data Services, 2014a:230). Projects are foreseen to be divided between beneficiaries, ensuring that none receives more than 25% of the benefits (CTO Data Services, 2013b:250).

Spain

In September 2011 the Spanish guidelines stated that Article 346 applied to defence equipment and dual-use equipment for both military and non-military security purposes. Defence agreements covering either of these were eligible, in principle, for IC, i.e. offset (Shanson, 2011g:3). The director of Spain's IC directorate stated that Spain's offset guidelines were unlikely to be changed and that the country would most likely always cite Article 346 when national security interests were involved.

As of October 2013 the MoD was responsible for defence policy, while the Industrial Cooperation Directorate (DICOIN) of *Isdefe-Gerencia de Cooperación Industrial* (Isdefe)

administered it. There was no formal policy concerning offset at the time, and no decision has been made by April 2014 as to whether the policy would continue to be noted in an internal directive (CTO Data Services, 2014a:253). In the same month, the Spanish MoD scrapped the bidding process for a major order of €154-m for more than 700 all-terrain trucks for all three of its military forces after objections were raised by the national free trade commission (CNMC, or *Comision Nacional de los Mercados y la Competencia*). In an effort to ensure assistance in the case of possible upgrades to the vehicles, as well as offering closer support for general engineering work, a "higher valuation" had been offered to bidders with production centres close to the army's main wheeled vehicle maintenance centre at Torrejon de Ardoz, near Madrid (Ing and Anderson, 2014:1).

Sweden

In 2011, Sweden stated that the Swedish Defence Materiel Administration, FMV, would not apply any particular offset policy, but that such issues would be dealt with on a case-by-case basis based on the provisions of the EC treaty and the relevant directives (EDA, 2014:Sweden). The available guidelines are described as only indicative of what may be required and still call for a 100% offset quota (CTO Data Services, 2014a:258; 260). FMV insists that weapon systems for certain weather conditions, the life cycle of systems procured before EU membership, and IT and cyber systems are all essential interests of national security, and Sweden is adamant that such details remain confidential (Shanson, 2013f:2).

The UK

In the UK, the government favours long-term engagement rather than projects tied to individual IP requirements. This aim has distinguished the country's new policy from traditional offset (CTO Data Services, 2014a:289). In October 2012 the UK introduced an "industrial engagement" policy designed to overcome the barriers to offset imposed by Directive 81. The policy is not linked to individual procurements, but is monitored through annual reports that contractors submit to the MoD. There are no government-imposed targets (CTO Data Services, 2014a:289). The UK Trade and Investment Defence and Security Organisation's Industrial Engagement Unit is implementing the policy on behalf of the MoD (CTO Data Services, 2014a:289). The unit concludes agreements with overseas-based suppliers that set forth the arrangements for engaging

with UK industry, as well as the reporting requirements related to such activities (CTO Data Services, 2014a:289).

In the National Security through Technology document (paragraph 154), the UK MoD refers to “overseas-based defence and security suppliers” that invest in the defence and security sectors in the UK as “participating companies”. Such companies are encouraged to view the UK as a prime location to engage in R&D, investment and technology transfer, extending opportunities for UK companies to become part of their supply chain (Dalton, 2013:slide 4). Foreign companies that are party to the country’s Defence and Security Industrial Engagement Policy (DSIEP) are requested to engage specifically with SMEs and, where possible, to provide advice to enhance SMEs’ opportunities to succeed in the marketplace. “These activities will also underpin the promotion of the UK’s defence and security exports” (Dalton, 2013:slide 4). The EC has not criticised the new direction to date. By the end of 2013, four companies had signed partnerships, with three more advising that they would sign. The first annual report was produced (Dalton, 2013:slide 9).

Summary of transpositions by the EU

Note that EU MS decisions related to Directive 81 are not public knowledge and that assessments or dates given may not be fully correct. Information has been gleaned from statements or presentations by representatives from countries, comments made at public conferences or statements in the press or on dedicated websites.

Most of the EU MS included the right to call on Article 346 to protect their essential security interests, making Directive 81 non-applicable. In general, after the launch of Directive 81, national offset regulations in EU MS were replaced by announcements that a case-by-case assessment would determine when offset is required or by a declaration that the national offset guidelines or amended guidelines remain in force, but will apply only if Article 346 is applicable. Sixteen countries initially opted for a case-by-case assessment to determine national security interests: Austria, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Finland, Greece, Hungary, Italy, the Netherlands, Norway, Poland, Romania, Spain and Sweden. Germany stated that it may request work packages, while the UK announced its DSIEP to promote UK industries to overseas-

based companies. No offset is required in Cyprus, France (which maintains high protectionism), Ireland, Latvia and Malta.

As of March 2014, the status was as follows:

- MS that assess procurement on a case-by-case basis and only apply offset when Article 346 can be called upon:
 - o Austria (direct and indirect defence, but no offset guidelines);
 - o Belgium (retained old offset rules);
 - o Czech Republic (scrapped offset rules, only procurement laws);
 - o Denmark;
 - o Estonia;
 - o Greece (retained old offset rules);
 - o Hungary (new offset rules);
 - o Italy (offset requirements will appear in RfQ);
 - o Luxembourg (RfQs will state if offset is required);
 - o The Netherlands (new offset rules under review);
 - o Norway (new rules in January 2014);
 - o Poland (separate law for procurement and offset)
 - o Portugal (under review; not sure if the country will abolish or keep offset rules);
 - o Spain (no formal policy); and
 - o Sweden (no specific policy).
- In the following MS the offset policies or regulations were under review:
 - o Bulgaria (waiting for a new ordinance);
 - o Finland (waiting for new law);
 - o Lithuania (no changes yet to old rules);
 - o Romania (waiting for new ordinance);
 - o Slovakia (not sure whether offset has been abandoned or not); and
 - o Slovenia (waiting for new guidelines).
- New approach and rules:
 - o The UK (a new direction in industrial participation, separating industrial investment from military procurement).

Seven EU MS (Austria, Greece, Lithuania, Portugal, Romania, Slovakia and Spain) had apparently not published any updated or amended offset rules, either because they had decided not to publish any official rules or because the offset policy was still under review following the launch of Directive 81 (CTO Data Services, 2014a).

Overall, Directive 81 had resulted in EU MS taking one of the following approaches:

- abolishing offset rules and merely stating that case-by-case assessments will determine whether Article 346 can be called upon to exempt the procurement from EU law;
- announcing that the offset rules are under review and that in the meantime offset will be asked for on a case-by-case basis when Article 346 justifies it for national security interests; or
- stating that offset will be determined by a case-by-case assessment based on the Article 346 exemptions and amending the previous offset rules that will apply when the procurement is exempted to various degrees.

When MS have no clear offset policies, practices will not be transparent.

4.24 STAKEHOLDER REACTIONS

This section will review how other stakeholders reacted to the MS' approaches to Directive 81.

European Commission: Not tolerating offset

The EC stated that Directive 81 “cannot allow, tolerate or regulate offsets” and that the ultimate goal is to “create market conditions in which the practice will no longer be needed.” The EC also considers bilateral reciprocal offset abatement agreements to be discriminatory since they concern only two MS and discriminate against bidders from other EU MS and from outside Europe (Shanson, 2011c:3).

In essence, the EC simply advised individual MS to surrender to the EDEM for the greater good of the Community as a whole (Shanson, 2011d:4). The EC apparently declined to review Directive 81 after offset authorities raised their concerns, because Ministers have not made a case as to why it should do so (Shanson, 2011d:4). The EC's subsequent Guidance Note on offset ignored petitions to be less rigid. The EC

stated that offset can be justified only on the basis of Article 346, which needs to be interpreted strictly and places “the burden of proof that the derogation is justified” on the MS that invokes it (Shanson, 2011d:4).

In April 2011 and May 2012, the EC turned down opportunities to face more than 300 delegates, comprising managers of offset and related fields, as well as representatives from various governments worldwide (Shanson, 2012f:2). The publication *CTO Countertrade and Offset* commented at the time that the EC “was hiding from the largest offset audience yet convened to figure out the implications of Directive 2009/81/EC and its Guidance Note” (Shanson, 2012f:2). Except for the Netherlands and Norway, no EU or EEA government officials heading their country’s offset authorities registered for the 2012 offset conference in Izmir, Turkey. “They, too, are apparently reluctant to face questions on the EU Directive. ... Boycotting the biggest offset conference of the year does a disservice to everyone” (Shanson, 2012f:2).

In his State of the Union speech in September 2011, the President of the EC committed the Commission, within its competencies, to do all it could to develop the Single Market and industrial base in the European defence sector (Calleja-Crespo and Delsaux, 2012:6). In June 2013, an EC director stated at an international offset symposium that the EC was worried that its efforts to eliminate offset in all of its forms were failing: “The numbers don’t actually look that good from our perspective because offsets are growing” (Shanson, 2013g:2). He blamed the failure on the global rise in defence spending and stated that the EC would continue to pursue the policy, particularly among countries that are not members of the WTO or signatories to the GPA and are therefore prohibited from practicing offset. Unfortunately, many of the bigger emerging or developing countries did not sign the WTO’s agreement (Shanson, 2013g:2).

In 2011, the European Commissioner for the Internal (Single) Market and Services, Michel Barnier, was on a panel at a high-level conference on Defence and Security Industries and Markets. He reassured delegates that MS can maintain their national sovereignty, and that the use of Article 346 may be justified for reasons of national security in some circumstances, such as nuclear dissuasion (Shanson, 2011c:1). Barnier stated that MS have security interests that the EC has to balance with the principles of the Single Market but that the EC should ban the “abusive and completely

discretionary” use of Article 346 to demand offset (Shanson, 2011c:1). The initial objective of Directive 81, he stated, was to make existing national rules on reciprocity compatible with European law, forcing MS to change their national laws if necessary: “Legitimate security interests must be safeguarded, but security arguments should not be used as excuses to avoid necessary economic reforms or to keep protectionist policies in place” (EC, 2013h:15). Making this distinction is not always an easy task, especially since defence has traditionally been excluded from the Single Market and stakeholders are not familiar with its dynamics (EC, 2013h:15).

A presentation made in April 2014 at a global offset conference in Barcelona, Spain by the EC’s defence expert at the Internal Market and Services Directorate General established that Directive 81 translates into prospects for tension in the relationships between EU MS and the EC (Shanson, 2014e:1). The EC expert stated that the Commission would soon seriously consider launching an infringement procedure against those nations contravening Directive 81 (Shanson, 2014e:1).

National defence industry associations

In response to the EC’s Guidance Note on Offset, published in 2010, 13 defence and security industry associations across the EU wrote a letter to the EC, emphasising the benefits of offset to the defence industry and SMEs (Muravska, 2013:17-18). The groups have also appealed to the EC to adopt a “prudent and pragmatic” attitude regarding offset (Shanson, 2010b:4). The CEO of a trade organisation advancing the UK aerospace, defence, security and space industries stated that if each MS implemented Directive 81 in a different way, such differences would make the goals potentially unworkable, both for the nations and for industry (Shanson, 2010a:3). However, some argue that the EC’s position is entrenched and therefore must be managed rather than opposed (Shanson, 2010b:4), suggesting a scenario in which MS pursue other means to protect their interests.

The WTO

Participation in the WTO’s GPA is entirely optional and commits signatories to core disciplines regarding transparency, competition and good governance in the procurement of goods, services and capital infrastructure by public authorities (CTO Data Services, 2014a:303). In November 2013, after the WTO ministerial conference in

Bali, the provisions of the GPA were updated to take into account developments in current government procurement practice, with offset being defined for the first time (WTO, 2013a:4). Article 1L defines offset as any condition or undertaking that encourages local development or improves a party's balance-of-payments accounts, such as the use of domestic content, the licensing of technology, investment, countertrade and similar actions or requirements (CTO Data Services, 2014a:303).

Article IV-6 stipulates that parties and procuring entities to a procurement shall not seek, impose or enforce any offset (CTO Data Services, 2014a:303). However, the prohibition does not cover defence procurement and there are other immunities for developing countries.

Transparency International

Transparency International UK, a non-profit organisation that seeks to expose government corruption, believes that offset transactions carry high risks of corruption due to the considerable secrecy within defence procurement generally and especially since they are not usually as closely monitored and scrutinised as the main defence contract (Shanson, 2011d:5).

In 2011, the organisation stated that the final stage of transposing Directive 81 presented a valuable opportunity for governments to raise their integrity in national defence procurement. Transparency International's position is that transparency and integrity cannot be addressed in offset if the public has no way to know how much the offset provisions cost the taxpayer (Shanson, 2011d:5).

EU MS reactions

Some countries approved Directive 81 because it did not mention offset explicitly, (Shanson, 2011d:4), while it seems that others were coerced into compliance.

Belgium's reactions

In April 2011, the acting counsellor general at Belgium's Federal Public Service Economy (FPSE) stated that Directive 81 had been approved "over the heads of some dissenting countries" that had been bullied at the political level to comply (Shanson,

2011b:4). The FPSE could not yet determine whether Directive 81 would ensure (Ballet, 2013:slide 7):

- equal opportunities for industries from all EU MS in all EU MS (“a level playing field”); and
- increased involvement of SMEs in the supply chain through the sub-contracting requirement.

The country stated that sub-contracting requirements would offer a limited return to Belgian industry, because Belgian’s participation in programmes in other MS was limited (Ballet, 2013:slide 13).

Bulgaria’s reactions

In 2011, a director of economic policy at Bulgaria’s Ministry of Economy called the Directive 81 requirements “very strict” and stated that Bulgaria might want to join other small MS to take a joint position (Shanson, 2011a:1-2). Bulgaria’s Deputy Minister of Economy stated in his keynote address to delegates at a conference in Sofia in 2011 that unilateral restrictions on offset in the EU would harm the competitiveness of the European defence industry and “will seriously impede the country’s progress” (Shanson, 2011a:5). He cited the indirect benefits realised since the September 2004 ordinance that introduced offset in Bulgaria, mainly related to the export of defence products, high-tech components and software (Shanson, 2011a:5). The benefits realised in 2010 alone amounted to about €50-m, an amount that Bulgaria viewed as an omen of opportunities to come (Shanson, 2011a:5).

The Czech Republic’s reactions

In August 2011, the Czech Republic failed to follow the tendering procedure for a €132-m contract for four military tactical transport aircraft—the CASA-295M. The EC apparently took advantage of changes in the Czech MoD and threatened to take the country to the ECJ for not complying with its obligation to award public supply contracts on the basis of public tenders (Shanson, 2013l:3). The MoD requested the Ministry of Industry and Trade’s (MIT) to comply with Directive 81 and abolish offset in exchange for the EC not suing the Czech Republic (Shanson, 2013l:3). The EC further demanded a proposal outlining how the government would abolish offset. The government instructed the legal division to draft a regulation specifying when it is permissible to apply Article 346 on a case-by-case basis (Shanson, 2013l:3). The EC reacted by

requesting the Czech Republic to cancel indirect offset retroactively and to discontinue the related activities in ongoing programmes.

The government stated that this was not possible and discussions continued (Shanson, 2013l:3). In April 2014, the Czech Republic decided reluctantly to comply with Directive 81 by omitting offset requirements in the draft contract for the extended lease of 14 Gripen jets.

The secretary of the MIT's offset committee told an offset conference in France in November 2013 that the EC had used pressure tactics and blackmail to oblige the Czech Republic to implement Directive 81 (Shanson, 2014e:5-6).

Denmark's reactions

Danish industry wanted the Danish government to negotiate a solution under which the EU would agree to allow Denmark to operate one set of rules for IC agreements to suppliers from the EU together with a separate system for suppliers from non-EU countries (O'Dwyer, 2013:3). As noted previously, the industry's view is that, in real-world terms, there is no European defence market, as 80-90% of all procurement contracts within the EU are placed nationally (O'Dwyer, 2013:4).

At an EC conference in February 2014 in Brussels to discuss the sub-contracting provisions of Directive 81 and cross-border market access for SMEs, it was mentioned that a number of small MS had written to the EU President asking for a mandate that 25% of defence programmes be procured cross-border. The EC did not seem to accept that OEMs foster long-term relationships with their suppliers and supply chains as an essential part of their strategy to remain competitive, ensure SoS and deliver value for money (Shanson, 2014c:1). One delegate stated that while "companies are looking for more competitive supply chains, the EC is looking for more competition, but does not seem to recognise that these are two different things" (Shanson, 2014c:1).

Finland's reactions

It is the opinion of the secretary-general of the Association of Finnish Defence and Aerospace Industries (AFDA) that in drafting Directive 81, the EC had the idea that the defence market would be a European market. It did not fully understand that the defence market is global in nature and did not appreciate the fact that the biggest offset

obligations due to Europe come from third-country suppliers such as the US (Shanson, 2011i:5). Directive 81, AFDA contended, does not take into account the specifics of the defence sector, mostly because the people who drafted it lacked “sufficient knowledge”. The interpretation of the exemption is unclear, and this fact will make negotiations between the procurement agency and the contractors more difficult (Shanson, 2011i:5).

The EC’s Guidance Note goes much further in prohibiting offset than Directive 81 does (Shanson, 2011i:5). Directive 81 and the offset interpretation of the EC will result in Finnish SMEs not getting the market access that they had before, likely making it impossible for them to survive, according to a representative of AFDA. Finland stated that the France-UK agreement on defence cooperation includes clauses on IC (offset), with the MS indicating very clearly that they want to build CoEs within their defence industries and do all their development work together (Shanson, 2011i:5).

France’s reactions

France accepts there are legitimate reasons why countries should seek to obtain access to better or newer technologies and does not deny their need to protect their interests or SoS (Shanson, 2013g:4). Thales’ CEO stated that the demand for technology transfer in export markets was part of the “rules of the game” (Shanson, 2012l:6). In 2014 France surprised observers by allowing only local companies to bid for two major new land programmes.

Hungary’s reactions

Hungary’s shift toward acquiring knowledge-based and high-tech activities proved that offset has and will continue to have a place in Hungary’s economic development (Shanson, 2010a:3). In 2010, Hungary had 18 offset programmes worth €1.2-b, with nine successfully completed at an overall fulfilment value of €900-m and nine others ongoing, representing €300-m. A low defence budget resulted in no new offset programmes at that time (Shanson, 2010a:4). In 2012, a senior advisor at the Ministry of Economy stated that the sub-contracting provisions in Directive 81 will not constitute an effective substitute for offset in Europe and that there are many doubts about the procedures to be followed (Shanson, 2011b:5).

Norway's reactions

The Norwegian authorities do not practice traditional offset, but prefer indirect industrial cooperation, which Directive 81 does not allow (Shanson, 2011i:5). A representative from the Norwegian Defence Logistics Organisation (NDLO) stated in 2011 that neither IC nor offset would be mentioned in the new law (Shanson, 2011i:6). Article 346 offers possibilities for IC, but how these possibilities can be written into the RfP remains to be seen. While market access is crucial, Directive 81 offers American and Canadian contractors a distinct advantage over European contractors, because they still relate IC programmes to their business plans (Shanson, 2011i:6).

Poland's reactions

Poland's relationship with the EU over Directive 81 was characterised by disenchantment. "Membership [in the EU] has not provided a panacea for economic problems, while integration in EU defence mechanisms has also presented challenges" (IHS Janes, 2013b:26). Poland considers attempts by the EC to prohibit the use of Article 346 as "interference in the essential national security interests of the state" (Shanson, 2014a:2).

A policy paper published in December 2013 by the Armaments Policy Department stated that Poland regarded the retention of offset as a priority and considered the intention to phase out offset "incoherent with the Interpretative Communication provided by the EC in 2006 (Shanson, 2014a:2). Poland insists that strategic defence assets are an essential national security interest and that the control of such assets contributes to long-term SoS This view, Poland states, is generally shared by the Letter of Intent (LoI) countries: France, Spain, Germany, Sweden, the UK and Italy (Shanson, 2014a:2).

However, the EU should not only assess issues from the perspective of major defence manufacturing countries "and should be better able to predict the consequences of its actions" (Shanson, 2014a:4). Only projected benefits or losses served as the basis for decisions regarding the liberalisation of the EU defence market (Shanson, 2014a:3). The needs of CEE (Central and Eastern European) countries have scarcely been taken into account by the EC and there are clashes of interest (Shanson, 2014a:3).

Poland had little chance to join and benefit from trans-European supply chains or to become involved in collaborative weapons investment programmes, and most Polish defence companies do not fulfil the SME criteria (Shanson, 2014a:2-3). Conditions for competition in the Single Market “have become too harsh, and may adversely affect the competitiveness of the European defence industry in the global market” (Shanson, 2014a:4). Poland’s view is that the only companies to benefit from competition among European companies will be the defence industries of non-European countries (Shanson, 2014a:4).

The country has to balance military versus political objectives, legal procedures versus business interests, and the aspirations of Polish industry versus the EU competition regulations, as well as short-term military needs elevated by developments in Ukraine versus long-term procurement plans (Redlich, 2014:slide 9). Politically, the Polish government has to balance EU and US interests without antagonising any of its partners (Redlich, 2014:slide 16).

Poland was contemplating a focus on consortiums in future defence procurement, with Poland’s defence sector searching strategic rather than tactical partners (Redlich, 2014:slides 5-6). The 2014 tender to develop a key component of Poland’s missile defence shield (Wisla system) is a US\$8.5-b programme that will run over the next ten years, and the contractor is obliged to share the technology with Polish industry. The domestic press hailed it as “a great opportunity for Polish companies”, with the possibility of stimulating the military electronics sector and creating jobs in the arms industry for a minimum of 5 000 to 7 000 people for many years to come (Shanson, 2014b:5).

Portugal’s reactions

In 2014, a Portuguese Member of the European Parliament (MEP) wrote an angry letter to the president of the EC, attacking the EC’s approach towards offset (Shanson, 2014c:2). This Member accused the EC of ignoring its own guidance on the prohibition of offset under Directive 81 and of failing to initiate proceedings against parties that misuse Article 346 “Concerned sources say the EC is now under pressure to set a precedent” (Shanson, 2014c:2).

Spain's reactions

A director of Spain's Industrial Cooperation Directorate stated in 2011 that Spain fully supports the EDA's Code of Conduct on offset and that the Code should be sufficient because it adequately addresses concerns about competition and transparency in the EDEM. Offset is a mechanism to reinforce the industrial technological base of Europe, creating or enhancing industries (Shanson, 2011g:3). The EU should have submitted Directive 81 for consideration by way of an EU-wide referendum (Shanson, 2011g:3). In May 2014, Spain signed a security co-operation agreement with Saudi Arabia that covers any future defence sales between the two countries. An MoD spokesman said that one of the reasons for the accord was to have a government-to-government framework in place ahead of any possible future defence deals (Ing, 2014b:1).

UK reactions

In 2011, a UK offset consultant expressed concern that Directive 81's position against offset could mean that companies will miss out on work that otherwise would have come into the EU—particularly from the US. Losing the structure that a regulated offset market creates would “take away the ability of European companies to compete on a level playing field, particularly in markets that remain protected” (Shanson, 2011a:2). In 2012, UK parliamentary papers stated that the overall net impact of Directive 81 could not be forecasted or monetised because no suitable data were available (Clark, 2012:6).

Brussels' proposals to help Europe's defence industry cope with the pressures of falling military budgets and increased competition from new markets were met by scepticism in the UK. The UK Defence Secretary stated that he would resist any proposals that are not in the interests of British companies, “such as allowing the export market to be controlled centrally on a pan-European basis” (Goldsmith, 2013:2). He said that proposals from Brussels tend to talk about increasing the competitiveness of European industry, but what they really mean “is imposing a dirigisme [an economic system where the state exerts a strong directive influence over investment] on European industry” (Goldsmith, 2013:2). His view was that Britain was not alone in resisting the push for the EU to take a more active role in the sector (Goldsmith, 2013:2).

The UK's new DSIEP is designed to overcome the barriers on offset imposed by Directive 81 (Shanson, 2013l:5). This policy is not dissimilar to any other offset or IP approach. "We are looking at inward investment, technology transfer and supply chain activity", stated the head of the defence and security industrial engagement policy (DSIEP) department for the MoD's International Relations Group. However, the UK is not assessing activities just in terms of the absolute financial value, but is prioritising the qualitative aspects (Shanson, 2013l:5). The DSIEP mirrors the absolute need to develop and enhance capability in the defence and security sectors, ensuring that SMEs gain access to overseas prime contractors. The programme is voluntary, without targets, penalties or input from the MoD (Shanson, 2013l:5). Article 346 exemptions are made by the contracting authority and implemented separately (Shanson, 2013l:5).

The UK's Minister of Defence Equipment and Exports stated that there would always be instances where Britain has to protect its national security interests, with such activities being referred to as "actions necessary to protect freedom of action and operational advantage" (Shanson, 2014d:2). He called on the EC to clearly define the terms under which MS may apply the national security exemption and stated that the UK would not support any endeavours towards new legislation, also questioning the need for EC guidelines on government transfer exemptions in Directive 81 (Shanson, 2014d:2).

The EDA

Although the EC and the EDA both believe that offset should be gradually phased out, they differ quite extensively as to the means to be used to bring about a new approach to offset. The tension mostly relates to the legal status of their respective policies, based on the politically sensitive connotation linked to offset practices. The EDA wants to keep "smart offset", meaning benefits that help domestic industry to become more efficient and that ensure capabilities that contribute to the development of the EDTIB (Maelcamp, 2011c:8-9). In February 2014, the EDA's CEO introduced an intriguing idea, asking MS why they do not consider invoking Article 346 jointly, bilaterally or trilaterally (Shanson, 2014d:3).

Legal interpretations

In May 2012, an associate at a law firm in Berlin commented that "it remains equivocal; however, to what extent the new system will in fact cause the individual MS to change

their defence procurement practices” (Shanson, 2012g:1). In November 2013, another associate at the same firm stated that the long-term impact of Directive 81 and its enforcement depended on how Article 346 was interpreted (Shanson, 2011b:3). Over the long term, MS would be faced with serious challenges as they sought to achieve what they have achieved in the past with less offset. MS can still try to add value to their economies by tying certain considerations such as on-site maintenance and maintenance warehousing to SoS. There are ways to tie such factors to the subject matter of the contract, and it would be legal, the Berlin lawyer stated (Shanson, 2011b:4). The buying MS should further look for ways to establish a justification for sub-contracting on the grounds that it is connected with the country’s SoS (Shanson, 2011b:4). The considerable flexibility afforded by Directive 81 is the principal reason for the uncertainty that it has introduced (Shanson, 2012g:1).

Defence contractors

DCs were making the following comments about Directive 81 (Shanson, 2011c:1-2):

- the confusion that followed the EC’s guidance notes has resulted in much frustration, and Directive 81 has to be clarified in order for defence companies to choose the right position in the market;
- the EC is acting to create more open national markets, but its strategy is also opening European markets to non-European suppliers from markets where the European industry do not have suitable access;
- if the EU industry does not press for reciprocity, the results will be highly prejudicial to the interests of Europe; and
- there is a need for a European defence policy that closes the loopholes inherent in Article 346.

Consultancy firm

A paper on the European DIB, published by a global strategy and management consulting firm following the December 2013 EU Council summit, stated that the implementation of Directives 81 and 43 has been patchy and that enforcement has been weak at best (Shanson, 2014b:1). The European Parliament’s earlier call for the Council to “provide the necessary fresh and ambitious impetus and to lay down guidelines, overarching political priorities and timelines for supporting a truly EDTIB” had gone unheeded.

The paper stated that the Council summit did not address the broader Single Market for defence and the lack of a corresponding industrial strategy. Nine months after EU MS had transposed Directive 81, MS were still far from having correctly interpreted their intent, despite progress in the area of transparency (Shanson, 2014b:1).

Switzerland

In February 2011, a senior legal advisor and offset manager at Armasuisse, Switzerland's offset authority, stated that the Swiss policy might be affected by the developments in Europe (Shanson, 2011a:4). The shrinkage of the Swiss Armed Forces from 600,000 men during the Cold War to about 120,000, with plans for further reductions, has affected the capacity of the Swiss defence industry to absorb work. As a result, Switzerland accepts both indirect and direct offset, with indirect benefits focusing on high-technology industries with the potential for dual-use (Shanson, 2011a:4). In November 2013 a representative of Armasuisse stated that the Swiss position is that offset is not distorting and does not have the negative trade connotations claimed by the EC (Shanson, 2013l:2). Switzerland always requires that offset transactions are strictly competitive, and offset serves in many cases as a "door-opener" to closed or protected markets (Shanson, 2013l:2). The country generally looks for a 60-40 balance between indirect and direct offset (Shanson, 2011a:4). Directive 81 is discriminatory and abolishing indirect offset may be creating more of a mess and not helping industry. Offset provides Switzerland with "golden opportunities" and will continue to be requested (Shanson, 2013l:2).

The US

It was evident that the US defence community remained just as confused as everyone in Europe. The question of sub-contracting also presents new challenges to US companies (Shanson, 2011b:5). In 2011, representatives from the Department of Commerce met with representatives of the EC and the EDA to discuss Directive 81, offset and other defence trade-related issues (US Department of Commerce, BIS, 2012:35).

An American company that employs expert analysts of the defence and aerospace industry stated that declining defence budgets prioritise exports, which would refocus suppliers' attention on offset (Shanson, 2012d:4). The group of analysts stated that the

EU “screwed up its analysis of the situation” (Shanson, 2012d:4). Defence production represents a very low volume and spreading it around to multiple countries makes it even more expensive. Direct offset probably costs anywhere from eight to 15%, and it is not sensible to prioritise direct offset over indirect offset (Shanson, 2012d:4). Directive 81 would drive offset underground and, ironically, the availability of Article 346 as a loophole would force countries to do more direct offset, but less efficiently. The analysts further stated that Article 346 has little real meaning because there is no such thing as an independent (European) DIB (Shanson, 2012d:4). In the US every single actuator in every airplane has at its core parts from China and most likely titanium from Russia. For most items even the US depends on foreign countries, so “the notion of an independent defence industrial base is an utter fallacy” (Shanson, 2012d:4).

Although EU directives address only the market access rights of companies established in EU territory, US suppliers to the EU defence and security industry come under the scrutiny of the EC (Shanson, 2011c:3).

The paper noted that Directive 81 does not aim to suppress the right to use the Article 346 derogation (Shanson, 2011c:4). After the launch of Directive 81, the EC probably wants to see two types of defence contracts (Shanson, 2011c:4):

- contracts covered under Directive 81, for which Community law will apply and for which indirect and civil offset requests are likely to be challenged by the EC, while certain forms of direct military offset governed by the provisions on SoS will be justifiable, with alternative provisions on competitive sub-contracting being applicable; and
- contracts not covered under Directive 81, which are exempted from Community law under Article 346 TFEU, but for which direct offset requirements have to relate to the military destination of the contract, while complying with the principles of transparency and non-discrimination; such contracts will be covered by the EDA Code on offset and by national offset policies.

US Congress

In November 2013, Republican Congressman Dan Lipinski stated that the Buy American Act had been weakened over the past 75 years by a series of exemptions and lax enforcement (Shanson, 2013k:2). He stated that in recent years the DoD had

granted more than 44 000 waivers of the law, ensuring that about US\$13.8-b in taxpayer funds benefitted foreign workers. Lipinski introduced the Buy American Improvement Act in order to close current legal loopholes and ensure jobs for American workers rather than foreigners (Shanson, 2013k:2). His bill would ensure that the federal government is supporting American workers by buying products made in the US (Shanson, 2013k:2).

The bill, if passed, would amend the definition of an “American-made” product to one that contains at least 75% domestic material instead of the current 50% (Shanson, 2013k:2-3). This strategy is in contradiction to the aims of the Transatlantic Trade and Investment Partnership (TTIP) agreement being negotiated between the US and the EU since July 2013 for the purpose of removing trade barriers in a wide range of economic sectors (Shanson, 2013k:2). It is also another example of a trend toward increased protectionism.

Transatlantic Trade and Investment Partnership (TTIP)

The TTIP is a trade and investment agreement designed to drive growth and create jobs. Independent research shows that the TTIP could boost the EU's economy by €120-b, the US economy by €90-b and the rest of the world's economy by €100-b. In February 2014, it was reported that both the EU and the US had explored ways to remove unnecessary trade barriers between their markets without lowering the protection of people's health, safety, work rights, privacy, financial security and the environment (EC, 2014c:1).

Aligned US-EU rules could cut the costs that EU firms face when exporting to the US by up to 25%, without weakening the requirements in any way (EC, 2014c:1). The agreement further aims to allow EU firms to bid for public contracts in the US and to improve access and transparency of procurement rules. Other aims are to ensure that governments treat companies in which they have a majority stake (“state-owned enterprises”) in the same way as any other firm and to enable EU firms to import energy and other raw materials from the US. Progress would be reviewed again in September 2014 (EC, 2014c:2); however, in the defence and security domain, protectionism is still expected to reign.

4.25 ELIMINATING PROTECTIONISM

In analysing how far Directive 81 goes in addressing protectionism or opening the market, and how the practice of protectionism can be tackled further, three areas of the EU defence industry will be examined in this section national programmes, cooperative programmes, and intra-EU exports (Edwards, 2011). In addition, the theme of transnational collaboration will be addressed in order to assess global competitiveness.

4.25.1 National programmes

MS procure, design and manufacture defence equipment within national boundaries to retain their sovereignty in defence matters and maintain a national defence manufacturing industry (Edwards, 2011:8-9). In 2009, 75% of total defence procurement in the EU was purchased within national boundaries (Edwards, 2011:9), and in 2013, the portion reached 80% (see 4.22 Transposition history). Offset resulted in attractive packages that in some cases were favoured above the cheapest or best-quality products (Edwards, 2011:17). A reduction in national programmes may decrease protectionism, but MS have a right to protect their national security interests. Judging from the reaction to Directive 81 and changes made to national offset policies in the EU, MS still prioritise this interest.

If EU MS purchase defence equipment for national protection from various foreign suppliers and offset benefits are not included, the end user will not receive the technology related to the system and will be dependent on the suppliers for any future services, repairs, modification and maintenance—paying separately for each after-sales interaction with the supplier. If a purchasing country is expected to pay for any technology transfer, training and maintenance capabilities, defence purchases will become more expensive and the purchaser will have to include such activities as part of the main contract. If the 30% sub-contracting in Directive 81 is aimed at ensuring that purchasing countries receive these benefits, sub-contracting to foreign SMEs will not fulfil such aims, because the integral knowledge of the system is with the prime contractor.

National decision

Key EU arms-supplying States, especially France, view arms sales foremost as a matter for national decision-making (Grimmett and Kerr, 2012:11). Directive 81 requires

that MS no longer rely on their national industry to ensure SoS, but trust other MS to ensure SoS in all circumstances. The EC may hope that a tough stance toward offset will encourage the main arms-producing nations—France, Germany, the UK, Italy and Sweden—to rethink their national preferences (Said, 2013:1-7), but the responses from these nations suggest otherwise. Since the launch of Directive 81:

- France, though stating that it does not apply offset, has frequently used US FMS as an important means for underwriting development and procurement of new weapons systems for its own military forces (Grimmett and Kerr, 2012:11). In January 2014 the country took a new direction in protectionism, allowing only local defence companies to bid for two major new land vehicle programmes and pushing the biggest companies to form a consortium in order to secure France's defence industrial base and workforce;
- the UK has established an industrial engagement policy that ensures that it will continue to enhance the capability of its defence and security sectors;
- Germany announced that it retained the option to ask for work packages when procuring defence equipment;
- Sweden is adamant that details related to certain procurements remain confidential and retains the right to call on Article 346 to exempt military procurement from EU law and reiterates geographical considerations that challenges SoS; and
- Italy announced that the RfP will stipulate whether offset is required, while terms and conditions will be included in the main procurement contract.

MS can decide

The current situation is uncertain, with no clear rules and requirements. EU MS still accept Article 346 as the basis for requiring offset and interpret the written law as stating that MS can decide what constitutes “essential security interests” and whether the MS needs to protect it. A definition of “essential security interest” is not forthcoming, and it therefore makes little sense for the EC to base the whole Directive on the interpretation of this concept. If MS in turn fail to open their defence and security procurement, the EC will have to build up case law over the long term (Edwards, 2011:12). However, it would have to tread carefully so as not to be viewed as the destroyer of the EU defence industry (Edwards, 2011:12).

DCs may challenge MS' closed procurement decisions in the ECJ, yet they want to avoid angering potential future customers. "In the long-term, budgetary pressures, rising costs and the indirect effects of Directive [81] may create industrial clusters for sensitive equipment" (Edwards, 2011:12), resulting in cooperative programmes. It cannot be projected whether such industrial clusters will develop into CoEs, but they will create monopolies resulting in political power. Therefore, it is possible that national considerations will still overrule EU-wide policies (Bailes and Depauw, 2011:25).

4.25.2 Cooperative programmes

For those who argue that Europe's defence industry is at risk, cooperation agreements seem important to ensure that MS' defence industries can work together more closely. The EU aims to increase the number of cooperative programmes in the EU in order to foster increased harmonisation of military equipment (Edwards, 2011:10). In November 2007, the EDA stated that European collaborative equipment procurement should reach 35% of total equipment spending (EDA, 2011b:1). In 2009, EU collaborative defence equipment procurement amounted to 22% of all procurement (EDA, 2011b:14).

EADS-BAE merger

The US\$45-b merger between EADS and BAE Systems in 2012 collapsed in the face of political differences (Goldsmith, 2013:2). Many EU officials view the failed merger as a missed opportunity to consolidate the European defence industry. One can also argue that creating monopolies is no sensible strategy to open a market or ensure more competition. In September 2013, the UK warned the EC that it "would oppose any moves to enforce new rules on the region's defence industry that impinged on the competitiveness of British companies" (Goldsmith, 2013:1).

Europeanisation—referring to increased cooperation in defence and security at the European level—has been resisted up to now by conflicting mission requirements of weapon platforms, incompatible ownership structure of companies, and divergent sequencing of procurement orders (Bailes and Depauw, 2011:25-7). Collaboration requires larger European procurement programmes and cross-border cooperation; however, given the budget constraints, this option will consolidate the industry, resulting in the closure of production sites and loss of employees in large numbers (Bailes and Depauw, 2011:25-7).

Europeanisation requires transparency and good governance, and it is doubtful whether the political will and the structures for such a process are in place in the EU (Bailes and Depauw, 2011:28). The European collaboration formula is also no longer trusted by many MS “due to increasing costs of the latest programs” such as the Eurofighter, A-400 and NH-90 (Barone, 2013:3-4). Each company, with only a few exceptions, is rather trying to survive on its own, without any comprehensive European strategy (Barone, 2013:4).

In the past, offset motivated collaborative programmes, but offset was not always cost-effective because the work had to match the financial contribution of the country to the programme (Heuninckx, 2011:15). Collaborative procurement in the EU may currently be motivated only by the inability of most MS to procure complex military equipment other than by buying it from the US or sharing costs with other MS (Heuninckx, 2011:33). However, even if sometimes managed by a “lead nation”, collaborative defence procurement is still mostly performed through international organisations or agencies established for that purpose, each of them applying different procurement rules (Heuninckx, 2011:33) that are often at variance with the EU public procurement regime. Cooperative programmes may have little effect on protectionism, with MS still ensuring that a proportion of investment in defence returns to the national manufacturing industry (Edwards, 2011:10) and remaining very selective in choosing their partners when collaborating in complex and sensitive equipment procurement.

Bilateral cooperation

Europe's defence industry sales reached US\$126.9-b in 2012, with the UK as a whole representing nearly 30% of the total defence trade (Goldsmith, 2013:2). In light of proposed military spending cuts in Western Europe, France and the UK have concluded a Declaration on Defence and Security Cooperation, including bilateral cooperation in some arms procurement and open access to each other's arms markets (Jackson, 2012b:1). The two governments have reached a ten-year strategic plan regarding the complex weapon sector (including anti-surface and cruise missiles) and will work toward establishing a single European prime contractor, while trying to achieve up to 30% in efficiency savings (UK Prime Minister's Office, 2010:5).

This progress in defence cooperation is heartening, but it is not clear how such or similar declarations will benefit the EDTIB when major EU defence companies have non-EU partners or shareholders.

BAE Systems, for example, the third biggest defence company globally in 2012 with arms sales worth over US\$30-b annually (Defence IQ, 2014:1), established a joint defence venture with Mahindra & Mahindra Ltd in India, while the French company DCNS (the 23rd-biggest defence company globally in 2012) (SIPRI, 2013h:2) and its Brazilian partner established a joint venture (ICN) for the construction of submarines and a naval base (EC, 2013f:26).

Long-term prospects

In the long term, the number of cooperative programmes in the EU may increase for the following reasons (Edwards, 2011:12-13):

- cost pressures will motive MS to cooperate in order to share development costs;
- cooperative programmes with an R&D phase are excluded from Directive 81, making it possible for participating governments to still ensure national benefits;
- a liberated market for non-sensitive equipment could result in similar equipment being used by different MS, increasing military harmonisation in the EU and offering a further incentive to undertake cooperative programmes.

Pressures to survive and internationalise are also reducing political control of the defence industry (Bailes and Depauw, 2011:28).

4.25.3 Intra-EU trade

Directive 81 aims to develop an EU-wide defence procurement framework, spreading risk and enlarging markets while increasing mass production and reducing unit costs (Schmitt, 2002:1). The Defence Package of Directives 81 and 43 eliminated administrative burdens related to the transfer of defence and security goods among EU MS, aiming to motivate procurements from European competitors rather than from national producers (Taylor 2011:17).

Sensitive equipment that can be shown to be essential to national security remains protected under Article 346 (Edwards, 2011:12). Therefore, Directive 81 may have the biggest impact on the procurement of equipment considered non-sensitive to national

security (such as dual-use), and on intra-EU exports. If MS decide to use selective procurement, these two areas of the EU defence industry will be open to attack from both the EC and DCs (Edwards, 2011:11-2).

Thus, Directive 81 has the possibility to limit protectionism, but it is unclear whether Directive 81 will create a level playing field across the EU. The rather uneven adherence to Community law across the EU may result in some MS ignoring regulations that could place their industry at a competitive disadvantage (Wright, Taylor and Allen, 2010:159). The EC's approach may not help to make the European defence industry more competitive and better able to compete in a global market (Wright et al., 2010:157). The financial crisis may force the MS to temporarily slow down or even halt the process of market liberalisation (Terlikowski, 2011:37).

A higher degree of intra-EU defence trade may only be supported if there are a higher degree of harmonisation and more synergies that can result in common European capabilities and armaments (European Parliament, 2013c:3), but this possibility poses a classic chicken-and-egg scenario. Most big companies in the EU are open to "limited cooperation" in specific projects (Bailes and Depauw, 2011:32).

4.25.4 Transnational defence trade

Transnational defence trade has the ability to eliminate protectionism when MS retain and organise the most effective and efficient industrial capabilities in CoEs and purchase the rest of their needed items from other nations that have also established CoEs. It is foreseen that such a strategy will end duplication and result in declining costs. However, in the same way that the development of facilities for national defence markets leads to duplication and overcapacity at the EDTIB level, competing CoEs with international ambitions may bring the same results (Eriksson et al., 2007:82).

Nations cannot even agree to coordinate food production in order to feed and sustain their people, and therefore it is questionable whether governments will embrace free-market elements in arms production. The low defence budgets in the EU do not allow for CoEs to be determined by market forces and free trade, and Directive 81 in any case sets the stage for political decisions in the defence and security domain. For CoEs to be

competitive, EU DCs also have to ensure not only that they are the cheapest in Europe, but the cheapest globally.

4.26 DEFENCE PROCUREMENT PROCESS CHANGES

To project the extent to which new processes in Directive 81 will assist in reaching specific goals, some requirements and aims of this new legislation are assessed.

4.26.1 Increasing competition

The objective of the Directive is to facilitate competition in markets where it is absent” (Owen and McCall, 2008:35). The EC reshaped the regulatory framework in order to liberalise the defence market and revive competitiveness (Barone, 2013:4). The security equipment market already features a high degree of competition, because it is a monopsony (see 3.16 Protectionism in the defence market). Smaller MS are already quite open in their procurement decisions and there is less potential for Directive 81 to produce change in these cases. Larger nations are much less open and rely less on imported defence equipment.

These preferences may be too powerful to be overruled by changes in legal procedures alone (Owen and McCall, 2008:40). Opening the defence equipment market to full competition implies clear risks as well. Some new MS that privatised their defence sectors after their political transition into the EU lost industrial strength and competitiveness (Secades, 2011:30), because the intergovernmental agenda consists of a far wider range of issues than military security, which challenges the traditional account of security politics (Gorenflo, 2008:3; White, 2004:50).

Even though R&D is the main booster of new generation equipment, Europe is heavily constraining its structural investment in the field (Barone, 2013:2). Diminishing public investment in defence is likely to result, in the mid-term, in diminished competitiveness and a reduction in both size and relevance of the European industrial base. The industry’s ability to compete in the long term in international markets will be extremely endangered. It is unlikely that “the external market could represent a valid alternative to the narrowing internal one for a long time”; the US in particular will become a greater competitor to European companies rather than an ally (Barone, 2013:2). Without any

comprehensive European strategy each company, with only a few exceptions, is rather trying to survive on its own (Barone, 2013:4). It has been postulated that the biggest threat to Europe's defence industry is not the economic crisis, but the American (and perhaps in due time the Chinese) defence industries (De Vries, 2011:3-4).

Home market

The EC states that competitiveness in world markets can be maintained in the long run only when it is based on a truly European home market in which EU companies can operate freely in all MS and benefit from a demand side that is consolidated at the European level (EC Services, 2012:2). The European defence market remains fragmented and lacks efficiency, because MS continue to allocate the bulk of their defence spending to manpower rather than to procurement of new equipment and forward-oriented research. There is also a lack of harmonisation of military requirements and most procurement remains national, resulting in small production volumes and rarely producing economies of scale (EC Services, 2012:2).

In order to cooperate on an equal footing with their US counterparts, EU companies need to maintain their capacities as system integrators and to remain at the cutting edge of technology in relevant key areas (Becher, 2004:27). These developments would be possible only if European governments maintain at least a certain level of R&D funding and follow a common European strategy for their defence-related industries (Becher, 2004:27). It cannot be assessed whether the exclusion of R&D programmes between two or more EU MS from Directive 81 will be enough to motivate MS to jointly prioritise future R&D.

EU MS need to be attractive partners

The lack of major new programmes is gradually reducing the range of high-end technology products that are still fairly competitive, undermining the drive to increase exports (EC Services, 2012:2). The US defence budget also faces significant cutbacks and US reform aims to streamline export controls, making it easier for US companies to export. With European defence markets declining or stagnant, incentives to invest in European mergers and acquisitions are likely to diminish, with buoyant third markets offering more investment options (EC Services, 2012:2). Cost is obviously also a key success factor, and if leading EU DCs do not cut their prices to be the cheapest the

Single Market will lead to their demise and craft the cheapest SMEs into the leaders of tomorrow.

4.26.2 Cross-border purchases

Directive 81 aims to increase cross-border purchases and ensure savings. The volume of additional cross-border purchases that would be generated by Directive 81 is questionable because no statistical link can be found between publishing contract notices in the OJEU and importing equipment from other MS (Owen and McCall, 2008:35). The rate of savings to be expected from any cross-border trade in equipment that Directive 81 may promote has to also be assessed with caution (Owen and McCall, 2008:35). “The cost of the equipment purchased non-competitively would still be the same, irrespective of the publication procedure, while the administrative costs would be higher under the new proposal” (Owen and McCall, 2008:42).

4.26.3 Savings

Offset adds an estimated five to 15% to costs. The Directive would not alter this situation. It may encourage more cross-border tenders, but foreign bidders might build the expected cost of offsets into their bids” (Owen and McCall, 2008:35).

Furthermore, DCs may expend much effort and cost in preparing offset proposals with the expectation that the direct offset will be accepted under the Article 346 exemption, whereas in the end the offset proposal may not even be considered. The uncertainty regarding the correct application of the Directive and the implications of processes further increases effort, risk and cost.

The savings foreseen through establishing a Single Market for defence equipment in the EU are attributable to the exploitation of economies of scale, the learning effects of longer production runs and the dynamic effects due to more intense competition (Rosenkötter and Fritz, 2008:52). A study undertaken by researchers at the University of York concluded that an “open” EU defence market would yield annual savings of nine percent in defence equipment procurement, increasing to 11% if competition is not restricted to EU MS companies (Hofbauer et al., 2012:25). In 2011 terms, this would have equated to savings of between €3.2-b and €3.9b for all EU countries collectively (roughly €140-m per MS). This projection seems unlikely because of national political

interests (Edwards, 2011:15). The savings is also by far too little to compete with the benefits that offset ensured MS.

4.26.4 Reorganisation

Directive 81 aims for increased collaboration and cooperation between MS in the defence and security industry. Industry representatives do not expect a re-organisation of the defence sector at the European level in the short to medium term (Bailes and Depauw, 2011:23). The business models are based on present policies, namely national orientation and sustaining minimum capacities with modestly reduced employment levels and fierce competition in the export market (Bailes and Depauw, 2011:24). European joint projects are not widely perceived as an alternative by the industry and are therefore not actively pursued. “As a general rule, companies get involved in EU cooperation programmes only when such procurement cannot be financed at the national level” (Bailes and Depauw, 2011:24). If joint procurements between EU MS do happen, national security is the next hurdle as participants seek to manage the shared use and availability of such equipment.

4.26.5 Publishing tenders in OJEU

In ensuring that defence equipment is procured competitively, Directive 81 requires the publishing of all contract notices in the OJEU. However, additional reservations about the practicality of Directive 81 relate to this requirement, because it is not obvious that much improvement can be achieved for defence equipment that is currently procured non-competitively for strategic or practical reasons (Owen and McCall, 2008:35). The projected volume of additional cross-border purchases that would be generated by Directive 81 is uncertain, because there is no statistical link between publishing contract notices in the OJEU and importing equipment from other MS. The bulk of the increase in notifications is likely to concern services, whose delivery requires a local presence (Owen and McCall, 2008:35).

2012 results on advertising tenders in the EU

An early analysis of publication notices of defence contracts in TED (Table 4.8) gives some insight as to the application of Directive 81 by MS (EC, 2013f:14). As of the end of March 2013 France alone had published almost half of all contract notices (515 out of 1 083), with Germany second at 235.

The UK published 79 contract notices and awarded 43. It published the highest number of voluntary *ex ante* information notices, indicating that 187 contract awards were made without prior publication in the OJEU. A voluntary *ex ante* transparency (VEAT) notice is posted when a public body, without publishing a prior contract notice in the OJEU, has awarded a contract using the negotiated procedure for service concessions or for Part B services (generally those that the EU considers to be largely of interest only to bidders located in MS where the contract is to be performed, and which include health, education, and recreational, cultural and sporting services).

Spain and the Netherlands have not published a single notice. The disproportion between contract notices and contract awards in Italy (23 notices and 194 awards) and also in Hungary (11 notices and 23 awards) indicates the frequent use of negotiated procedure without publication or of other procedures not foreseen in Directive 81 (EC, 2013f:14).

Table 4.8 Number of notices under Directive 81 published in TED

(21 August 2011- 31 March 2013)

Country	Buyer Profile	Contract Award	Voluntary ex ante Info Notice	Contract Notice	Prior Information Notice	Total
AT		1		2	1	4
BE		2		8		10
BG		11	1	14	1	27
CY				3	1	4
CZ		10		36	36	82
DE	1	163		235	7	406
DK		26	59	42	3	130
EE		1		1		2
ES	1					1
FI		37	25	63		125
FR	1	132	44	515	3	695
HU	1	23		11		35
IT	2	194	11	23	82	312
LT		3	3	12		18
LV		2		3		5
NL		6				6
PL	2	3	2	7		14
RO		1		5		6
SE		4	1	17		22
SI				1		1
SK		5	3	6	3	17
UK		43	187	79	10	319
Total	8	667	336	1083	147	2241

Source: EC (2013f:15).

4.26.6 Resisting national awards

EU-wide publication does not necessarily lead to cross-border competition or cross-border award of contracts” (EC, 2013f:15).

Table 4.9 Number of contracts awarded under Directive 81, 2011- 2013

(21 August 2011-23 March 2013)

	Total contracts	Awarded cross-border	Awarded nationally	% cross border
AT	1	0	1	0
BE	2	1	1	50
BG	19		19	0
CZ	46	10	36	22
DE	162	1	161	1
DK	26	11	15	42
FI	56	33	23	59
FR	216	0	216	0
HU	75	1	74	1
IT	196	3	193	2
LT	6	0	6	0
LV	2	2	0	100
NL	7	0	7	0
PL	3	0	3	0
RO	1		1	0
SE	4	0	4	0
SK	5	1	4	20
UK	45	7	38	16
Total	872	70	802	8

Note: For a significant number of contracts (83) the nationality of the contractor was not recorded. Based on the fact that the majority of contracts were awarded to national operators, the EC assumed that this was the case for the contractors whose nationalities were unknown.

Source: EC (2013f:16).

Table 4.9 above shows that even MS with high publication rates, such as France (100% of 216 contracts), Germany (161 of 162 contracts) and Italy (98.6% of 196 contracts), awarded very few contracts to non-national suppliers. Defence companies might be reluctant to operate outside their home markets, particularly if doing so means competing with other established national champions (EC, 2013f:15-6). Before 2010, more than 50% of defence equipment procurement performed by the EU MS took place outside the framework of the EU rules on public procurement because of the Article 346 exemption (Heuninckx, 2011:62) (see 3.6 Procurement policy). Similarly, the Pentagon still awards around 98% of its procurement budget to US companies (O'Donnell,

2010b:1). Finland was the only MS that awarded more cross-border (59%) than national contracts (EC, 2013f:16).

4.26.7 Inviting more than three contractors

Once contracting authorities have committed substantial sums to a project, politically it is virtually impossible to end them (Owen and McCall, 2008:35). Therefore, when existing contracts must be renegotiated with a DC, the already-selected contractor in effect becomes a monopolist once the project has been committed. This contractor is able to secure a monopoly price, regardless of what price was agreed upon initially. “There is a considerable risk, therefore, that the economic benefits from having a greater number of bidders for these types of projects will be close to zero” (Owen and McCall, 2008:35). Moreover, contracting authorities may have no strong motive to invite more bidders, but may prefer to engage large, national companies with whom they are familiar and that can ensure greater possibilities of exploiting economies of scope and scale. It will also not always be possible to invite bids from “not less than three” capable contractors in order to qualify for access to the flexible procedures within Directive 81 (Owen and McCall, 2008:35).

4.26.8 Institutionalising defence

The EC set out to integrate the armament market, stating that Directive 81 established the regulatory backbone of a EDEM and applying—for the first time—specific Internal [Single] Market rules in this sector to enhance fair and EU-wide competition (EC, 2013e:5).

Political control

Export orientation, privatisation, outsourcing and internationalisation are likely to reduce the necessary level of political control over an industry that does not supply normal consumer goods “but is charged with delivering the tools for the state to maintain its monopoly of force” (Bailes and Depauw, 2011:28). This requires transparency and good governance, and it is doubtful whether the political will and the structures for such a process are in place in the EU (Bailes and Depauw, 2011:28).

4.27 EFFECTS ON NON-EU COUNTRIES

EU regulatory changes also affect non-EU countries, as regulatory modifications have secondary effects on the global defence industrial base (Hofbauer et al., 2012:32). Countries that traditionally rely on EU sources for their defence needs will be most directly affected. Directive 81 offers national governments the freedom to exclude non-EU bidders, which indirectly provides EU companies with advantages over non-EU companies (Hofbauer et al., 2012:32), because their regulations are compatible with EU regulations. However, in the same way, ITAR ensures a comparative advantage for US companies (Hofbauer et al., 2012:33).

Non-EU protectionism

In contrast to EU countries with their declining budgets and offset limitations, non-EU emerging countries show rising defence budgets. Investing in third countries may prove to be a more sustainable way of maintaining turnover. Key markets for defence suppliers in the Asia-Pacific region and the Middle East are also prioritising the development of their defence industrial bases and are expanding their offset regulations to protect national markets (Shanson, 2013d:6). EU DCs need to be ready to transfer design, manufacturing and assembly activities, as well as know-how and technology, to these emerging countries. Such transfers will further sideline the EU defence sector.

Non-EU countries have better opportunities for growing their defence industries post-Directive 81. MS that believe they will no longer be able to develop their national defence capabilities because of low budgets and the uncertainty created by the Directive may merge their technology with non-EU partners to open new markets or to strengthen their profile in the dual-use market. This may forge business relationships between EU and non-EU countries. There is also the chance that companies in smaller EU MS may sell their technology or assets to non-EU parties. However, with dual-use items featuring strongly in some defence sectors, many non-EU companies with no specific military know-how and technology will also look toward emerging markets to offer them a chance to enter the defence industry.

Benefits to Russia

Further protectionism measures were announced by major exporter Russia in June 2013, when the deputy premier and chairman of Russia's Military Industrial Commission

called for that country “to switch to the offset operating arrangement” (Shanson, 2013f:5). It was stated that in the future all import transactions will be concluded only if there are serious offset programmes (Shanson, 2013f:5).

Effects on Switzerland

Switzerland is geographically surrounded by EU MS, and Directive 81 may put the Swiss defence industry at a disadvantage. The EC’s interpretation of “third parties” in sub-contracting provisions refers to SMEs in the EU and therefore excludes Swiss companies. There is also the risk that offset may in the future benefit SMEs in the EU, while the few bigger DCs that act as the competence centres for the Swiss Armed Forces struggle to survive. As Switzerland is not an EU MS and has signed only a framework for cooperation with the EDA, Swiss defence and security capabilities will not be considered when the EU plans consolidation, CoEs and future strategies. The Swiss offset policy is well-established; however, as a result of Directive 81 Swiss DCs will no longer be able to participate in offset swaps with EU MS (see 2.6 Essence of offset). On the other hand, Swiss companies still benefit from inbound offset when the government procures defence equipment and foreign suppliers commit to industrial cooperation (offset).

Swedish Gripens for Switzerland

One particularly interesting political controversy developed beginning in April 2013 when Saab of Sweden—at the time the preferred bidder to deliver 22 Gripen fighter jets worth CHF3.3-b (US\$3.7-b) to Switzerland—agreed to deliver offset business of CHF300-m (US\$335-m) before Switzerland signed a contract (Saab, 2014:1). Saab focused on long-term partners for the Gripen programme and negotiated with Swiss companies, including SMEs in all regions of Switzerland, to comply with the required regional distribution of the IP benefits. The supplier had to ensure benefits worth five percent of the contract value in the Italian-speaking part of Switzerland, 30% in the French-speaking part and 65% in the German-speaking part (Shanson, 2013c:5).

Saab started creating hundreds of business relationships in Switzerland through the Swiss Industrial Participation (offset) programme (*Australian Aviation*, 2014:1). The company’s pre-offset arrangements resulted in 546 business contracts with 125 Swiss companies, valued at CHF402-m (US\$450-m). Armasuisse started analysing the

contracts and, before the cancellation of the purchase, had already confirmed that CHF250-m (US\$280-m) of the business counts towards industrial cooperation (Saab, 2014:1).

Before Swiss industries could start counting their benefits, however, the Swiss had to purchase the Gripens—and that was dependent on a national public referendum. Under Switzerland's system of direct democracy, citizens can have the last word on an array of issues if campaigners muster enough signatures from voters in order to force a plebiscite (*The Local*, 2014:1).

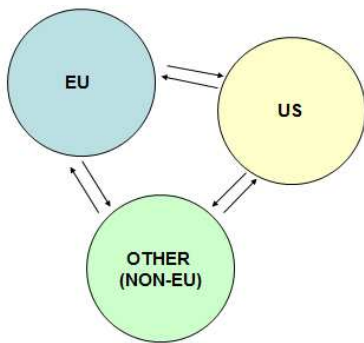
The coalition campaigning against the deal was steered by the left-leaning Socialists and Greens, as well as anti-militarists, but also included economic liberals who opposed the price tag (*The Local*, 2014:1). The opponents further argued that the model chosen by the authorities existed only on paper, with the manufacturer, Sweden's Saab, still developing it (*The Local*, 2014:1) and collected the necessary 5 000 signatures for a referendum on the Swiss Gripen Fund Law (*Defense Industry Daily*, 2014:7; Jennings, 2014:1).

The referendum was held on 18 May 2014. Twelve days before the vote, it was reported that Saab appeared to have had a better chance of winning after the Swedish defence company agreed to hand CHF405-m (US\$461-m) worth of business to Swiss companies (Hoyos, 2014:1), contingent on the referendum's approval. Nevertheless, despite this economic incentive, on 18 May the Swiss electorate shot down the Gripen deal with 53.4% of voters in opposition. Saab announced that it intended to continue with concluded offset agreements with the 125 Swiss companies in spite of losing the referendum. Even though the company has no legal obligation to deliver industrial cooperation, Saab will fulfil it voluntarily (Shanson, 2014g:6).

4.28 THE FUTURE OF OFFSET BENEFITS TO EU MS

In assessing scenarios pertaining to the future of offset benefits, Figures 4.6 to 4.8 on the following pages indicate that future benefits will go to non-EU purchasers.

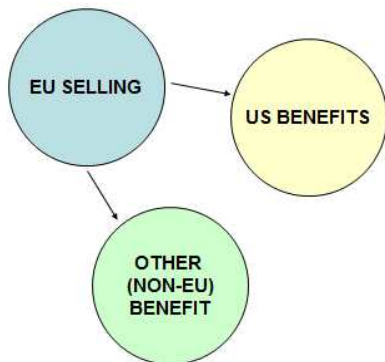
Figure 4.6 Flow of offset benefits globally, pre-August 2011



Source: Furter, 2014.

Before 21 August 2011, offset benefits could be graphically demonstrated as “equal” globally, as most countries purchasing defence materiel received offset (or localisation) benefits while most countries selling defence materiel fulfilled offset requirements.

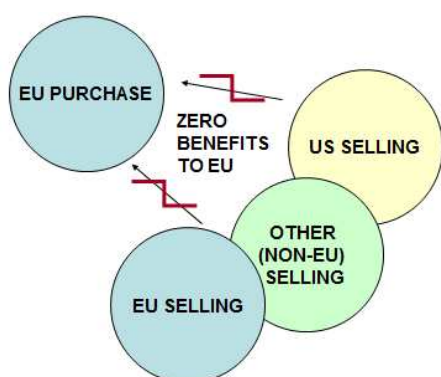
Figure 4.7 EU selling: Flow of offset benefits to non-EU purchasers post-August 2011



Source: Furter, 2014.

Since 21 August 2011, EU MS selling defence equipment to non-EU countries still have to fulfil generally 100% offset or localisation requirements, but may no longer receive any offset benefits.

Figure 4.8 EU purchasing: no offset benefits to EU purchasers post-August 2011



Source: Furter, 2014.

On the other hand, EU MS purchasing defence equipment from non-EU countries may receive no offset benefits to develop the defence industries in EU MS.

Fewer benefits

According to the analysis of arms transfers presented in Chapter 3, EU MS fulfilled an absolute minimum of US\$2.2-b offset annually in other MS during 2000-2012, with EU MS Germany, France, Italy, Sweden and Spain seemingly fulfilling much offset within the EU. Combining offset benefits from fellow EU MS and non-EU MS, which are estimated conservatively at US\$2.35-b per year, the total offset benefits obtained by EU MS during 2000-2012 can be estimated at US\$4.5-b per year, which may no longer be available since the launch of Directive 81 (see Table 4.10)

Table 4.10 Offset benefits received and fulfilled

TRADE PATTERN	PERIOD	OFFSET RECEIVED OR FULFILLED	ANNUAL FIGURE
EU-to-EU	2000-2012	EU received US\$28.77-b	US\$2.2-b
Non-EU- to-EU	2000-2012	EU received US\$30.68-b	US\$2.35-b*
	TOTAL	US\$59.45	US\$4.5-b
	<i>2008-2010**</i>		<i>US\$6.8-b*</i>
EU to non-EU	2000-2012	EU fulfilled US\$27.73-b	US\$2.13-b
	TOTAL	US\$27.73-b	US\$2.13-b
Non-EU to non-EU	2000-2012	US\$24.17-b	US\$1.85-b

*Note that between 1993 and 2005 the US fulfilled an average of US\$2.55-b offset in the EU per year (see Table 3.19).

**Outcome of 2013 study (see following explanation).

A study titled “Openness of MS’ defence markets”, done for the EC in October 2013, stated that the total annual value of offset that EU MS received from other EU MS is much higher (Shanson, 2013j,1-4; see also 4.30 EC assesses openness of the market

after Directive 81). Offset benefits to EU for 2008-2010 were calculated at US\$6.8-b (€5-billion) per year (Shanson, 2013j:1). This figure indicates that total offset benefits to EU MS could have been as high as US\$9.1-b annually (EU-to-EU US\$6.8-b, non-EU-to-EU US\$2.35).

Directive 81 mostly discriminates against the biggest purchasers of arms in the EU, who may no longer receive offset benefits in return for their expenditures. Without offset development, some smaller MS may no longer be able to purchase anything locally and will have to rely more heavily on strong exporters.

Biggest importers lose offset benefits

The removal of offset will have significant implications for importing MS. The five main EU defence importing countries, Finland, Greece, Poland, Portugal and Spain, will receive less local work-share, technology transfer and investment in R&D programmes (Edwards, 2011:11). They will be unable to use direct offset to support their indigenous defence industries and will be forced to opt for off-the-shelf purchases (Edwards, 2011:12). Net exporters Italy, Sweden, the Netherlands and the UK, which also received considerable imports from the US accompanied by offset benefits (Edwards, 2011:11), will be affected by fewer industrial benefits if Directive 81 is implemented as required.

Other EU MS with high import rankings globally that may receive no offset for their defence purchases because of Directive 81 include Norway (EEA member), Austria, Belgium, Bulgaria and Denmark (see Tables 3.28 Arms imports to the top 13 EU MS including Norway, 2009-2012; and 3.32 Highest estimated offset benefits received in one year by various EU countries).

Strategic value of indirect offset

EU MS may no longer receive indirect offset, which usually includes the supplier's commitment to mobilise foreign investment in civil sectors or results in the purchase of civil goods in the buying country (Edwards, 2011:10). Defence still has to play a critical role "in generating the technologies and skill-intensive jobs on which Europe's industrial future depends" (Calleja-Crespo and Delsaux, 2012:7). These skills and technologies do not pertain only to the arms domain. Indirect offset ensures that countries can reach

the required level to be able to operate and manage defence equipment. In EU MS a loss of indirect benefits may result in less capable and effective supporting industries.

Fulfilling offset outside the EU

MS exporting to non-EU countries will generally still need to fulfil offset obligations for defence procurements. If trends persist, these countries will still receive offset benefits from EU MS selling to them, allowing for the differences in national rules and waiver agreements. The main recipients of major conventional weapons during 2008-2012 (SIPRI 2013d) were as follows:

- India, receiving 12% of the global share;
- China, receiving 6%;
- Pakistan and South Korea, 5% each;
- Singapore, Algeria, Australia and the US, 4% each; and
- UAE, Saudi Arabia and Turkey, 3% each.

The four major Western European arms suppliers (France, the UK, Germany and Italy) have supplied a wide variety of sophisticated weapons to various purchasers (Grimmett and Kerr, 2012:11). These EU countries are potential sources of armaments for nations which the US chooses not to supply for policy reasons (Grimmett and Kerr, 2012:11). The UK, for example, sold major combat fighter aircraft to Saudi Arabia in the mid-1980s when the US chose not to sell a comparable aircraft. More recently, India made European aircraft suppliers finalists in its competition for a major sale of combat aircraft—a competition ultimately won by France. Saudi Arabia recently purchased 72 Eurofighter Typhoon fighter aircraft from the UK. The aircraft was built by four European nations: the UK, Germany, Italy and Spain (Grimmett and Kerr, 2012:11).

Future offset markets

Based on past EU export figures and the projection of the top military offset markets through 2021, EU defence exporters will fulfil the most offset in Saudi Arabia, India and Brazil (Kimla, 2013:slide 21). The main EU exporters that are especially expected to fulfil offset in Saudi Arabia, India, the UAE, South Africa and Turkey are Germany, France, and the UK (Holtom, Béraud-Sudreau et al., 2011:1-2).

Table 4.11 An example of where the biggest three EU defence exporters are still expected to fulfil offset

EU MS	STILL HAS TO FULFIL OFFSET IN:
Germany	South Africa and Turkey (second and third biggest recipients of German arms)
France	UAE (second biggest recipient of French arms)
UK	Saudi Arabia and India (second and third biggest recipients of UK arms)

Source: Holtom, Béraud-Sudreau et al. (2011:4).

Countries benefiting from less offset

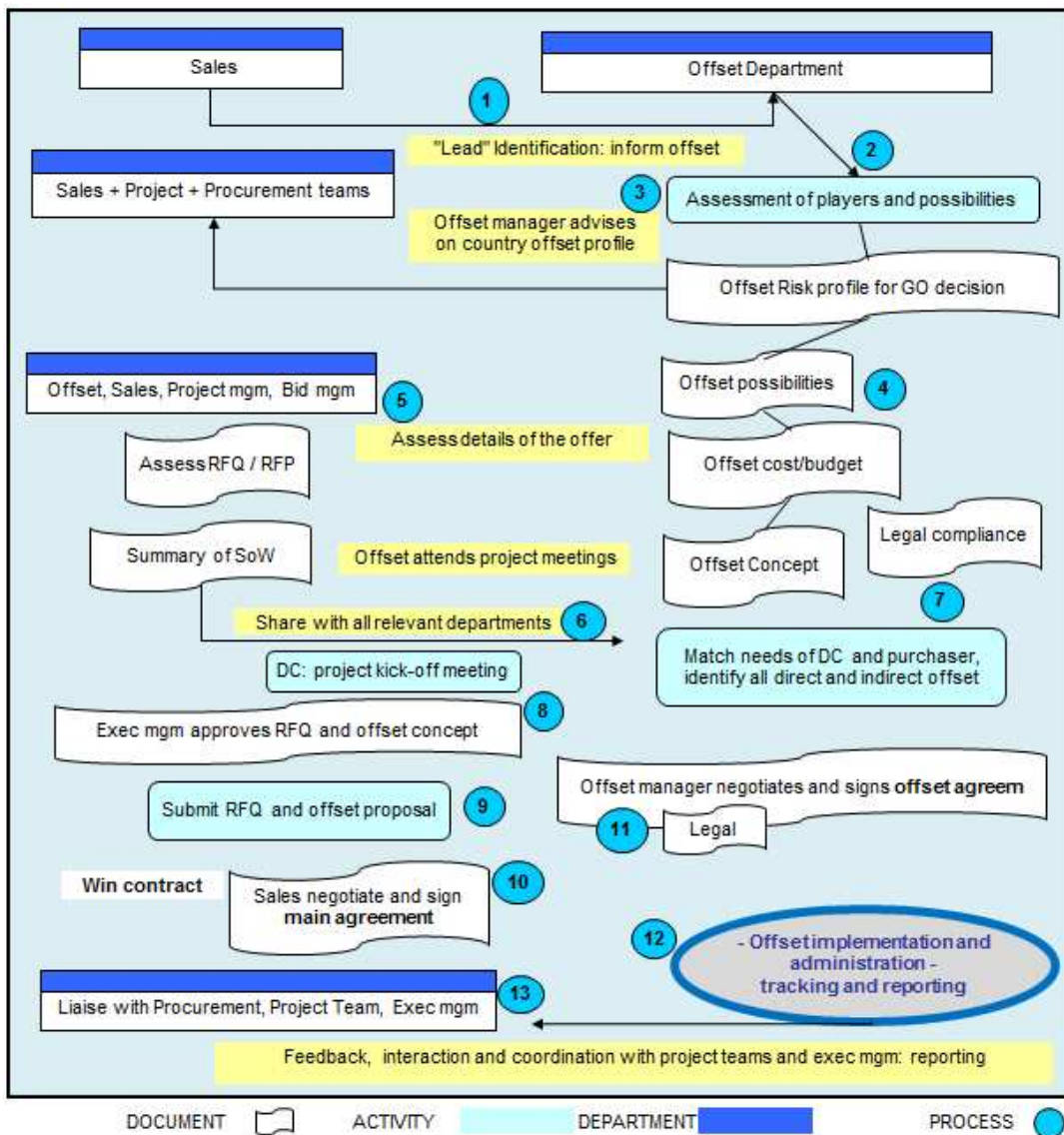
The main exporters to the EU will benefit from less offset requirements. The main suppliers of arms to EU MS between 2003 and 2007 were the US, Germany, the Netherlands, France, Sweden, the UK, Italy and Spain (SIPRI, 2013b; sales values can be calculated using this source by selecting specific countries on the website). During 2007-2011, the main suppliers were listed as Germany, the Netherlands, Italy, France, Israel, the US, the UK and Spain (Holtom et al., 2012a:2, 2012c:2). Sweden also delivered arms worth US\$4.3-b to EU MS during various periods between 2000 and 2012. Export figures for 2003-2012 indicate that the US and Germany, as the biggest suppliers of arms to EU MS, will likely be the biggest beneficiaries of Directive 81 (SIPRI, 2013b:main suppliers to EU MS, 2003-2012).

However, given the declining EU MS defence budgets, major EU suppliers will have to find markets in non-EU countries. For these suppliers in the EU, the client geography may change but the offset conditions will stay the same, at least for the foreseeable future.

4.29 OFFSET MANAGEMENT CHANGES AND NEW SKILLS

In an industry that is being transformed and a market challenged by various and different internalities and externalities, DCs and offset managers need to re-strategise. Increased exports will require DCs to rely on different, non-national stakeholders, while new markets may pose increased risks and more cultural diversity. In establishing cooperation agreements with countries on other continents, offset managers may be required to increase their knowledge of organisational and legal frameworks.

Figure 4.9 Summary of offset process pre-Directive 81



Abbreviations: Mgm: management; RfQ/RfP: Request for quotation or proposal, SOW: statement of work; DC: defence contractor; exec: executive, agreem: agreement

Source: Furter, 2014.

The flow diagram in Figure 4.9 depicts the process that offset managers generally follow to manage offset requirements, and the parties with whom they interact. The figure reflects the process as explained in 2.11, Offset management, heading "Interaction between DCs and authorities". Prior to Directive 81, offset in the EU was accepted as a protectionist practice regulated by the national government. The national offset authority in a MS was the guardian of offset rules and regulations, negotiating and approving offset plans and solutions. In an effort to comply, offset managers in DCs followed a certain process dictated by the national rules of the procuring government. Offset

managers maintained strong relationships with the relevant offset authority and relied on this authority in the EU MS to approve offset solutions. The offset authorities in MS set the rules and offset managers at DCs aimed to comply (see Figure 2.8). Under Directive 81, MS offset authorities may no longer have autonomy in defence and security procurements and need to comply with EC rules.

Since the launch of Directive 81, the EU now aims also to regulate the defence market, prioritising the EU Single Market based on commercial trade and eliminating offset. As the guardian of the treaties, the EC drafts and implements EU legislation and aims to create an EDEM, and it may investigate defence procurement processes (EC, 2014b:1). The EU MS become the negotiators, as they must protect their national security interests within a trade context dictated by the EC. EU MS are expected to develop the EDTIB, improve intra-EU relations and trade and comply with EU law. Figure 4.4 demonstrates how Directive 81 may change the roles of offset authorities in MS and of offset managers. The EC aims to take on some responsibilities of the authorities in EU MS, while EU governments may in some cases act as offset managers.

Offset management challenges

As a result of Directive 81, offset managers have to cope with these challenges:

- little transparency between MS relating to their reactions to Directive 81;
- few examples to set a trend;
- incomplete legal interpretation;
- managing RfQs (request for quotations) on a case-by-case basis;
- ensuring EU MS collaboration, while some EU defence budgets are declining;
- acceptance of offset plans depends on MS' negotiations with the EC;
- in some cases two-party negotiations become three-party negotiations, with the EC investigating offset offers;
- in complying with bids, offset processes are determined by a project-by-project *assessment* instead of following MS' national offset regulations; and
- offset managers need skills in legal matters and knowledge of EU institutions.

Coping with the new process

The legal framework developing in support of Directive 81 is still murky, but at this point the main differences can be compared to the pre-Directive offset process shared in

Table 2.7. After Directive 81, Offset managers are experiencing the following changes in how they represent their company's interests:

Table 4.12 Post-Directive 81: Offset management changes in EU MS

PROJECT PHASES	OFFSET MANAGEMENT in EU POST-DIRECTIVE 81
PRE-SALES	Offset managers are not able to share information proactively on offset policies in the MS where the DC wants to sell, because offset in EU MS is generally now determined on a case-by-case basis, depending on whether it is essential to protect national security interests; the offset manager is not able to assess offset possibilities because solutions no longer align with national offset policies and rules in the purchasing country.
TENDER	Marketing 'go' meeting where DC decides whether it will make an offer.
	the RfQ/RfP may require a certain quota of offset, confirming that the MS views the procurement to be essential for its national security interests and therefore excluding EU law; if EU law is excluded on the basis of the Article 346 exemption or an exclusion in Directive 81, the national offset rules in the purchasing country are valid but should exclude indirect offset;
	when the DC assesses whether it wants to make an offer and needs to do a risk and cost assessment on offset, offset managers are not able to give a clear indication of solutions and cannot draft the initial budget and do an initial risk assessment with certainty, because the procurement may or may not be regulated by EU law and the manager will not know for sure what activities the purchasing country will deem to be essential for its national security interests;
	offset managers will make the effort to devise and draft offset proposals without knowing for sure whether the offset requirements may be disputed by the EC, and if the MS's offset requirement is questioned or investigated by the EC and the application of Article 346 is disapproved, the offset requirements may be
	the offset manager may decide to include a clause in the offset proposal stating that the offer will be valid only if not contested by the EC (or if accepted by the ECJ should a court case ensue);
	no indirect offset solutions may be required by the purchasing government, but DCs may wish to support long-term business relationships with the purchasing country and may therefore decide to include activities in the tender that are similar to indirect offset and target the dual-use or commercial market; such offers may eventually result in agreements between the DC and private companies in the purchasing country and be managed as business-to-business activities; R&D projects may also be proposed for the private sector, which will move defence further out of the public domain;
	Directive 81 allows sub-contracting up to 30% of the contract value to "third parties", which the EC interprets to mean SMEs in EU MS and not global companies; most MS did transpose this provision of Directive 81 into national legislation, and if DCs decide to fulfil this requirement, offset managers have to use appropriate SME sub-contractors in the EU; if an exemption applies, sub-contracting is expected to be national.
	Offset manager submits summary of offset requirements to procurement to include in the RfQ to possible subcontractors, detailing their commitments.
NEGOTIATION	the DC's offer to the MS includes an offset proposal; if the offset requirement or procurement process is disputed, the MS may be expected to defend its decisions before the EC or the ECJ and the offset manager or DC may not be privy to such discussions; the offset manager or DC is eventually informed by the MS whether the offset requirement was approved.

Source: Furter, 2014.

Offset process changes pre- and post-Directive 81

By way of summary of the discussion in this chapter, Figures 4.10 and 4.11 describe the offset process changes resulting from Directive 81 in fuller detail, showing which new issues demand management attention.

Figure 4.10 Comparing offset process changes after Directive 81

OFFSET PROCESS IN THE EU	
PRE-DIRECTIVE 81	POST-DIRECTIVE 81
Defence contractor receives RfQ	RfQ is advertised
	If Directive 81 applies: new skills: interpreting legal regulations
	..No offset is required
	..The EC states that Sol and SoS are guaranteed when EU MS purchase from one another
	..If 30% sub-contracting is required, MS has to decide whether it should be to EU SMEs or globally
Offset is required:	If EU law is excluded on the basis of Article 346 or an exclusion in Directive 81:
..Offset solutions had to comply with national offset policies in MS	..Directive 81 does not apply
..To assess compliance, offset managers consulted national offset rules and the RfQ	..Direct offset is required to protect national security interests
..National offset rules determined offset quota, percentage direct and indirect, threshold, penalties, multipliers, fulfilment period	..Offset managers consult RfQ and apply new offset policy in MS (if available) or make contact with relevant offset authority to clarify offset requirement
	..DC decides whether direct % offset can be fulfilled (intellectual property)
	..In order to list possible offset solutions, offset managers assess defence, technical, maintenance capabilities, infrastructure and political profile of purchasing country and determine whether the required offset may be essential to protect national security interests and which activities may be accepted as possible solutions new skills: knowledge of EU MS strategies
	..Sub-contracting will be national
	..Biggest dispute is over indirect offset; with Directive 81 only regulating the activities of contracting authorities in MS, offset managers may decide to propose business-to-business projects that are similar to indirect offset
Assess offset risks	Offset risks may increase because only direct offset is accepted improve skills in risk management
Assess possible offset solutions	Assess possible offset solutions
.. Direct	..Direct
.. Indirect	..Consider B2B cooperation
Prepare offset proposal and submit	Prepare offset proposal and submit
..Defence contractor optimises offset benefits to enhance its position in the tendering	..If a party complains, or the EC is informed of the offset requirement, it may be disputed and MS may be called upon to motivate its offset requirements to the EC, or the ECJ
	..If offset requirement is disputed, it may be cancelled
	..DC may decide to conclude bilateral agreements with local companies that would enhance long-term relationships between the parties (benefits similar to indirect offset)
If successful:	If successful and offset requirements are not questioned or investigated but condoned:
..Negotiate proposal with offset authority in purchasing country	..Sign offset contract together with main supply contract
..Sign offset contract together with main supply contract	
Implement direct and indirect offset solutions	Implement direct offset solutions

Source: Furter, 2014.

Figure 4.10 assists offset managers in establishing a new offset management process that complies with the Directive 81 requirements.

Figure 4.11 Offset changes in the EU after Directive 81

The changes in the offset regime resulting from Directive 81 are listed and compared in Figure 4.11 under subjects that include new EU regulations, the award process, offset benefits and sovereignty.

Pre-21 Aug 2011 OFFSET IN THE EU (GENERALISATION OF PROCESS)		Post-21Aug11 OFFSET IN THE EU
RfQs Government issued a RfQ RfQ did not have to be made public (government had the option to only include certain suppliers)		RfQs Government issues a RfQ RfQ has to be made public (transparent procedure, non-discriminatory) (all suppliers must have an equal chance to participate) Procurement under the new regulations must follow new common advertising rules for publishing in OJEU
THRESHOLD Offset required for all contracts above the set national threshold		THRESHOLD EU threshold for defence and security procurement
QUOTA AND TYPE OF OFFSET MS generally required 100% offset MS could dictate a percentage direct and indirect offset		QUOTA AND TYPE OF OFFSET Directive 81 (EU law) allows no offset Contracting authorities in MS may call on Article 346 or an exclusion in Dir 81 and require offset (if EC investigates the requirement, MS need to prove offset is essential for national security) No indirect offset may be required MS has right to exclude bidders that will not honour SoI requirements or fulfil SoS requirements MS may request that 30% of the contract value be sub-contracted
AWARD PROCESS Open procedure National preference ensured SoI, SoS and the development of supporting infrastructure		AWARD PROCESS MS may follow restricted procedure/negotiated procedure with prior publication of contract notice If justified by stipulated rules, non-competitive (or limited competition) procurement may be carried out under the negotiated procedure without publication of a contract notice DC need to prove it is able and willing to honour SoI DC to guarantee SoS: capabilities, reaction time, availability, logistics DC may choose to conclude further bilateral agreements with MS to enhance long-term cooperation which will be outside of the scope of Directive 81 If Directive 81 applies, no offset is required If an exemption is applied, offset may be requested in the interest of national security If offset is sanctioned, the national law of the MS as updated after Directive 81 is valid If the requirement is investigated, the offset requirement may be rescinded from the contract If the EC does not request the MS to prove why offset is essential for its national security, the MS awards the contract to the cheapest bidder/chooses most econ advantageous tender Post-tender negotiations are allowed There are a range of legal rights and remedies available to aggrieved parties who suffer or risk suffering loss or damages as a result of a procurer's failure to comply with the new regulations
OFFSET OFFER Offer had to comply fully with national offset laws or regulations and detail: direct & indirect offset activities, business & implementation plans, benefits The offset agreement is managed according to the offset rules in the MS		OFFSET OFFER Offset has to comply with EU law
NON-PERFORMANCE If the DC does not meet offset milestones, or comply with MS requirements, penalties can be imposed as liquidated damages or merely as penalties, with the obligation escalating and passed on to a new, future milestone		NON-PERFORMANCE If EU law is excluded by an exemption/exclusion, the national offset policy in the MS determines penalties
BENEFITS Purchasing government received offset benefits equal to the value of the offset quota, including defence-related knowledge, sub-contracts, technology, local purchase orders for items and components, thus the purchaser was put into a position to manage and maintain its systems After the delivery of the system, the paths of the supplier and end-user (MS) split and the MS took full control of operation, maintenance and repair of the purchased system, also possibly modifying it		BENEFITS Purchasing government may receive direct offset if it can prove that it is essential for its national security EC states that SoS is ensured EU-wide and after the delivery of the system, the end-user stays dependent on the supplier for maintenance, repair and possible modifications
OFFSET IN NON-EU DCs in EU selling to foreign governments have to commit to offset		OFFSET IN NON-EU DCs in EU selling to foreign governments have to commit to offset
INBOUND OFFSET When EU MS purchased defence equipment, local companies generally received offset benefits equal to the value of the contract value EU companies and industries also received indirect offset benefits		INBOUND OFFSET DCs and other companies in EU MS may no longer receive offset benefits when governments purchase defence equipment Local companies and industries may receive no indirect offset benefits
SOVEREIGNTY The MS exercised sovereignty to manage its defence and security matters and determine the process of offset fulfilment		SOVEREIGNTY The EC can investigate MS's decisions regarding the management and development of their defence and security industries and refer cases to the ECJ

Source: Furter, 2014.

While it is stated that indirect offset is no longer acceptable, suppliers may still choose to enhance their long-term business relationships with purchasing countries through non-defence projects.

4.30 EC ASSESSES OPENNESS OF THE MARKET AFTER DIRECTIVE 81

Offset underground

The 2013 study for the EC measured the impact of Directive 81 on the European defence market with relation to the competitiveness of the market; the effects on sub-contracting; consolidation trends in the EDTIB; and the phasing out of MS' offset policies (Shanson, 2013j:1; see 4.28 The future of offset benefits to EU MS). The years 2008-2010 were used as a baseline period to provide a picture of the degree of openness of the market before the transposition of Directive 81 into national laws. The study assessed the extent to which contracts were awarded across borders and how frequently local companies received deals as part of offset arrangements (Shanson, 2013j:1).

During the period under review, 1 840 defence contract awards were published EU-wide in TED, the electronic platform of the EU's Official Journal, and the Electronic Bulletin Board (EBB). The advertised tenders amounted to €8.8-b and, according to the EDA, represented only 3.3% of EU MS' total defence procurement during the three-year period (Shanson, 2013j:1). Of all the contracts advertised, 65% (€5.8-b) were awarded nationally, 26% (€2.3-b) were awarded to operators in other MS, and only four percent (€0.4-b) was awarded to operators in third countries (Shanson, 2013j:1).

Intended consequences

The authors acknowledged the difficulty of judging what would have happened to the EDTIB in the absence of Directive 81, stating that the uniqueness of the EDEM and the EDTIB made it difficult to find industries that are "otherwise similar" to carry out a comparison (Shanson, 2013j:1). The report relied on a set of "expectations" about the impact of Directive 81, including mostly "intended consequences" that could have a dramatic impact on the EDTIB and the defence and security industry in Europe.

However, policies can also have unintended consequences. Directive 81 could result, for example, in EU MS selecting US equipment on the basis that they offer superior value for the money (Shanson, 2013j:2). EU MS may prefer US suppliers because they can still require offset when purchasing defence equipment through the US's Foreign Military Sales (FMS) programme. The US State Department reported that FMS more than doubled in one year, from US\$34-b in 2011 to US\$69-b in 2012 (Shanson, 2014e:6).

If EU companies adopt a non-EU market focus, Europe risks losing the industrial and technological capabilities that are necessary to develop and produce what is needed for its security. Moving production to the purchasing country and transferring technology are becoming minimum requirements for many major export orders, all of which may lead to cutbacks in manufacturing facilities and employment in Europe, threatening the long-term competitiveness of the EDTIB (EC Services, 2012:2). "Increasing or even maintaining key strategic defence assets in times of scarce financial resources will therefore be a major—if not the main challenge in this policy domain" (EC Services, 2012:2).

Impact on SMEs unclear

The 2013 EC report stated that the impact of Directive 81 on SMEs remained unclear and recommended a study to measure whether SMEs' numbers and shares of value-added have changed by 2014. In such a study, the report urged, special attention should be paid to MS that have abandoned their offset policies (Shanson, 2013j:2). The authors concluded that if Directive 81 succeeded in opening supply chains, it would create opportunities for the defence industries in other MS, but they questioned whether the relevant industries are sufficiently competitive to exploit such benefits (Shanson, 2013j:3). It was clear once more that the phasing out of offset and the increasing intensity of competition create great challenges for MS and for European companies.

The report stated that for Poland and Romania, the two most important defence producers among the newer MS, the phasing out of offset comes at a time when they would be looking to offset "to fill the void left by refurbishing decommissioned Soviet-era equipment in a number of export markets" (Shanson, 2013j:3).

Offset could survive in all but its name

The report concluded that despite Directive 81, offset might survive in practice. It stated that bidders could still offer offset in all but name, “teaming up with local sub-contractors and presenting these arrangements as efficient supply chain solutions” (Shanson, 2013j:4). Defence companies were of the opinion that the political nature of offset and the risk of losing contracts by not offering offset meant that companies would continue to propose local cooperation (Shanson, 2013j:3).

Directive 81 “has changed the status of offset from an obligation to one in which EU industries are begged or forced to work with one another” (Shanson, 2013j:3-4). The EC’s objective may be to end offset and increase transparency in defence procurement, “but the result appears to be that offsets are going underground and continue to survive in secret deals” (Shanson, 2012h:1).

4.31 POSSIBLE OUTCOMES: THREE TRENDS

An “open” EU defence market may maintain a preference for national procurement, result in intra-EU trade or ensure transatlantic procurement.

- If national procurement persists (offset is still required): Authorities procure from their national industry to develop local capabilities, accepting that their purchases do not offer economies of scale and can pose economic inefficiencies; local preferences are motivated by the argument that national involvement is the only way to protect national security interests and guarantee SoS and Sol; MS may strive to invest in defence and security R&D to ensure that their national industry does not starve from technological advancement; however, multiple R&D projects in the EU will still result in duplication and EU DCs would prioritise local, independent projects to ensure the advancement of their own technology and an advantage in export markets.
- If intra-EU procurement is favoured: proximity, past business relationships and no (or decreased) offset requirements may motivate EU MS to procure equipment from one another, resulting in foreign dependencies within the EU; however, in a globalised world it is difficult to perceive the benefits of such decisions. Low prices in non-EU countries are economically more efficient and MS will have to balance cost requirements with their perception of how they can protect national security

interests; without offset benefits that pass the know-how from the supplier to the end user, MS may become creative in ensuring that they keep control of their materiel. Since defence is not a part of the commercial domain, it cannot be assumed that MS with developed defence industries will specialise in one domain such as land systems in order to achieve economies of scale, while purchasing all other defence and security capabilities from foreign countries that also specialise and manufacture effectively and efficiently. Although the EC is prioritising CoEs in the EU, Directive 81 is of minimal assistance in this regard, in the sense that EU MS are open only to limited cooperation and only two or three EU MS with the same political and economic profile may agree to join forces if they can all offer some form of advantage. Regionalisation of the EU defence domain can be viewed as an afterthought after globalisation, with increasing defence budgets outside the EU luring DCs to focus on non-EU markets.

- Transatlantic procurement: Governments globally prioritise SoS, which demands trust, as well as an excellent past record. Free-market rules will allow only certain companies to advance; only DCs demonstrating high innovation and compelling sales propositions will survive in the global defence market. The most internationalised DCs may overcome difficult cultural barriers, while the DCs with a large variety of activities and locations may use their diversified involvement to invest in new markets and move production to where it is required.

Outcomes of the three trends

Current defence budgets in the EU do not support intra-EU trade, and those EU MS that are most active in procuring view arms sales as a matter for national decision and are increasing their protectionism, as discussed earlier in this chapter under 4.25.1 National programmes). The non-EU countries with the largest defence budgets prioritise offset, and their purchases will ensure that they gain much expertise and technology from EU DCs. The largest DCs in EU MS will compete in the global market, partner with non-EU players and be instrumental in moving defence and security activities to regions outside the EU. DCs will follow the market, while governments will have to make increased efforts to ensure national security.

Political integration

For the EU, the real crisis is rooted in the more fundamental question of how the European continent will be ruled in the 21st century. Directive 81 comes at a very inopportune time for Europe. While individual countries are trying to gain global position, ensuring their political standing and overcoming austerity measures, the EC is seeking to institutionalise defence and consolidate political power. It also seems inappropriate that the EU, in its efforts to mould Europe into a single economy, has to act as the “big brother” of trade freedom in an industry that is struggling to hold its own in the international arena.

Defence procurement rules in the EU are still uncertain, with few cases setting precedents. In a slow-moving market further hampered by politics and finances, MS seem to be hesitant to act without knowing whether they can ensure localisation. DCs are generally global vendors whose primary aim is to survive the economic crisis by prioritising profitability and sustainability in growing markets. EU governments are in a more precarious position, bound by national budgets and ballots, and some of them could lose their defence capabilities as a result.

4.32 CONCLUSION: IMPLEMENTATION OF DIRECTIVE 81

Chapter 4 has analysed the essence of Directive 81, giving a detailed history of its transposition and implementation up to the present time.

Directive 81 and the EC’s interpretative communication on the application of Article 346 in the field of defence procurement have extended the ambit of the Single Market to the defence and security sectors. The new legislation pertaining to defence procurement is described as having considered the specificities of the defence market by including provisions for SoS, SoI and a maximum of 30% sub-contracting to third parties. These aspects could be interpreted as factors that ensure national security interests and therefore can substitute for offset. Article 346 can be invoked as a basis for claiming exemption from EU law when a nation believes that its security interests cannot otherwise be protected. However, Directive 81 is subject to a number of legal uncertainties in relation to the interpretation of Article 346 and the relationship of various exclusions to other overarching treaty law (BAE Systems, 2013:29).

While the EU aims for harmonisation to support the enforcement of legal requirements in the field of public procurement, Directive 81 has resulted in most EU MS assessing offset on a case-by-case basis. This outcome decreases transparency and complicates the monitoring of related actions. Directive 81 requirements may further be subject to unpredictable decisions in courts, which may not coincide with the political intent of the legislation (BAE Systems, 2013:29).

Retarding the industry

In Western Europe, austerity has not prompted broad cooperation and ad hoc bilateral alliances have not evolved into multilateral coordination. Against a background of falling European defence budgets, the uncertainty regarding the procurement process in the EU can therefore be seen as further retarding the industry. In February 2014, the defence and security tenders advertised by EU MS included no major purchases. Only 45 elements were listed (TED, 2014:1). The tenders included requests from EU MS for footwear; fire-fighting equipment; bullet-proof vests; and laboratory, optical and precision equipment. A requirement for repair and maintenance services for military aircrafts, missiles and spacecraft from Finland-Tampere was for only €510 997.

Governments are selling surplus material, following strategies of force reduction, privatisation, diversification, and export facilitation (IHS Janes, 2013a:slide 6). Some EU MS support open competition in the defence sphere in principle but have been reluctant to agree that the EC should have a greater role in policing a Single Market in defence and promoting cooperative procurement programmes (Bond, 2014:1). It is hard to perceive how the EU defence market will become more competitive when offset is no longer required in the EU. MS that cannot afford to develop their defence industry without offset benefits may have to rely on the EU for the protection of its people and assets, or they may establish new partnerships with non-EU countries.

Future markets dictate

Trust, cooperation and an acknowledgement of shared interests are required to make the desired changes in the EU defence and security market a reality. The Directive may not have the required outcome if:

- the leading technology in defence belongs to non-EU companies;

- EU DCs seek partnerships with non-EU companies in order to survive;
- EU defence industries diversify and seek unique selling propositions (USPs) in space, renewable energy or nuclear solutions for civil applications; or
- non-EU countries purchasing defence equipment ensure through offset that manufacturing and technology are moved to the buying countries.

Only in the second half of 2016 will the EC evaluate specifically whether and to what extent the objectives of Directive 81 have been achieved with regard to the functioning of the Single Market and the development of an EDEM and an EDTIB, having regard for, among other factors, the situation of SMEs (OJEU 2009a:122). Where appropriate, the report shall be accompanied by a legislative proposal.

MS' annual review

In order to permit assessment of the results of applying Directive 81, MS have to forward a statistical report to the EC by 31 October every year. The report needs to be prepared in accordance with Article 66, which requires that MS specify the number and value of contracts awarded by MS or third-country contracting authorities, addressing supply, services and works contracts separately (OJEU 2009a:120). These annual reports may share some light on how MS are proceeding.

Having comprehensively characterised the central problem of this study—namely, the enormous economic, political, and strategic question marks surrounding the EU's attempt to move away from offset—we will turn in the next chapter to the methodology adopted for this research.

CHAPTER 5

RESEARCH METHODOLOGY

5.1 INTRODUCTION

Offset is an integral part of international trade, defence contracts and management constructs. An international survey of offset managers was conducted to assess the possible outcomes of Directive 81 for defence procurement and offset in the EU, determining future defence markets. The survey data were analysed systematically, resulting in a collective view of possible implications of the new EU defence procurement legislation for industrial capacity and capability, arms transfers, offset fulfilment and new markets.

The research was done by collecting and assessing empirical data while concurrently analysing government policy, profiling the defence industry, and interpreting new legislation and its possible implications to defence procurement. New frameworks were established to explain the offset management process in the EU, while any changes resulting from Directive 81 were indicated and compared to the pre-2011 process. In order to arrive at a conclusion based on normative guidelines of how new legislation has changed the nature of trade in a specific industry, the findings were tested against, and compared with, current theoretical discourse and perceived knowledge of this global subject.

This chapter describes the methodology used to carry out the survey. It presents the rationale for the study, the sample selection, and the data collection process. The questionnaire, including the establishment of validity and reliability, is also discussed.

5.2 RATIONALE FOR THE STUDY

Offset is the only practice that allows for the free transfer of industrial benefits from the seller, who owns the expertise and know-how, to the purchaser, who wants to be placed in a position to independently use, manage, repair, and maintain the military equipment or systems that it has purchased. Offset makes it possible for purchasing governments to receive knowledge and capabilities linked to those purchases and designated to

protect their people and assets. When governments lose their authority to decide about industrial benefits when purchasing defence equipment, they may no longer be in a position to develop their defence industry. An elimination of offset may resist duplication of defence and security capabilities in the EU, but it may also force MS with less fully developed defence industries to eventually rely on their EU neighbours or on EU or non-EU suppliers to ensure the proficiency of their armed forces. Directive 81 also placed indirect offset on the back burner. The current financial downturn further complicates national security, decreasing defence budgets in the EU.

Main focus of the study

The research is exploratory in that it sought new insights and asked questions to assess phenomena in a new light (Saunders, Lewis and Thornhill, 2009:139). The survey constructed for this research sought to determine offset managers' agreement or disagreement with the following statements contained in the survey:

1. the application of Directive 81 is clear (Statement 2 in the survey);
2. in order to protect its national security interests, every EU MS has the exclusive right to decide whether and when it wants to apply Article 346 TFEU to exempt a defence and security procurement contract from EU law (Statement 14);
3. the EU defence market will become more competitive when offset is no longer required in the EU (Statement 3);
4. EU MS still purchase most defence equipment from their national suppliers (Statement 24);
5. Directive 81 will increase intra-EU defence trade, guaranteeing that EU MS will purchase more defence equipment from one another (Statements 4 and 8);
6. indirect offset is important to purchasing countries, because it develops a country's general infrastructure, skills, know-how and industrial capabilities that eventually ensure national security (Statement 15);
7. the fact that "national security interests" are not defined makes Directive 81 nearly meaningless, because the gist of the whole Directive is based on how this concept is interpreted (Statement 20);

8. until the interpretation of Directive 81 becomes clear, EU MS in need of offset may decide to act outside of the scope of Directive 81, completely separating agreements for industrial benefits from the defence procurement contracts (the UK's DSIEP [Defence and Security Industrial Engagement Policy] is an example) (Statement 21); and
9. Directive 81 has dramatically changed the daily management of offset by defence companies fulfilling offset in the EU (Statement 26).

Further aspects examined included offset managers' views on offset and industrial capability, EU strategies, the Directive 81 defence procurement process, defence markets, and global scenarios.

5.3 THE RESEARCH DESIGN

Theoretical framework

The theoretical construct that the survey attempts to measure is the influence of government policy and legislation on countries' capabilities and sovereignty and on patterns of global trade, with specific reference to the defence and security industry. Identifying the implications of new policies and legislation can lead to improved policy-making and trade legislation that balances economic and political interests.

Types of research and the reason for choosing specific method

Both quantitative and qualitative methods are widely used in business and management research (Saunders et al., 2009:151). This research project is quantitative and was performed by collecting and assessing empirical data. Primary, as well as secondary data were collected.

Primary data were gathered from managers responsible for offset fulfilment and offset policies. Data were obtained by use of a self-administered questionnaire (Saunders et al., 2009:362) completed by a sample of 77 respondents, of whom only 71 were eventually included. A total of 100 offset managers were invited to take part in the survey; at leading defence companies with offices in various countries, more than one offset manager may have received the survey (see "Administration of questionnaire" under 5.4 below). Responses from five respondents were deleted because they

indicated either that they have been focusing on offset in non-EU countries in the past year or longer, or that another manager in their group is mainly responsible for offset in the EU. One respondent completed the survey but also indicated in an e-mail to the researcher that he was not certain about the current status of Directive 81 and offset in the EU; his response was therefore deleted from the sample.

Seven offset managers declined to participate due to project deadlines or because they had not participated in making offset proposals in the EU. Sixteen others indicated that they were travelling or did not reply at all. The final sample (n = 71) contained responses from 21 countries and from 65 companies or institutions.

The questionnaire was devised to gather the experiences and perceptions of offset managers on the impact of new legislation on trade in the defence industry, particularly Directive 81. The statements were formatted in such a way that respondents could share views on offset as a discipline, including its processes, requirements and implications, while also offering possible outcomes of Directive 81. Respondents could add comments on all statements.

Quantitative research

Quantitative research aims to classify features, count them and construct statistical models in an attempt to explain what is observed (Neill, 2007). The data analysis for this study included descriptive statistics and graphs representing the numerical data. Quantitative research follows a positivist research paradigm, which “maintains that knowledge is about description rather than questioning” (University of the West of England, Bristol, 2007:1). Positivism draws on measurable evidence and prioritises empiricism, which focuses on the idea that observation and measurement form the core of the scientific endeavour (Istance, 2001). Therefore, positivism subscribes to the scientific method and seeks to provide the basis for descriptive laws based on consistencies in patterns and properties.

Available literature

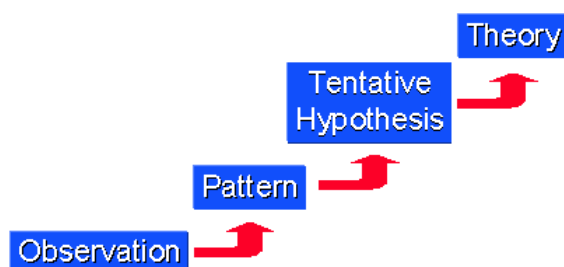
Secondary data were gathered through a review of available literature, which aimed at providing a clear representation of government policy, the defence industry, the defence market, new EU legislation relating to defence procurement, the management of such a

discipline, and the implications of changed trade patterns for defence capabilities in the EDEM. Legislative frameworks, national policies, and political interactions provided the backdrop for the focus areas in the literature review.

The study employed inferential research, using a sample to represent the entire population. Information gathered through the questionnaire is viewed as applying to offset managers worldwide who are required to manage offset policies or fulfil offset obligations when selling to foreign governments.

Although the research is quantitative, it proceeded inductively. To better understand the nature of the problem, this approach permits “alternative explanations of what is going on” (Saunders et al., 2009:126). A collection of 30 statements was used to get a broad overview of how offset managers perceive the goals and implications of Directive 81. Respondents were encouraged to include comments along with their quantitative responses. In the data analysis, inductive reasoning moved from specific observations to broader generalisations and theories.

Figure 5.1 The inductive process



Source: Trochim (2006:1).

The research can also be termed descriptive (Saunders et al., 2009:140), because it portrays a profile of the outcome of new legislation on public procurement. In the EU, offset was formerly a prerequisite when DCs concluded supply contracts with foreign governments. New legislation changed the requirement and therefore also the benefits shared between buyer and seller. The descriptive approach used here to characterise the results of these changes is in contrast to explanatory research, which would seek to establish causal relationships among variables. This study does not hypothesise cause-effect relationships; rather, the questionnaire is an exploratory process of gathering

information. The findings could not be compared to previous findings, as no similar research has been done to date. However, implications were considered and recommendations made, both with regard to application of the findings and for future research. Table 5.1 summarises the research design.

Table 5.1 Conceptual aspects of the research design

Research philosophy	Positivism
Research strategy	Survey
Research purpose	Exploratory study
Data collection methods	Questionnaire, secondary data

Target population

The basic research paradigm requires that a population and representative sample of the population be identified. Offset is a unique discipline with a small community of managers globally, thus providing a limited group of prospective subjects. The population for this study is defined as all offset managers at the divisional level and offset directors at corporate head offices who are employed by defence companies world-wide, as well as offset administrators at Ministries in the EU who regularly attend global offset symposiums, including the GOCA (Global Offset and Countertrade Association) conferences since 2006 (GOCA, 2010) and ECCO (the European Club for Countertrade and Offset) symposiums since 2010 when the club was established in France. The names and details of attendees at GOCA conferences were found on the GOCA website (www.globaloffset.org), while those attending ECCO symposiums are listed on the ECCO website (www.ecco-offset.eu).

Purposive sampling

The researcher aimed to collect expert advice on the impact of new legislation on defence procurement and offset in the EU by using expert sampling, a sub-category of purposive sampling that “involves the assembling of a sample of persons with known demonstrable experience and expertise in some area” (Trochim, 2006:3). This was the best way to elicit the views of persons who have specific expertise in defence offset in the EU, as well as in the defence market.

The global population of senior-level offset managers was divided into sub-groups according to those who have made public presentations on the subject in the past, the countries or regions in which they fulfil offset, the seniority of the manager, and the frequency with which these managers attend GOCA and ECCO events.

Using systematic sampling, a sample was chosen in each sub-group by picking the names of those who have presented papers at GOCA and ECCO global offset events or have been part of past panel discussions at these events; eliminating offset managers whose designations state that they are responsible only for offset in other geographic areas than Europe; and then choosing the more senior of two or more offset managers employed by the same company and ensuring that the most senior manager is the one who most regularly attends the GOCA and ECCO events and actively contributes to discussions and debates. Leading international DCs such as Thales, BAE Systems, Lockheed Martin, Raytheon and General Dynamics have multiple operations and divisions globally, with a collection of offset managers taking responsibility within each DC, while smaller DCs such as Rheinmetall (Germany) and Kongsberg (Norway) may have three offset managers globally. The offset portfolio in one DC may include a single region or multiple regions and may relate to different systems such as information systems, land systems or aeronautics.

Sample size

As noted above, 100 offset managers from 23 countries were invited to participate in the study. Prospective subjects were aware for some time that this study was taking place. When presenting papers at GOCA and ECCO events, the researcher reminded members of the audience of this planned research and that many of them would be invited to participate. In some DCs, the offset managers who received the survey agreed among themselves who would complete the survey and only one response was then received.

It was assumed that the respondents had studied the new offset legislation to an extent that they could answer questions about the current scenario. They were asked to offer a quantitative analysis of issues pertaining to the new legislation, as well as the management of defence offset and defence markets. These assumptions were met through the inclusion criteria relating to level of management (corporate divisional level

or director at corporate headquarters), offset management experience in the EU, presentation of papers at international offset events or frequency of attendance at global offset conferences and symposiums, which the author attended regularly.

A cover letter (Appendix F) describing the study was sent via e-mail to each prospective participant, along with an electronic link to the questionnaire. The researcher provided telephone and e-mail contact information to answer any questions that the respondents might have about participation in the study or about the questionnaire. No queries were received, only comments and feedback. The questionnaires completed by respondents included their names, designations and companies, and therefore the anonymity of the respondents was not ensured; however, confidentiality was assured in the sense that the responses are not linked to a specific respondent and their individual answers cannot be traced.

Questionnaire construction

The questionnaire was in English, which is not the mother tongue of all the respondents. The Likert Scale ratings collected opinion data (Saunders et al., 2009:378), asking the respondent to rate how strongly he or she agreed or disagreed with a statement, resulting in quantitative data.

Statements related to the main goals of the study, listed above in section 5.2, were placed randomly among the total of 30 statements. Additional questions determined offset managers' views on the following subjects:

Views on offset and industrial capability:

- offset rationale and benefits (Statement 1);
- whether Directive 81 changed the ways in which EU governments and offset managers manage defence procurement (Statements 22 and 23);
- how much offset ensures the protection of national security interest (Statement 13);
- whether offset managers perceive a great change in the offset environment in the EU after Directive 81 (Statement 11); and
- whether, after Directive 81, offset managers need new skills and mandates to manage defence procurement in EU MS effectively (Statement 27).

Views on offset and EU strategies:

- whether Directive 81 makes EU MS laws pertaining to defence procurement irrelevant, diminishing their sovereignty (Statement 28);
- whether an elimination of offset in the EU (under Directive 81) will result in EU companies having limited access to foreign high technologies, which will severely limit the EU's technology base as well as R&D possibilities (Statement 9);
- whether the essence of Directive 81 is not about determining which defence procurements contract may be excluded from the scope of EU law, but about what legal standing EU MS have to resist the authority of the EC (Statement 30); and
- whether Directive 81 will result in one military force and one Ministry of Defence for the EU (Statement 29).

Views on offset and the Directive 81 defence procurement process:

- whether DCs that are not successful in their bids because they did not include offset proposals will be willing to complain to the EC when contractors that did include offset offers are successful (Statement 25);
- if the elimination of official, published offset rules in EU MS will result in less transparency (Statement 10);
- if SoS will always be ensured when EU MS purchase defence and security equipment from one another (Statement 5);
- whether Directive 81's Sol clauses will completely safeguard classified information, making the use of Article 346 superfluous (Statement 6);
- the interpretation of "third parties" in Directive 81's provisions on sub-contracting (Statement 7);
- the risks related to the inclusion of newcomer SMEs in the defence supply chain (Statement 19);
- whether EU MS purchasing defence equipment no longer require offset benefits (Statement 22); and
- whether DCs bidding for defence supply contracts continue to include any offset offers in their bids (Statement 23).

Views on offset and national security:

- whether offset is necessary to protect national security interests (Statement 12); and
- whether all aspects of a defence contract include elements relating to national security and therefore 100% of the contract value should be subjected to offset (Statement 13).

Views on offset and markets:

- whether EU defence companies are currently developing partnerships with non-European companies and producers in order to stay viable (Statement 16).

Views on global scenarios:

- to what extent the main European armaments producers are competitors in the export market, which defeats the cooperation aim of Directive 2009/81/EC (Statement 18); and
- the extent to which, contrary to the current trend in the EU, some developing countries are increasing defence spending and applying stringent offset requirements that require EU MS to transfer technology, expertise, skills and economic benefits when selling to these countries (Statement 17).

Pilot study

The draft questionnaire was subjected to a pilot test, as it was sent to four respondents who were requested to assess the relevance of the statements, fill out the questionnaire and make any recommendations that they deemed necessary. The four recipients were:

- Ove Sindre Lied, director industrial cooperation, Kongsberg Defence, Norway;
- Cary Victor, director, industrial participation, Lockheed Martin Corporation, US;
- Bernd Kuypers, managing director, Offset and Countertrade Agency, Germany;
- and
- Jim Barkas, managing director, BNI, US.

Changes suggested by these respondents were included in the final survey.

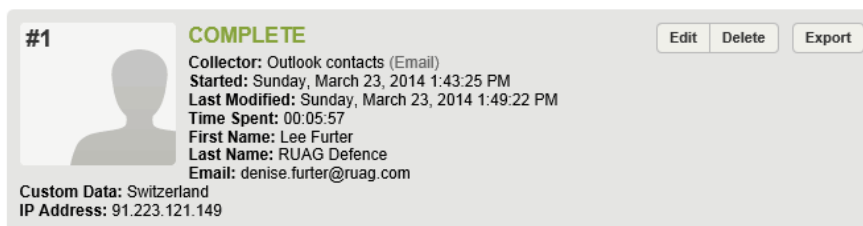
5.4 THE RESEARCH PROCESS

As noted, this research project is quantitative and consists of collecting and analysing empirical data. One self-administered questionnaire designed for the specific purposes of this study was used for data collection.

The population for this study was offset managers responsible for managing offset in DCs or in EU governments. An Internet survey was conducted using the SurveyMonkey program, which formats the chosen questions into a questionnaire and administers it via e-mail, web link, Facebook, an embedded link on a web page, a link via Twitter or website pop-ups.

This survey was sent to respondents by e-mail. The program automatically includes a link to the survey, which is uniquely tied to that individual e-mail address and which sends all surveys to the researcher's own e-mail address.

Figure 5.2 Sample of respondent identifications



Returned questionnaires show the respondent's identity (see Figure 5.2) so that, when tracking responses, the researcher is able to see how many questionnaires have been completed and by whom, and thereby to remind non-respondents to complete the survey. The questionnaire consists of 30 Likert-style questions and respondents were asked to indicate for each statement whether they fully agreed, agreed, were neutral, disagreed or fully disagreed.

Administration of the questionnaire

The questionnaire was mailed electronically on 23 March 2014 to 93 respondents, and seven more respondents were added after the 2014 GOCA conference in Barcelona, Spain. In some instances, invitations were sent to more than one offset manager in a

DC, each being responsible for offset in a different region or for a different division in the DC. For example:

- for General Dynamics, offset managers from Austria, Switzerland, and the US participated;
- for Thales, offset managers in France and the Netherlands were included;
- for Stemcor, offset managers in the UK and Italy received the survey;
- for Saab, an offset manager in Sweden and one in Switzerland were included;
- for Raytheon, offset managers in the US and Canada participated; and
- for Pilatus, Switzerland, two offset managers from Switzerland were included, each being responsible for offset in different regions.

Question summaries indicate to what extent the respondents agreed or disagreed with the statements, while the data trends show the frequency of responses received over time.

Data analysis

The 30 questions yielded numerical data (1 = fully agree, 5 = fully disagree). The following chapters will assess how the study findings contribute to relevant theory in the field by exploring the connectedness of the findings to theory relating to information processing and financial and operational management practices (Mancosa, 2010:19).

Validity and reliability

Validity is concerned with the study's success at measuring what the researcher set out to measure. It encompasses the entire experimental concept, establishing whether the results obtained meet all of the requirements of the scientific method (Shuttleworth, 2008). Internal validity refers to the rigour with which the study was conducted, assessing the study's design, the care taken to conduct measurements, and decisions concerning what was and was not measured (Colorado State University, 2010:1).

To ensure internal validity, four experts in the discipline of offset were asked to comment on the design, relevance, balance and adequacy of the research instrument in relation to the research objectives (Mancosa, 2010:108). They were satisfied that the questionnaire was valid.

External validity is the process of examining the results and questioning whether there are any other possible causal relationships. There is a chance that unknown factors contributed to the results and findings, such as that offset managers did not interpret the question correctly, wanted to protect their careers or their power bases, or wanted to prove a personal viewpoint. To ensure the accuracy or truthfulness of responses, the following route was followed:

- face validity: the likelihood that a question could be misunderstood or misinterpreted was managed through review of the questionnaire by four experts;
- construct validity: the researcher used the literature review to examine various views of stakeholders related to the various statements; and
- content validity: the topics covered in the literature review and expert opinions ensured that the instrument provided adequate coverage of the topic.

Threats to validity include participant error and participant bias. It is accepted that respondents work under strenuous deadlines and would want to complete the survey as quickly as possible. On the other hand, the survey was important to the respondents because its results could enhance their offset management procedures. The fact that responses were kept confidential should have eliminated any risk that respondents would answer questions in a way that their employers would approve, rather than truthfully (Saunders et al., 2009:156).

A further motivator to answer the questionnaire as truthfully and accurately as possible was the fact that the researcher has been invited to present the findings at the next global GOCA (Global Offset and Countertrade Association) conference in Cartagena, Colombia, in October 2014. This fact has been shared with most respondents because 62% (n = 43) of them requested a copy of the findings. Offset managers from around the world attend the GOCA conferences with the aim of sharing knowledge and improving offset management, demonstrating their willingness to develop offset as a discipline.

Observer error was ruled out as far as possible by checking the captured data three times and calculating all findings repeatedly.

Reliability

The meaning of reliability is that any significant results should be inherently repeatable, not a one-time event (Shuttleworth, 2008:1). Other researchers must be able to replicate the experiment under the same conditions and generate the same results. Any experiment that uses human judgment can introduce subjective and non-repeatable features, but the use of a Likert-type rating scale reduces the degree of subjectivity in the research tool.

5.5 LIMITATIONS OF THE STUDY

The study was limited to 71 offset managers representing 65 companies or institutions in 21 countries. A total of about 320 delegates annually attend the conference of the largest offset association globally (GOCA), including offset managers and representatives of companies involved in global trade, government agencies and risk and financial management. GOCA has 101 members, representing global companies and institutions that manage offset. With many DCs employing more than one offset manager, the number of offset managers globally is estimated at 230. A conservative estimate of the number of offset managers with EU responsibilities is 130. The sample of respondents in this study is therefore estimated to represent about 55% of offset managers globally who manage offset in the EU.

Secrecy and proprietary interests are inherent in the defence industry and the traditional lack of transparency may have resulted in respondents not revealing all information pertaining to their activities. This probability may have been increased by the inability to offer anonymity of responses. The fact that DCs operate in a competitive and political environment and that the survey relates to the political power of the EU may have introduced an element of caution as respondents completed the questionnaire.

5.6 ELIMINATION OF POTENTIAL ETHICAL ISSUES

Potential ethical issues relating to this research included maintenance of the confidentiality of responses; presentation of the data in the aggregate so that there could be no identification of the respondents or the DCs that they represent; use of the data exactly as it was received; and intended use of the findings. All responses were

processed as they were received. The data will not be used for other than academic purposes and to improve the management of offset risks.

5.7 CONCLUSION

A significant effort has been made to ensure that the research questions and objectives of this study would result in a value-adding research project. The literature review offered a valuable overview of the information available on the discipline, also indicating who the stakeholders (in addition to governments) are on issues of defence trade and offset. A combination of primary and secondary data offers a balanced picture in that the views of the respondents could be compared with the views of authors, expert speakers and other analysts. The study population is relatively narrow because offset is a unique discipline with not many experts. In opting for purposive sampling, the study further prioritised expert opinion.

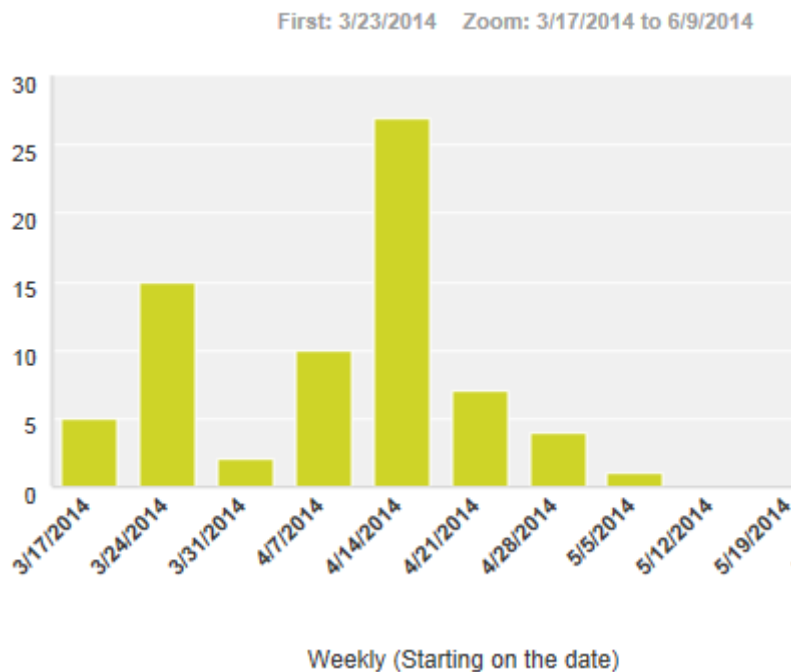
“The research processes that are set in motion with the selection of a sample are thus satisfactorily completed when the findings of the study are extended as generalisations that are applicable to the population” (Mancosa, 2010:77). In the next chapter the findings from this study are shared, analysed and discussed.

CHAPTER 6 STATEMENT OF FINDINGS

6.1 INTRODUCTION

This chapter reports results of the survey questionnaire developed for this research and administered through SurveyMonkey. Responses indicated agreement or disagreement with the 30 statements in the questionnaire, using a five-point Likert scale. Some respondents made use of the opportunity to include comments, which in some cases can be interpreted as recommendations (discussed in Chapter 8). Responses were received over a period of 43 days through 5 May 2014.

Figure 6.1 Weekly survey response trends



The survey was launched one week before the biggest annual offset conference, the GOCA Global Industrial Cooperation Conference (GICC), held in Barcelona, Spain, at the end of April 2014. The rationale behind this decision was that a representative of the EC was among the conference speakers, addressing “The current state of the EU defence and security procurement Directive [81] and its impact on Offset”. Offset managers who felt they wanted to get the latest update on the implementation of

Directive 81 would thus have the opportunity to delay completing the survey until after this presentation. Twenty offset managers completed the survey before the conference. During the conference no responses were received. The most responses were received on 15 April, after the researcher sent a personal reminder to those offset managers who had not yet completed the survey. Additional time following the Easter weekend (18-21 April 2014) was provided for managers to respond, and the survey was closed on 5 May 2014.

6.2 FINDINGS FROM THE STUDY

The 71 responses to the survey provided the primary source of data for the study. The choices for each question were “fully agree”, “agree”, “neutral”, “disagree” and “fully disagree”. A respondent could choose only one of the options.

The answer of “neutral” is generally interpreted as meaning that the respondent neither agreed nor disagreed with the statement. In this survey, respondents who opted for the “neutral” answer usually added comments such as “I don’t know”, “Don’t have relevant data” or “No supporting personal experience”. Such answers were therefore interpreted as expressing uncertainty about the issue or outcome that the statement addressed.

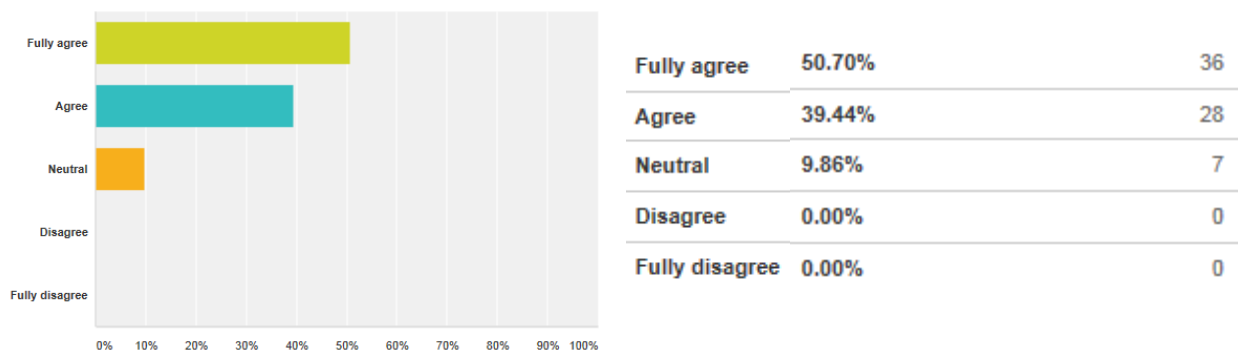
Responses to the statements

In most cases, percentages are rounded and therefore may not add to 100%. The responses to all statements can be viewed together in Appendix G, All response data represented per statement in percentages and response count.

Statement 1: Offset makes it possible for local companies to access the global defence industry, gain access to new markets and grow technological capabilities.

Offset is used by governments to develop their defence capabilities. No respondent disagreed with this statement. Of the 71 respondents, 90% (n = 64) fully agreed or agreed, with 10% (n = 7) being neutral.

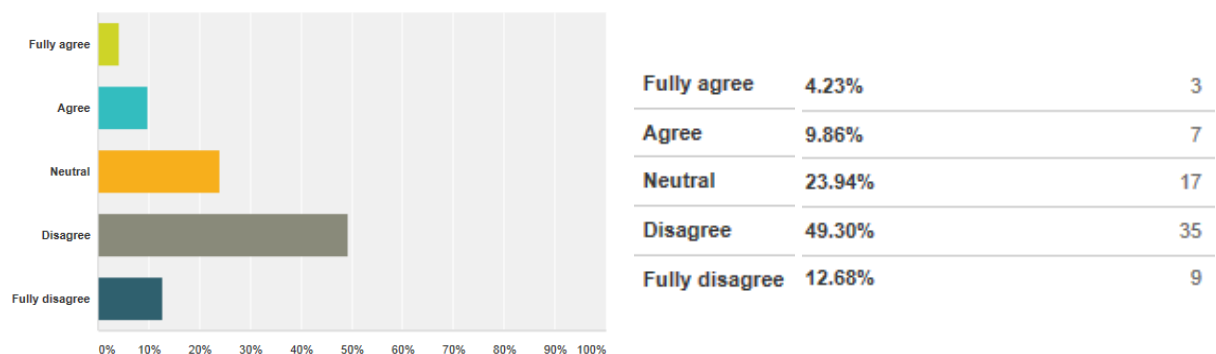
Figure 6.2 Answers to Statement 1: Offset ensures multiple benefits



Statement 2: The application of Directive 2009/81/EC on defence procurement is clear.

Whether Directive 81 is clear has significant implications for the likelihood of its effective implementation and for compliance with the Directive. Only 14% (n = 10) of respondents agreed with this statement, 24% (n = 17) were neutral and more than 62% (n = 44) stated that it is not clear.

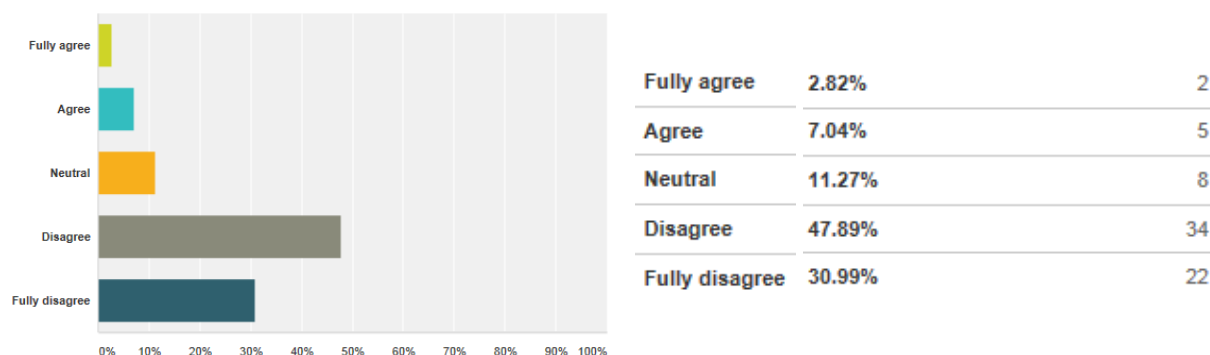
Figure 6.3 Answers to Statement 2: The application of Directive 81 is clear



Statement 3: By “banning” offset, Directive 2009/81/EC will be successful in creating a more competitive EU defence market.

The EC is set to eliminate offset, stating that such a scenario will create a more competitive EU defence market. Only 9% (n = 7) of respondents agreed that a ban on offset would create a more competitive EU defence market, while 11% (n = 8) were neutral and more than 78% (n = 56) disagreed, including 31% (n = 22) who marked “fully disagree”.

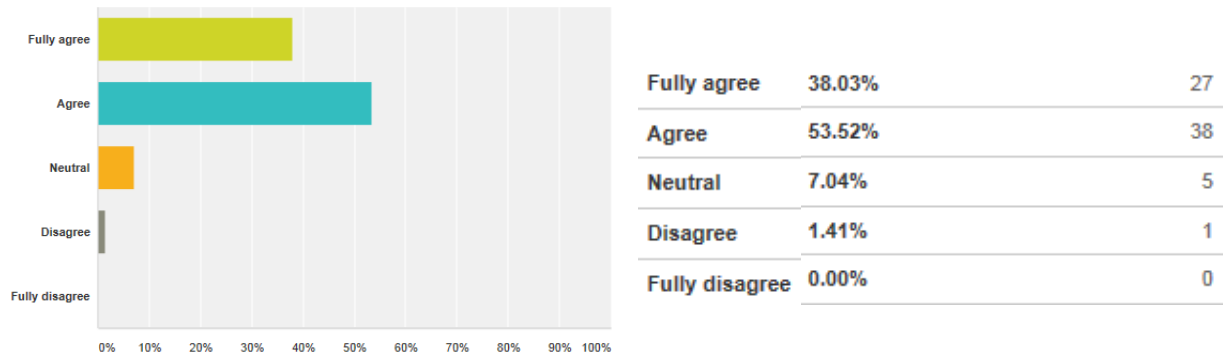
Figure 6.4 Answers to Statement 3: A more competitive EU defence market will emerge by eliminating offset



Statement 4: Smaller EU MS with less-developed defence industries rely on foreign imports for their defence equipment, but there is no guarantee that they will purchase from other EU MS.

In cases where EU MS do not have the capability to manufacture their own defence equipment, Directive 81 intends for these MS to purchase such equipment from other EU MS. However, the EU cannot dictate to EU MS where or what to purchase; it can only endeavour to instruct them how to purchase. Only one respondent disagreed with this statement, expressing the expectation that EU MS will purchase from one another; 7% (n = 5) were neutral and more than 91% (n = 65) fully agreed or agreed. See Figure 6.5 on the following page.

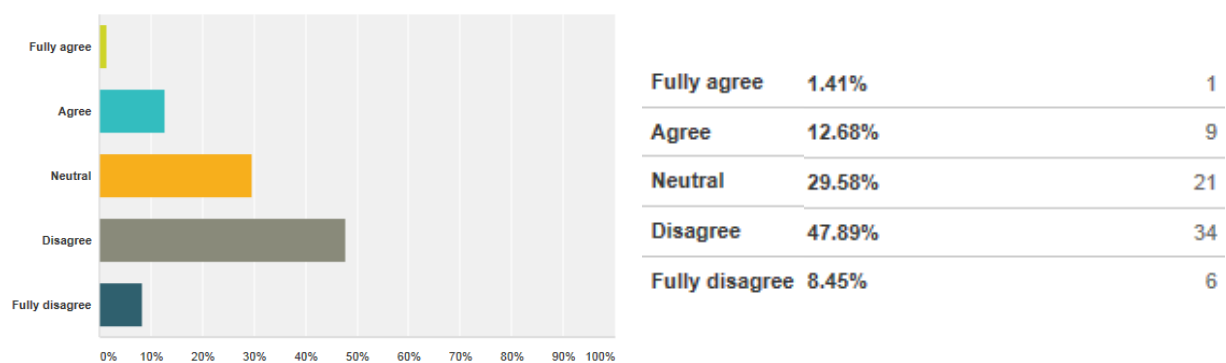
Figure 6.5 Answers to Statement 4: EU MS with less-developed defence industries will purchase from other EU MS



Statement 5: When an EU MS supplies defence and security equipment to other EU MS, SoS is always ensured.

The EC claims that new provisions in Directive 81 can ensure SoS in all instances where EU MS purchase defence and security equipment from another, and that therefore EU MS should no longer favour local suppliers. More than 56% (n = 40) of respondents fully disagreed or disagreed with the statement, while 30% (n = 21) were neutral, expressing a high level of uncertainty on this point; 13% (n = 9) agreed, with only one respondent agreeing fully.

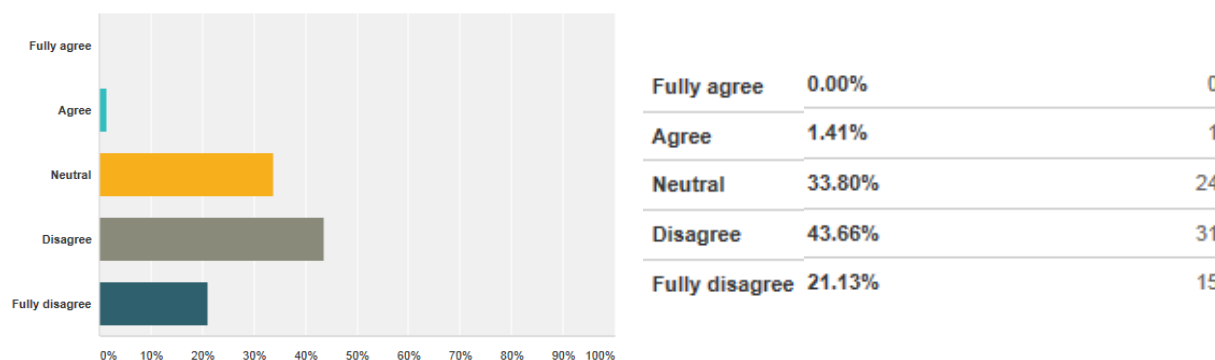
Figure 6.6 Answers to Statement 5: Whether SoS in intra-EU trade is always ensured



Statement 6: The new security of information clauses in Directive 2009/81/EC are sufficient to safeguard classified information and therefore the Article 346 TFEU exemption will no longer be necessary.

Based on contractual agreements, Directive 81 aims to ensure that suppliers of defence equipment keep sensitive information confidential through all phases of the project, resulting in few opportunities for MS to call upon the Article 346 exemption and award supply contracts to national contractors to ensure this goal. Only one respondent agreed with this statement, 65% (n = 46) disagreed, and more than 33% (n = 24) were neutral, indicating the uncertainties regarding of future defence trade in the EU.

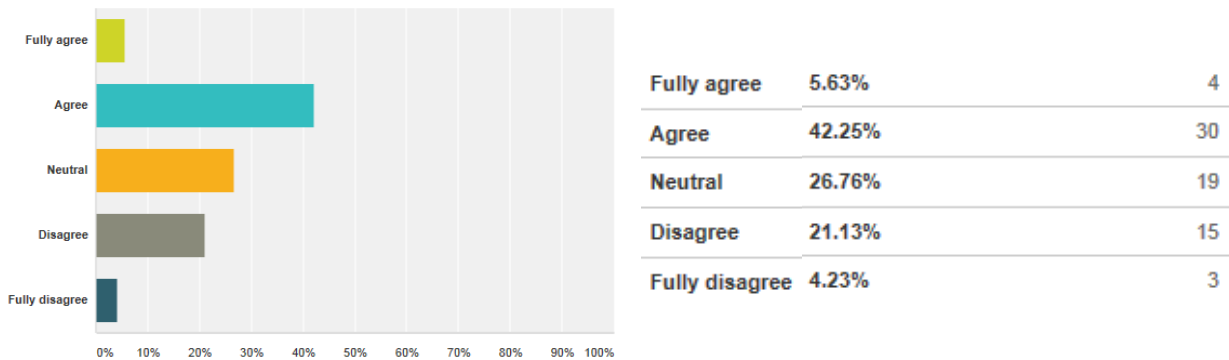
Figure 6.7 Answers to Statement 6: Directive 81 ensures Sol



Statement 7: The 30% sub-contracting allowed in Directive 2009/81/EC can be to "third parties", which include companies globally.

The sub-contracting provisions in Directive 81 permit sub-contracting up to 30% of the contract value to "third parties". The EC interprets "third parties" to mean only SMEs in EU MS. Nearly 48% of respondents (n = 34) fully agreed or agreed with Statement 7, which interprets third parties more broadly; 27% (n = 19) were neutral, while 25% (n=18) disagreed. See Figure 6.8 on the following page.

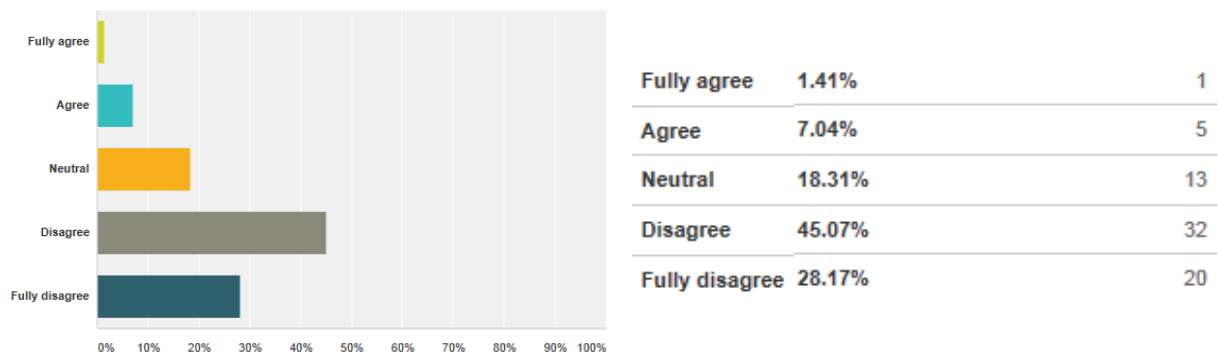
Figure 6.8 Answers to Statement 7: The 30% sub-contracting should not be limited to SMEs in the EU



Statement 8: Directive 2009/81/EC ensures that EU MS purchase more defence equipment from one another.

In eliminating offset, the EC states that EU MS will purchase more defence equipment from one another. Only 8% (n = 6) of respondents fully agreed or agreed with the statement, 73% (n = 52) disagreed or fully disagreed, and 18% (n = 13) were neutral.

Figure 6.9 Answers to Statement 8: EU MS will purchase more defence and security equipment from one another

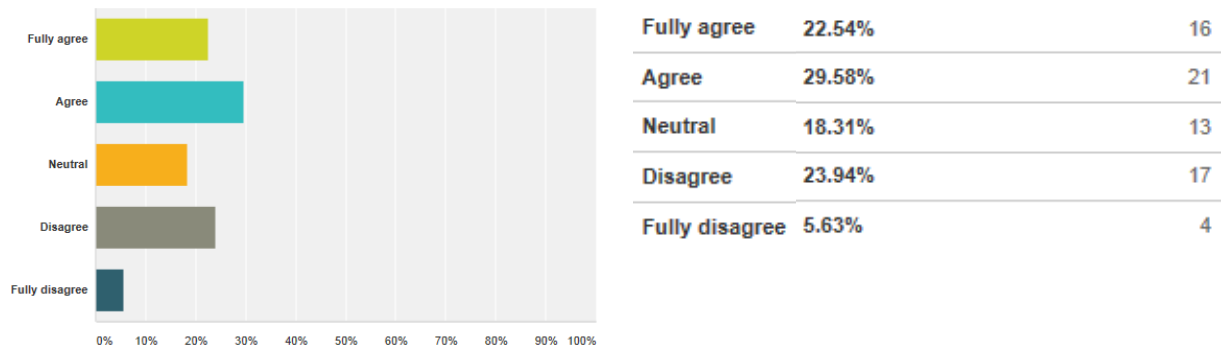


Statement 9: Under Directive 2009/81/EC, EU companies' ability to access American or other high technologies is drastically reduced, which will severely limit the EU's technology base, as well as research and development (R&D) possibilities.

If EU MS no longer receive offset benefits when they purchase defence and security equipment, the EU will not benefit from technology transfers and investments in R&D.

More than 52% (n = 37) of respondents fully agreed or agreed with this statement, 29% (n = 21) disagreed or fully disagreed, and 18% (n = 13) were neutral.

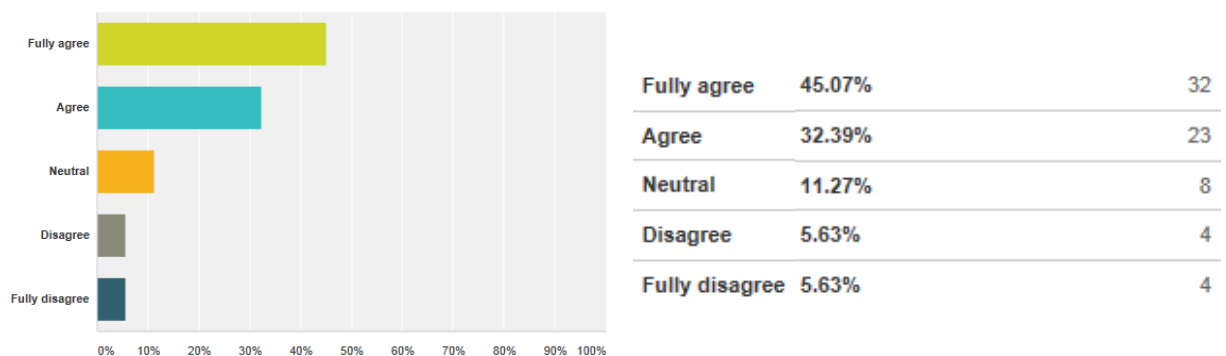
Figure 6.10 Answers to Statement 9: No offset in the EU will translate in less technology transfers to EU MS



Statement 10: The elimination of official, published offset rules in EU MS results in less transparency.

The EC's endeavour to eliminate offset has resulted in EU MS assessing each defence and security purchase on a case-by-case basis and no longer applying official national policies that set the rationale and requirements for all such procurements. This scenario will result in varied requirements and offers that cannot be assessed for compliance based on published policies. Only 11% (n = 8) of respondents disagreed or fully disagreed with the statement, 77% (n = 55) fully agreed or agreed, and 11% (n = 8) were neutral.

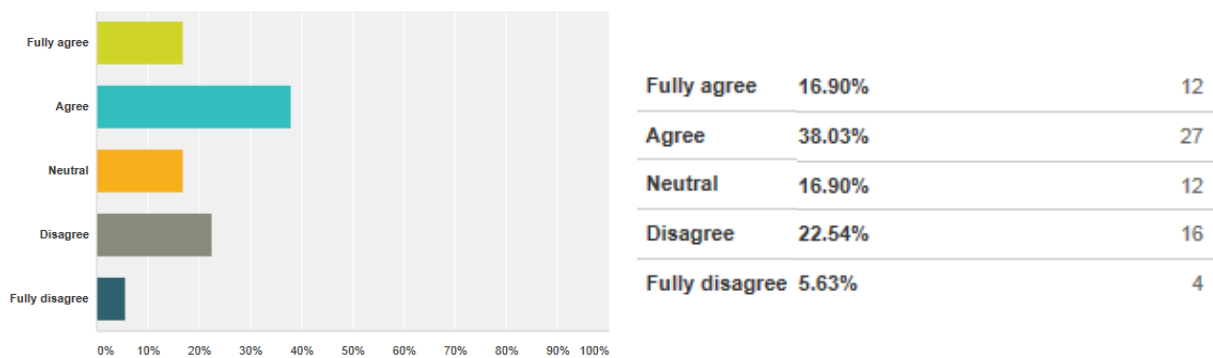
Figure 6.11 Answers to Statement 10: Having no official offset rules in the EU means less transparency



Statement 11: More than two and a half years after the launch of Directive 2009/81/EC, little has changed.

Offset managers, who have to devise and implement solutions in order to fulfil offset obligations in the purchasing countries, were asked whether they believe that Directive 81 has brought a change in how offset is managed. This question elicited varied responses, perhaps partly because not all offset managers have probably made offers to EU MS since the implementation of Directive 81, as many DCs have turned more heavily to non-EU markets. A total of 55% (n = 39) of the respondents fully agreed or agreed with this statement, 17% (n = 12) were neutral and 28% (n = 20) disagreed.

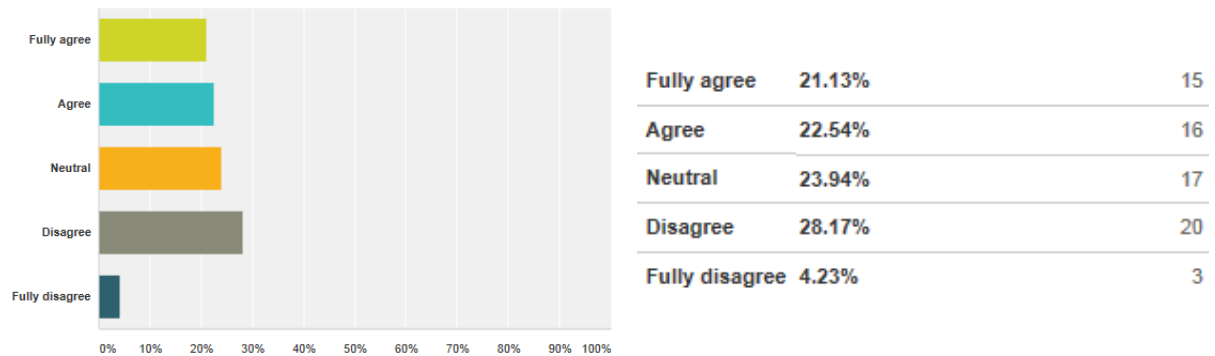
Figure 6.12 Answers to Statement 11: Directive 81 has not changed the previous *status quo*



Statement 12: When a country purchases foreign defence equipment, offset is necessary to protect national security interests.

Asked whether offset is necessary to protect national security interests, 44% (n = 31) fully agreed or agreed with this statement, 24% (n = 17) were neutral and 32% (n = 23) disagreed or fully disagreed. See Figure 6.13 on the following page.

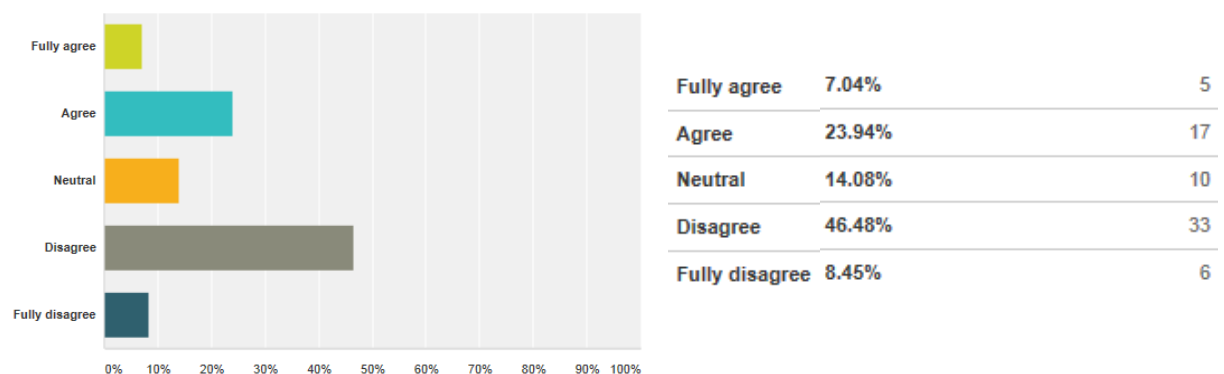
Figure 6.13 Answers to Statement 12: Offset is necessary to protect national security



Statement 13: All aspects of a defence contract include elements relating to national security and therefore 100% of the contract value should be subjected to offset.

Prior to Directive 81, MS have required 100% offset for most defence procurements, viewing the total procurement as essential for national security. Both direct and indirect offset were required, relating to the equipment being purchased, as well as to non-defence industries that could be viewed as supporting relevant skills, capabilities, and infrastructure. Statement 13 asked if *all* aspects of a defence contract include elements relating to national security; 55% (n = 39) of respondents fully disagreed or disagreed with this statement, 14% (n = 10) were neutral and 31% (n = 5) fully agreed or agreed.

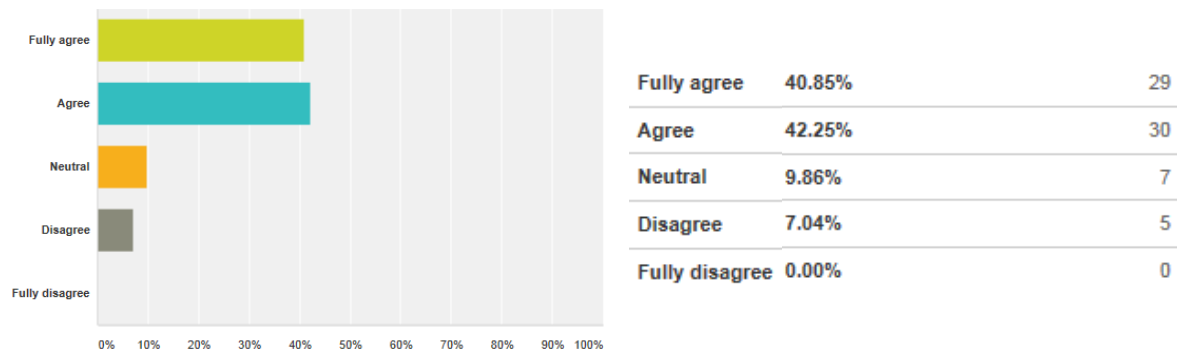
Figure 6.14 Answers to Statement 13: The complete defence purchase relates to national security



Statement 14: In order to protect its national security interests, every EU MS has the right to decide whether it wants to apply Article 346 TFEU to exempt a defence and security procurement contract from EU law.

The treaty states that EU MS may exempt defence and security purchases from EU law when they deem it necessary to protect their national security interests. This statement received strong support from offset managers, as 83% (n = 59) of respondents fully agreed or agreed with it, 10% (n = 7) were neutral, and 7% (n = 5) disagreed. No respondent fully disagreed.

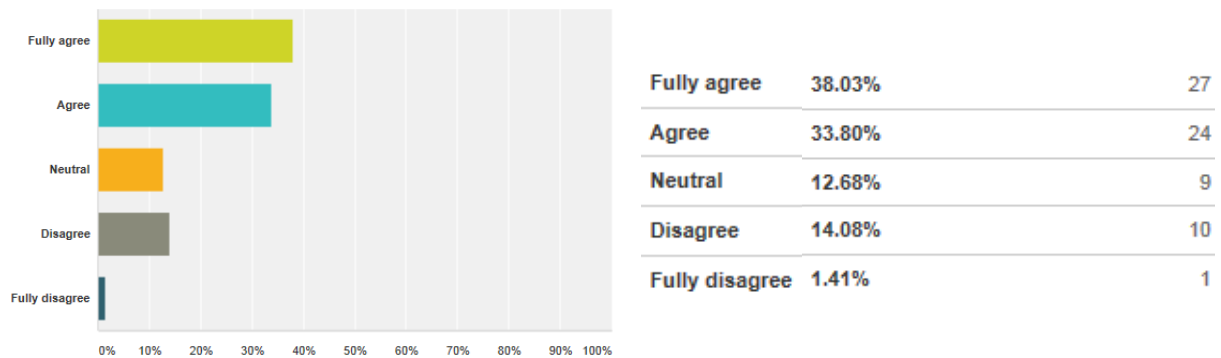
Figure 6.15 Answers to Statement 14: EU MS have the discretion to decide when to exempt defence and security purchases from EU law



Statement 15: Indirect offset is important to purchasing countries, because it develops a country's general infrastructure, skills, know-how and industrial capabilities that eventually ensure national security.

Directive 81 stipulates that only activities related to the defence purchase may be required as offset, endeavouring to eliminate indirect offset. However, 72% (n = 51) of respondents agreed or fully agreed that offset can ensure advanced skills, know-how and industrial capabilities, developing general infrastructure that is eventually required to protect national security interests. A total of thirteen percent (n = 9) were neutral and 15% (n = 11) disagreed. See Figure 6.16 on the following page.

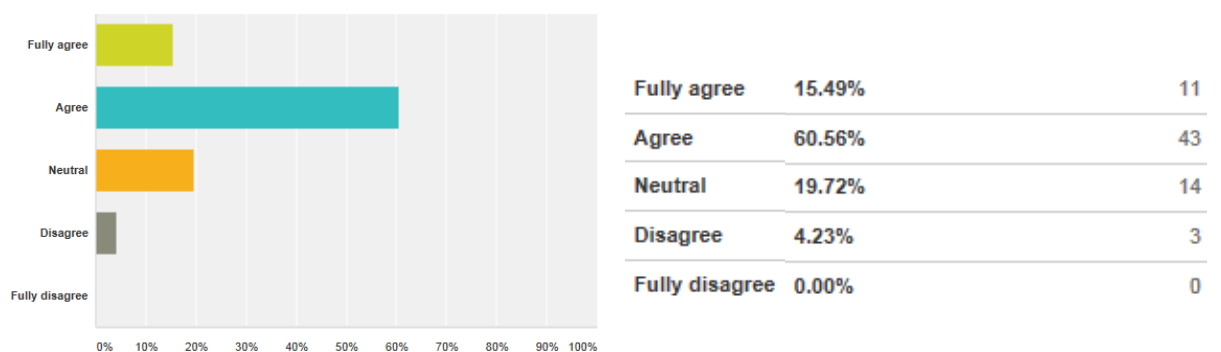
Figure 6.16 Answers to Statement 15: Indirect offset also ensures benefits that support national security



Statement 16: In order to stay viable, EU defence companies currently develop partnerships with non-European companies and producers.

Austerity measures in the EU, as well as dwindling defence budgets, have resulted in EU DCs focussing on new markets in non-EU countries. The uncertainty relating to the availability of offset benefits linked to defence procurements by EU MS could also be seen as slowing down defence and security procurements in the EU, further reducing market activity. Only 4% (n = 3) of respondents disagreed with the statement; 76% (n = 54) fully agreed or agreed, while 20% (n = 14) were neutral.

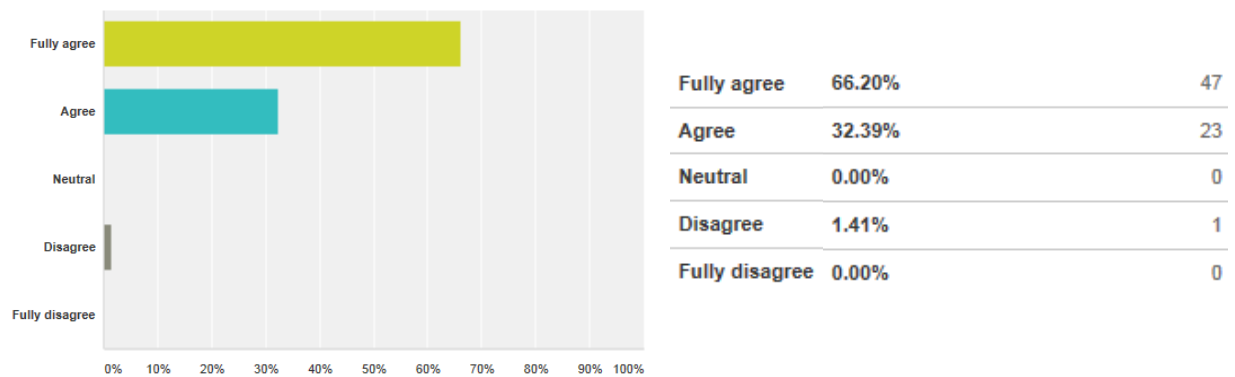
Figure 6.17 Answers to Statement 16: EU defence companies develop partnerships with non-European companies and producers



Statement 17: Contrary to the declining budgets in the EU, some developing countries are increasing defence spending and applying stringent offset requirements that require transfers of technology, expertise, skills and economic benefits.

Offset requirements clearly have not decreased in non-EU countries, as confirmed by all but one of 71 respondents. More than 98% (n = 70) of respondents fully agreed or agreed with this statement.

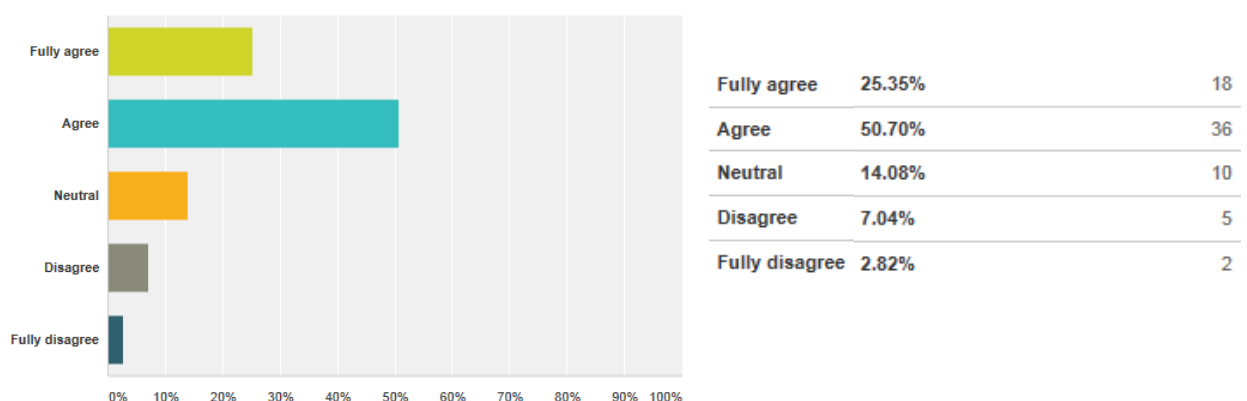
Figure 6.18 Answers to Statement 17: Stringent offset requirements still exist outside the EU



Statement 18: The main European armaments producers are actually competitors in the export market, which defeats the cooperation aim of Directive 2009/81/EC.

Directive 81 foresees developing a stronger home market that should benefit EU MS and develop the EDTIB; however, EU MS compete in the export market and the competition has become fiercer since EU defence budgets have started declining. It is not clear how the EU will decide which DCs to support in their export endeavours to non-EU countries. The statement that the competition between European armaments producers inhibits cooperation found agreement from 76% (n = 54) of respondents; 14% (n = 10) were neutral and 10% (n = 7) disagreed.

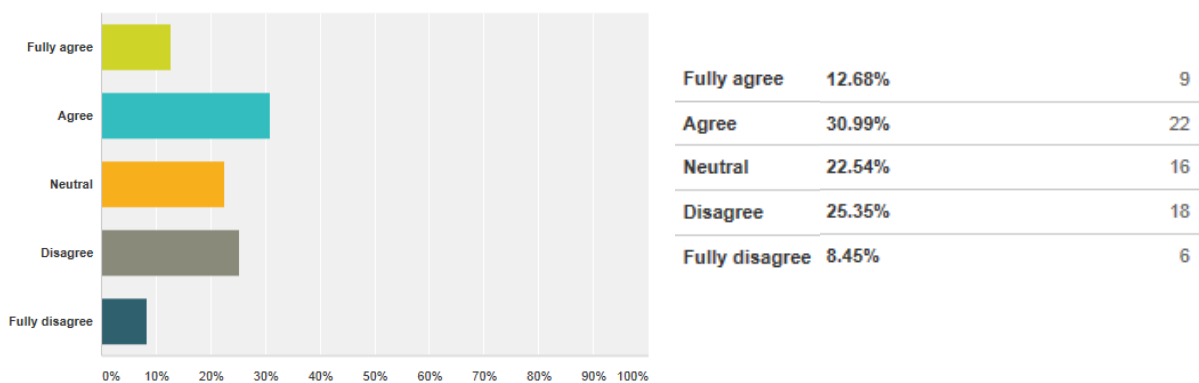
Figure 6.19 Answers to Statement 18: EU DCs are competing in the export market



Statement 19: By including newcomer SMEs in the defence supply chain, product quality and project milestones become unpredictable, exposing the procuring nation and the armed forces to risk.

In defence and security procurements, the EC endeavours to ensure up to 30% sub-contracting for EU SMEs. SMEs may not have the necessary experience and capabilities to deliver such contracts, increasing related risks. Opinion was divided on this statement, as 43% (n = 31) of respondents fully agreed or agreed, 23% (n = 16) were neutral, and 34% (n = 24) disagreed.

Figure 6.20 Answers to Statement 19: SMEs may increase risks

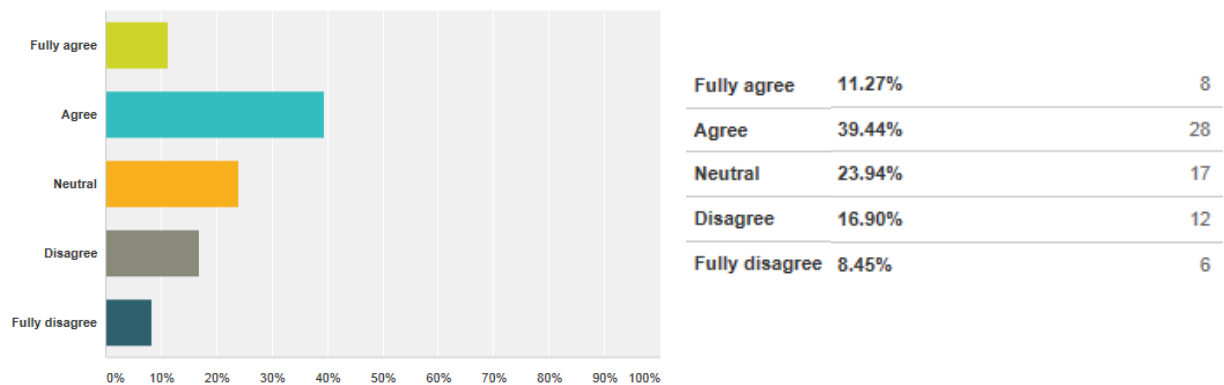


Statement 20: Since “national security interests” are not defined, Directive 2009/81/EC is nearly meaningless.

Directive 81 can be seen as opposing the right of EU MS to require offset to protect their national security interests, and the complete directive relates to defence and security procurements, which are executed to protect national security interest. With the term “national security interests” not defined, however, the interpretation of Directive 81 remains uncertain, potentially leaving room for various interpretations by EU MS. The requirement to define the term and justify its application each time a MS makes a defence and security procurement may initially translate into increased effort, less transparency and delays. However, once EU MS have been through the exercise a few times, the process may be completed more quickly and with less effort.

More than 50% (n = 36) of respondents fully agreed or agreed with the statement that the failure to define national security interests limits the meaningfulness of Directive 81; 24% (n = 17) were neutral and 25% (n = 18) disagreed.

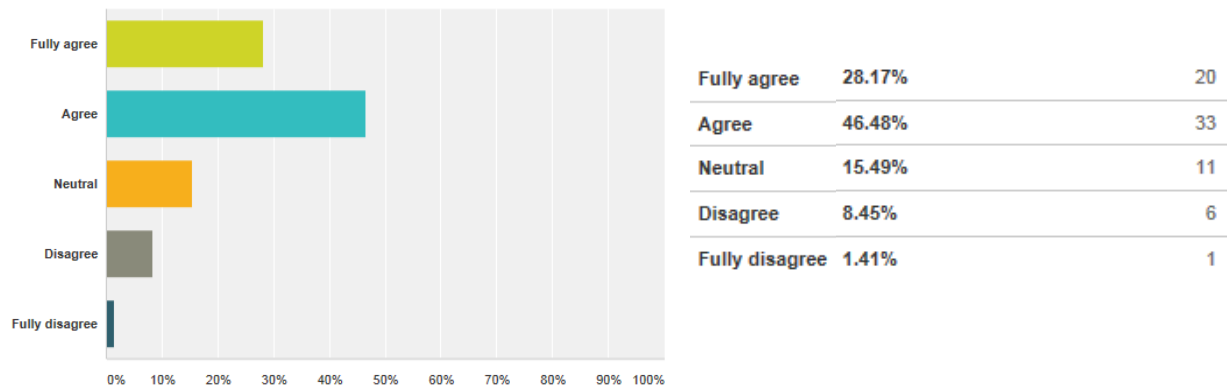
Figure 6.21 Answers to Statement 20: No definition of “national security interests”



Statement 21: Until the interpretation of Directive 2009/81/EC becomes clear, EU MS in need of offset may decide to act outside of the scope of Directive 2009/81/EC, completely separating agreements for industrial benefits from the defence procurement contracts (the UK’s Defence and Security Industrial Engagement Policy, or DSIEP, is an example).

Directive 81 aims to abolish compensation to EU MS linked to defence procurement, but never mentions the word *offset*. Some EU MS have made various requests to the EC to reassess the new legislation or its interpretation of Directive 81. With national security being a leading government concern, EU MS may choose to take offset underground. A total of 75% (n = 53) of respondents fully agreed or agreed with this statement, 16% (n = 11) were neutral and 10% (n = 7) disagreed. See Figure 6.22 on the following page.

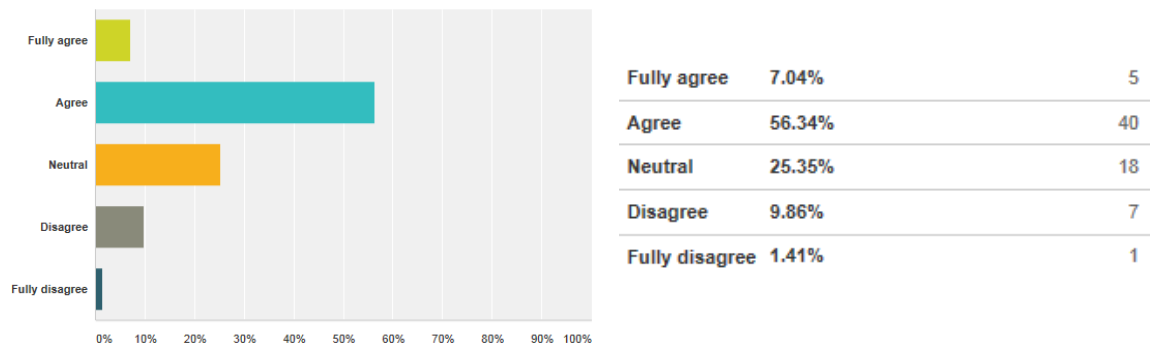
Figure 6.22 Answers to Statement 21: EU MS may separate agreements for industrial benefits from defence procurement contracts



Statement 22: EU MS that required offset in the past still ask for offset when purchasing defence equipment.

Since the launch of Directive 81, many EU MS have continued to require offset when purchasing defence equipment. Only 11% (n = 8) of respondents disagreed with this contention; 64% (n = 45) agreed and 25% (n = 18) were neutral.

Figure 6.23 Answers to Statement 22: EU MS still require offset

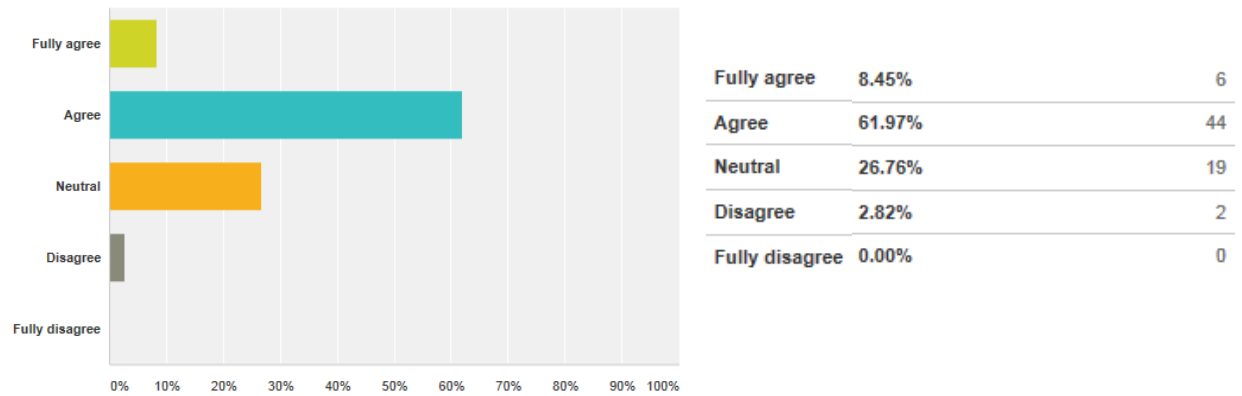


Statement 23: Defence contractors that tender to supply defence equipment to EU MS still include offset in the form of local content, work-packages and transfer of technology in their offers.

Since the launch of Directive 81, considerable uncertainty has remained with regard to its interpretation. In many cases, DCs still include offers of offset benefits to EU MS purchasing defence equipment, as confirmed by 71% (n = 50) of the survey

respondents who fully agreed or agreed with this statement; 27% (n = 19) were neutral and 3% (n = 2) disagreed.

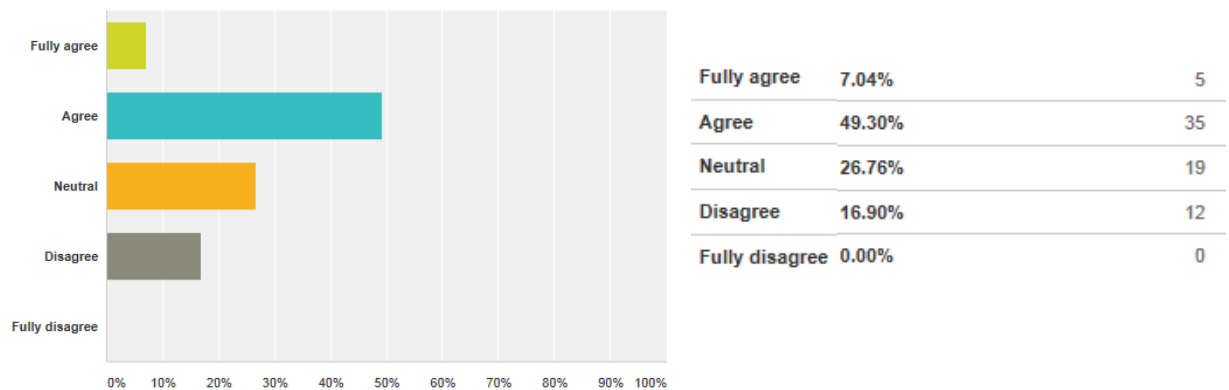
Figure 6.24 Answers to Statement 23: DCs still include offset offers in their tenders to EU MS



Statement 24: EU MS still purchase most defence equipment from their national suppliers.

Since the launch of Directive 81 it has been shown that EU MS still purchase most defence equipment from their national suppliers. In February 2014, France went so far as to allow only national companies to submit bids for a large military vehicle procurement. Overall, 56% (n = 40) of respondents fully agreed or agreed with this statement, 27% (n = 19) were neutral and 17% (n = 12) disagreed.

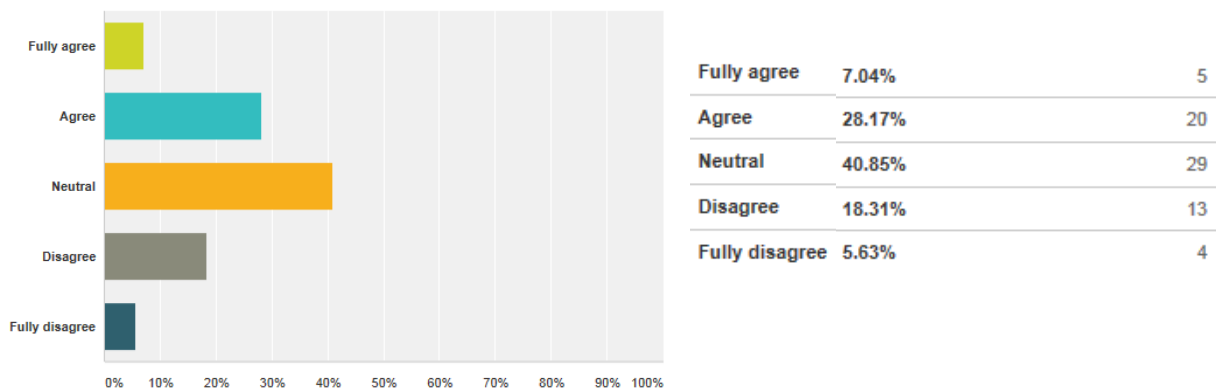
Figure 6.25 Answers to Statement 24: EU MS still purchase from their national suppliers



Statement 25: Defence contractors that are not successful in their bids are willing to complain to the EC when they do not win a tender because they did not include an offset offer, while the winner did.

Directive 81 has also created uncertainty regarding the interpretation and implementation of the process to be followed when purchasing defence and security equipment. The EC expects parties that become aware of non-compliance with Directive 81, or that believe they have been disadvantaged because Directive 81 has not been followed, to make such cases known. However, in public procurement, governments are the only potential customers of DCs and questioning the activities of government decision makers may be too risky a route for some DCs to follow. The responses to this statement exhibited the greatest amount of uncertainty in the survey, with 41% (n = 29) of respondents remaining neutral; 35% (n = 25) of respondents fully agreed or agreed with this statement, while 24% (n = 17) disagreed.

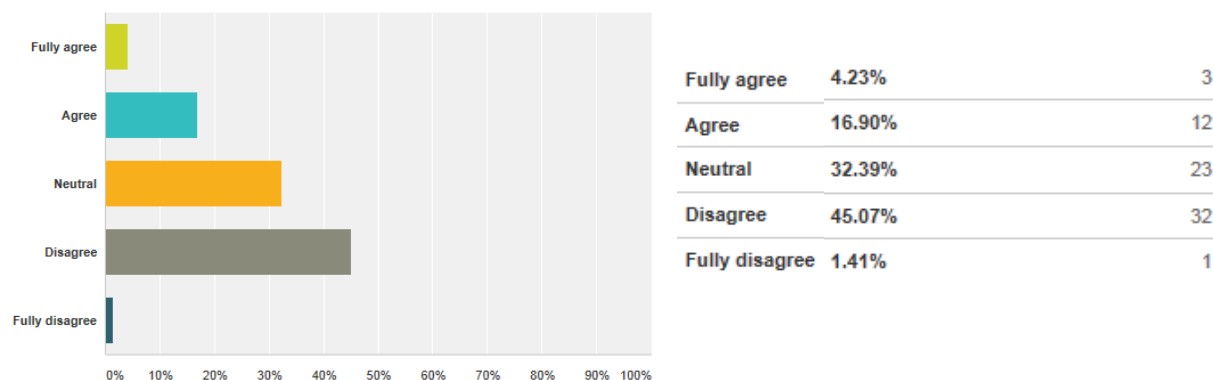
Figure 6.26 Answers to Statement 25: Whether DCs that do not win tenders are willing to complain to the EC



Statement 26: The daily management of offset in defence companies that need to fulfil offset in the EU changed dramatically because of Directive 2009/81/EC.

Respondents were asked whether Directive 81 has significantly changed the way in which offset is managed in the EU. More than 46% (n = 33) fully disagreed or disagreed with this statement, with 32% (n = 23) neutral and 21% (n = 15) in some level of agreement. See Figure 6.27 on the following page.

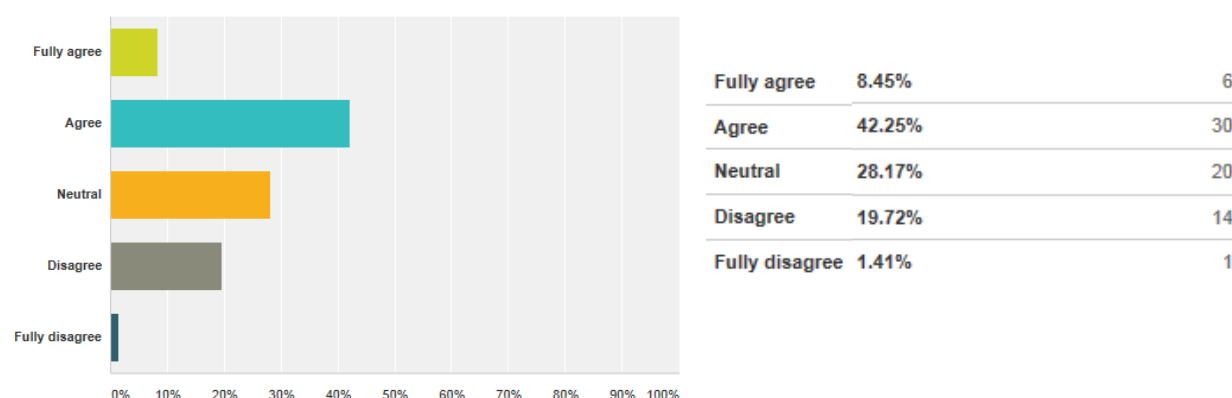
Figure 6.27 Answers to Statement 26: Whether Directive 81 has changed offset management processes



Statement 27: After Directive 2009/81/EC, offset managers need new skills and mandates to manage defence procurement in European Union member states effectively.

If Directive 81 changed the way in which offset is managed in the EU, offset managers may need new skills, such as an improved ability to interpret contract clauses and legislation, or a better understanding of EU policies and the objectives and responsibilities of EU institutions. Slightly more than 50% (n = 36) of respondents fully agreed or agreed with this statement, 28% (n = 20) were neutral and 21 (n = 15) disagreed.

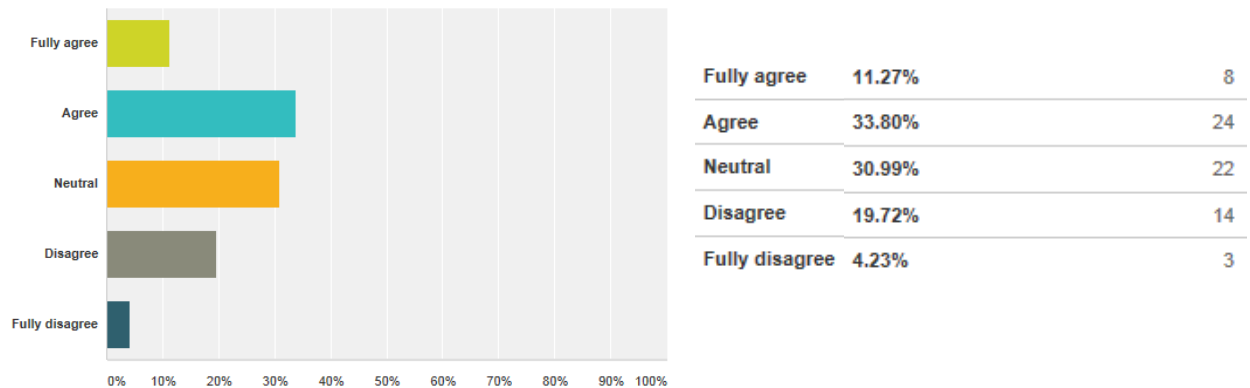
Figure 6.28 Answers to Statement 27: Offset managers are in need of new skills after the launch of Directive 81



Statement 28: Directive 2009/81/EC makes national laws in EU MS pertaining to defence procurement irrelevant, diminishing their sovereignty.

If EU MS can no longer decide about industrial benefits related to defence procurement, their sovereignty has been diminished. More than 45% (n = 32) of respondents fully agreed or agreed with this statement, 31% (n = 22) were neutral and 24% (n = 17) disagreed.

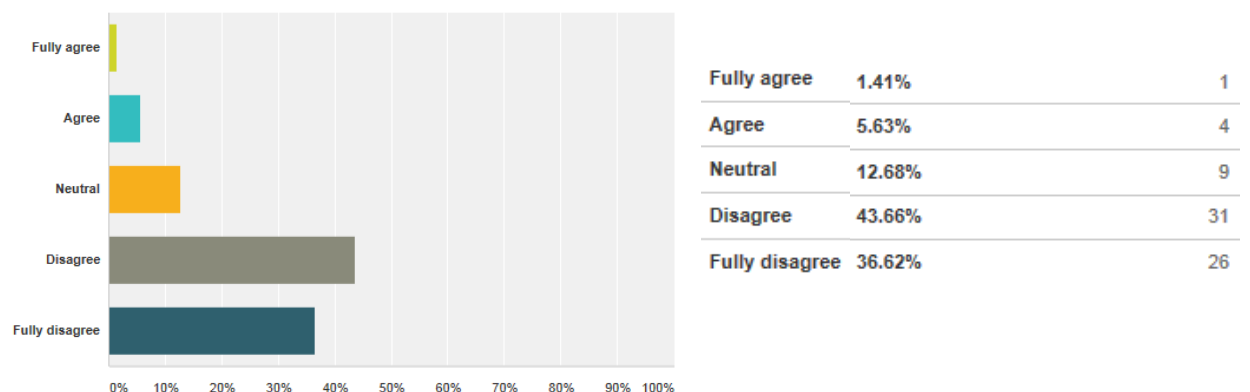
Figure 6.29 Answers to Statement 28: Directive 81 diminishes the sovereignty of EU MS



Statement 29: Directive 2009/81/EC will result in one military force and one Ministry of Defence for the EU.

If EU MS are no longer in a position to purchase defence equipment or develop their defence capabilities independently, it is conceivable that they will no longer be in a position to defend their assets and people and that the EU will step in to remedy such a situation. However, offset managers did not see the scenario proposed in this statement as likely; more than 80% (n = 57) of respondents fully disagreed or disagreed with the statement, 13% (n = 9) were neutral and 7% (n = 5) fully agreed or agreed.

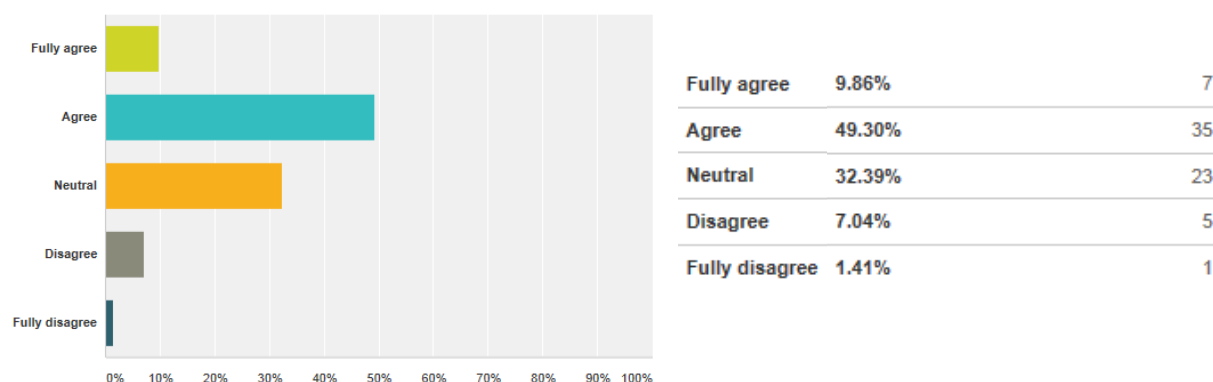
Figure 6.30 Answers to Statement 29: One military force and MoD for the EU?



Statement 30: The question in the case of Directive 2009/81/EC is not whether or which types of defence procurement contract may be excluded from the scope of the new Directive, but what legal standing EU MS have to resist the authority of the EC.

In cases where EU MS exclude EU procurement law and require offset to protect their national security interests and the EC is in disagreement, a stiff debate may arise as to whether the EU MS' discretion should be questioned. More than 59% (n = 42) of respondents fully agreed or agreed with this statement that the legal standing of EU MS' right of resistance may be at stake; 32% (n = 23) were neutral and 8% (n = 6) disagreed.

Figure 6.31 Answers to Statement 30: EU MS versus EC authority



See Appendix G for a more compact summary of the responses to all 30 statements.

Responses relating to the main objectives of the study

Several of the statements in the questionnaire were most directly linked to the main objectives of the study as stated in Chapter 1. Answers to those questions are summarised below.

1. Is the application of Directive 2009/81/EC clear?
 - More than 62% (n = 44) of respondents stated that the application of Directive 81 is not clear, while nearly 24% (n = 17) were neutral (Statement 2).
2. Does every EU MS, in order to protect its national security interests, have the exclusive right to decide whether and when it wants to apply Article 346 to exempt a defence and security procurement contract from EU law?
 - A total of 83% (n = 59) of respondents agreed (Statement 14).

3. Will the EU defence market become more competitive when offset is no longer required in the EU?
 - More than 78% (n = 56) of respondents disagreed (Statement 3).
4. Do EU MS still purchase most defence equipment from their national suppliers?
 - More than 56% (n = 40) of respondents agreed, while 27% (n = 19) were neutral (Statement 24).
5. Will Directive 81 result in EU MS purchasing more defence equipment from one another?
 - More than 73% (n = 52) of respondents disagreed, while 18% (n = 13) were neutral (Statement 8).
6. Is indirect offset important to purchasing countries, in that it develops a country's general infrastructure, skills, know-how and industrial capabilities that eventually ensure national security?
 - More than 72% (n = 51) agreed (Statement 15).
7. Does the fact that "national security interests" are not defined make Directive 81 nearly meaningless, because the gist of the whole Directive is based on such an interpretation?
 - More than 50% (n = 36) of respondents agreed, while nearly 24% (n = 17) were neutral (Statement 20).
8. Until the interpretation of Directive 81 becomes clear, will EU MS in need of offset decide to act outside the scope of Directive 81, completely separating agreements for industrial benefits from the defence procurement contracts (the UK's Defence and Security Industrial Engagement Policy, or DSIEP, is an example)?
 - More than 75% (n = 53) agreed (Statement 21).
9. Has Directive 81 dramatically changed the daily management of offset by defence companies fulfilling offset in the EU?
 - 46% (n = 33) of respondents disagreed, while 32% (n = 23) were neutral (Statement 26).

Summary of findings

In this section, to illustrate the areas of strongest consensus, responses to the 30 questions are listed in order from the highest to the lowest percentage of agreement with a particular position. Where there was a high percentage of disagreement, the

question has been restated so that all high percentages of shared opinion can be presented as statements of agreement.

- 98% agreement with Statement 17: Contrary to the declining budgets in the EU, some developing countries are increasing defence spending and applying stringent offset requirements that require transfers of technology, expertise, skills and economic benefits.
- 91% agreement with Statement 4: Smaller EU MS with less developed defence industries rely on foreign imports for their defence equipment, but there is no guarantee that they will purchase from other EU MS.
- 90% agreement with Statement 1: Offset makes it possible for local companies to access the global defence industry, gain access to new markets and grow technological capabilities.
- 83% agreement with Statement 14: In order to protect its national security interests, every EU MS has the right to decide whether it wants to apply Article 346 TFEU to exempt a defence and security procurement contract from EU law.
- 80% agreement with respect to Statement 29: Directive 81 will not result in one military force and one Ministry of Defence for the EU.
- more than 78% agreement with Statement 3: By banning offset, Directive 81 will *not* be successful in creating a more competitive EU defence market.
- 78% agreement with Statement 10: The elimination of official, published offset rules in EU MS results in less transparency.
- 76% agreement with Statement 18: The main European armaments producers are actually competitors in the export market, which defeats the cooperation aim of Directive 81.
- 76% agreement with Statement 16: In order to stay viable, EU defence companies currently develop partnerships with non-European companies and producers.
- 75% agreement with Statement 21: Until the interpretation of Directive 2009/81/EC becomes clear, EU MS in need of offset may decide to act outside of the scope of Directive 2009/81/EC, completely separating agreements for industrial benefits from the defence procurement contracts (the UK's Defence and Security Industrial Engagement Policy, or DSIEP, is an example).
- 73% agreement with Statement 8: Directive 81 does not ensure that EU MS purchase more defence equipment from one another.

- 72% agreement with Statement 15: Indirect offset is important to purchasing countries, because it develops a country's general infrastructure, skills, know-how and industrial capabilities that eventually ensure national security.
- 71% agreement with Statement 23: Defence contractors that tender to supply defence equipment to EU MS still include offset in the form of local content, work-packages and transfer of technology in their offers.
- 65% agreement with Statement 6: The new security of information clauses in Directive 81 are sufficient to safeguard classified information and therefore the Article 346 TFEU exemption will no longer be necessary
- 64% agreement with Statement 22: EU MS that required offset in the past still ask for offset when purchasing defence equipment.
- 62% agreement with Statement 2: The application of Directive 2009/81/EC on defence procurement is not clear.
- 59% agreement with Statement 30: The question in the case of Directive 2009/81/EC is not whether or which types of defence procurement contract may be excluded from the scope of the new Directive, but what legal standing EU MS have to resist the authority of the EC.
- 56% agreement with Statement 5: When an EU MS supplies defence and security equipment to other EU MS, SoS is not always ensured
- 56% agreement with Statement 24: EU MS still purchase most defence equipment from their national suppliers.
- 55% agreement with Statement 13: All aspects of a defence contract include elements relating to national security and therefore 100% of the contract value should be subjected to offset.
- 55% agreement with Statement 11: More than two and a half years after the launch of Directive 81, little has changed.
- 52% agreement with Statement 9: Under Directive 81, EU companies' ability to access American or other high technologies is drastically reduced, which will severely limit the EU's technology base, as well as research and development (R&D) possibilities.
- 50% agreement with Statement 20: Since "national security interests" are not defined, Directive 81 is nearly meaningless.
- 50% agreement with Statement 27: After Directive 81, offset managers need new skills and mandates to manage defence procurement in EU MS effectively.

- 48% agreement with Statement 7: The 30% sub-contracting allowed in Directive 81 can be to "third parties", which include companies globally.
- 46% agreement with Statement 26: The daily management of offset in defence companies that need to fulfil offset in the EU changed dramatically because of Directive 81.
- 45% agreement with Statement 28: Directive 81 makes national laws in EU MS pertaining to defence procurement irrelevant, diminishing their sovereignty.
- 44% agreement with Statement 12: When a country purchases foreign defence equipment, offset is necessary to protect national security interests.
- 43% agreement with Statement 19: By including newcomer SMEs in the defence supply chain, product quality and project milestones become unpredictable, exposing the procuring nation and the armed forces to risk.

The one question on which the frequency of neutral answers exceeded both the number of respondents agreeing with the statement and the number disagreeing was Statement 25: DCs that are not successful in their bids are willing to complain to the EC when they do not win a tender because they did not include an offset offer, while the winner did.

Highest scores

The highest scores in each category of answers (fully agree, agree, neutral, disagree and fully disagree) were recorded for the following statements:

Fully agree:

- Statement 17, 66%: Contrary to the declining budgets in the EU, some developing countries are increasing defence spending and applying stringent offset requirements that require transfers of technology, expertise, skills and economic benefits.
- Statement 1, 51%: Offset makes it possible for local companies to access the global defence industry, gain access to new markets and grow technological capabilities.
- Statement 10, 45%: The elimination of official, published offset rules in EU MS results in less transparency.

Agree:

- Statement 23, 62%: DCs that tender to supply defence equipment to EU MS still include offset in the form of local content, work-packages and transfer of technology in their offers.
- Statement 16, 61%: In order to stay viable, EU defence companies currently develop partnerships with non-EU companies and producers.
- Statement 22, 56%: EU MS that required offset in the past still ask for offset when purchasing defence equipment.

Neutral:

- Statement 25, 41%: DCs that are not successful in their bids are willing to complain to the EC when they do not win a tender because they did not include an offset offer, while the winner did.
- Statement 6, 34%: The new Sol clauses in Directive 81 are sufficient to safeguard classified information and therefore the Article 346 TFEU exemption will no longer be necessary.
- Statements 26 and 30, 32.4%: The daily management of offset in defence companies that need to fulfil offset in the EU changed dramatically because of Directive 81, and The question in the case of Directive 81 is not whether, or which types of defence procurement contract may be excluded from the scope of the new Directive, but what legal standing EU MS have to resist the authority of the EC.

Disagree:

- Statement 2, 49%: The application of Directive 81 on defence procurement is clear.
- Statement 3, 48%: By “banning” offset, Directive 81 will be successful in creating a more competitive EU defence market.
- Statement 5, 48%: When an EU MS supplies defence and security equipment to other EU MS, SoS is always ensured.

Fully disagree:

- Statement 29, 37%: Directive 81 will result in one military force and one Ministry of Defence for the EU.
- Statement 3, 31%: By “banning” offset, Directive 81 will be successful in creating a more competitive EU defence market.

- Statement 8, 28%: Directive 81 ensures that EU MS purchase more defence equipment from one another.

A further analysis of the highest scores is included in Chapter 7.

6.3 COMMENTS

Note that in cases where the comments were similar, they were not repeated.

Statement 1: Offset makes it possible for local companies to access the global defence industry, gain access to new markets and grow technological capabilities.

- Fully agree, especially for smaller companies in countries with no OEMs (original equipment manufacturers).
- Fully agree, but local companies must be competitive in price and quality.
- Neutral, DCs do not want to transfer technologies that can quickly create competition.
- Neutral, offset successes depend on many factors.

Statement 2: The application of Directive 81 on defence procurement is clear.

- Disagree, the applications by EU MS are not clear.
- Disagree, the EC has another view than what is stipulated in Directive 81.
- Disagree, since several MS are taking the stance that they will continue with offset, DCs are unsure how to react.

Statement 3: By “banning” offset, Directive 81 will be successful in creating a more competitive EU defence market.

- Fully disagree, offset has nothing to do with it, success depends on non-EU exports.
- Fully disagree, there are multiple multinational defence companies in Europe that contribute to the fragmentation of the defence market in the EU. The industry itself should first eliminate the fragmentation and over capacity, and only then can governments use their influence to make the defence market competitive and self-sufficient.
- Fully disagree, it will create monopolies in large MS.
- Fully disagree, Directive 81 does not create a level playing field. I cannot understand why the MS agreed to the Directive.

- Fully disagree, European companies have a disadvantage since foreign companies can supply to Europe with no offsets, yet European companies still have to face offsets in many countries outside of Europe.
- Disagree, legislation based on reciprocity similar to the Buy American Act would have been a better choice.
- Disagree, note that there are nine other market distortions.
- Disagree, for exports it is a disadvantage.
- Disagree, will stifle competition outside Europe.
- Neutral, because the elimination of offsets may be successful in forcing consolidation, with only the best companies surviving, but will be unsuccessful in the sense that it will bring technology transfers to an end and discourage partnerships, while offset resulted in some of the best partnerships in the industry in the past.

Statement 5: When an EU MS supplies defence and security equipment to other EU MS, SoS is always ensured.

- Disagree, if the supplying country has to manage conflict it needs the supplies for itself.
- Disagree, it represents a false sense of security. Each EU MS will act in its own best interests regardless of its EU membership;
- Disagree, SoS is never fully guaranteed—during a conflict it becomes just an agreement on paper and Article 346 should be applied when purchasing critically important defence systems.
- Agree, it is the objective.

Statement 6: The new security of information clauses in Directive 81 are sufficient to safeguard classified information and therefore the Article 346 TFEU exemption is no longer necessary.

- Neutral, not sufficient in all cases but may work in some.

Statement 7: The 30% sub-contracting allowed in Directive 81 can be to "third parties", which include companies globally.

- Fully agree, it should be global.
- Agree, it should not be mandatory to include companies in EU MS, it is for the purchasers (MS) to decide.
- Disagree, it is clear that EU MS are not convinced of the positive effect it will have in their respective countries.

- Fully disagree, SMEs in EU cannot compete in countries such as India and Brazil.

Statement 8: Directive 81 ensures that EU MS purchase more defence equipment from one another.

- Fully disagree, larger MS will continue to limit procurements to their own industries.
- Fully disagree, when recently procuring armoured vehicles, France invoked Article 346 in order to protect French contenders.
- Fully disagree, not likely, MS will purchase nationally or internationally based on competition.
- Neutral, it remains to be seen.

Three respondents who agreed with the statement clarified that this is the eventual goal, although one said that the goal was “not real or practical”.

Statement 9: Under Directive 81, EU companies’ ability to access American or other high technologies is drastically reduced, which will severely limit the EU’s technology base, as well as R&D possibilities.

- Fully agree, there will be less pressure on companies outside the EU to provide technology transfers.
- Fully agree, offset can overcome such inconveniences.
- Agree, yes for technology, while R&D may still depend on MS’ budgets.

Statement 10: The elimination of official, published offset rules in EU MS results in less transparency.

- Fully agree, Poland is a perfect example of this. No one knows what is going on!
- Fully agree, it may result in a "shadow offset market" instead.

Statement 11: More than two and a half years after the launch of Directive 81, little has changed.

- Agree, the EC is still struggling to enforce Directive 81.
- Agree, little has changed since few RfQs have been released since the transposition of Directive 81 in respective countries.
- Agree, nothing has changed in the procurement behaviour of the bigger MS, while the smaller MS may find it more difficult to defend their national security interests without scrutiny from the EC.
- Disagree, obligors understand Directive 81; however, they are still trying to determine whether or how MS will implement it.

- Disagree, procurement laws have been updated since the launch of Directive 81; however, there has been a paucity of tenders involving international defence contractors so it's tough to evaluate if the Directive is changing things.
- Disagree, it is already less transparent.
- Disagree, the uncertainty makes some governments hesitant to negotiate offset but MS will soon realise they are losing their industries.

Statement 12: When a country purchases foreign defence equipment, offset is necessary to protect national security interests.

- Fully agree, especially if its industrial base is not sufficiently developed.
- Agree, the transfer of work-packages and know-how is important to national security.
- Neutral, offset helps to protect national security interests, but it isn't "necessary".
- Disagree, indirect offset is an integral part of offset fulfilment, assisting in developing skills and know-how.

Statement 13: All aspects of a defence contract include elements relating to national security and therefore 100% of the contract value should be subjected to offset.

- Agree, but it depends on the product.
- Neutral, it depends on the country's objective of using offset to create value for its country or industry.
- Disagree, 100% on the sales price is acceptable, but should not include the maintenance contracts.
- Disagree, it depends on the project.
- Disagree, not for government-to-government sales, but yes when DC's have to fulfil offset.
- Disagree, this will be hard to motivate.

Statement 14: In order to protect its national security interests, every EU MS has the right to decide whether it wants to apply Article 346 TFEU to exempt a defence and security procurement contract from EU law.

- Fully agree, this is a sovereign right.
- Agree, but now the EC has to give its consent!
- Agree; however, the EC may oppose it.

Statement 15: Indirect offset is important to purchasing countries, because it develops a country's general infrastructure, skills, know-how and industrial capabilities that eventually ensure national security.

- Fully agree, indirect offset develops adjacent technologies, which help make industry financially stable.
- Fully agree, provided that it is based on competitiveness.
- Fully agree, 100% defence-related offset is not always realistic. Companies should be granted the flexibility to choose between direct and indirect.
- Fully agree, offset should not be regulated by distinguishing between direct and indirect solutions.
- Agree, all companies pay taxes to the government and should get an opportunity to participate in offset cooperation.
- Agree, governments will focus on areas of "comparative advantage" and defence may not be a priority.
- Neutral, in some cases yes, some cases no.
- Neutral, it may be the case, but more general benefits will be hard to defend as being in the interest of national security.
- Disagree, not valid in developed countries.

Statement 16: In order to stay viable, EU defence companies currently develop partnerships with non-European companies and producers.

- Fully agree, the money is spent overseas and the offset demands are tough.

Statement 17: Contrary to the declining budgets in the EU, some developing countries are increasing defence spending and applying stringent offset requirements that require transfers of technology, expertise, skills and economic benefits.

- Fully agree, they look after their own interests.

Statement 19: By including newcomer SMEs in the defence supply chain, product quality and project milestones become unpredictable, exposing the procuring nation and the armed forces to risk.

- Fully agree, my company certainly had that problem where technical issues at the local sub-contractor caused unacceptable delays, not only disrupting defence introduction and training programmes but putting us at risk of penalties and exposing our reputation.
- Agree, it depends on the product and the quality; however, we have examples of leading EU SMEs delivering very modern technologies, which after ten years of implementation of the systems are still not functioning as expected.
- Neutral, it depends fully on the quality of such enterprises and their products.
- Fully disagree, it depends on the company selected by the OEM.

- Fully disagree, not when this is managed correctly.

Statement 20: Since “national security interests” are not defined, Directive 81 is nearly meaningless.

- Agree, the question is who will monitor the results.
- Agree, open tendering is no longer allowed in the EU but only 17% of contracts are transparent and based on “open” competition.
- Neutral, it leaves space for "creative" interpretation.
- Disagree, only the offset aspect of Directive 81 is meaningless.
- Disagree, it has become a political decision.
- Fully disagree, Directive 81 is transposed and therefore effective.

Statement 21: Until the interpretation of Directive 81 becomes clear, EU MS states in need of offset may decide to act outside the scope of Directive 81, completely separating agreements for industrial benefits from the defence procurement contracts (the UK’s DSIEP is an example).

- Fully agree, if countries like France that lobbied fiercely to abolish offset start invoking Article 346 to impede participation of non-French defence companies, including DCs in the EU, it becomes clear that the position of the EC is not shared by many MS.
- Fully agree: the approach is much easier for bigger MS.
- Agree, all will follow the historic Germany (Eagle vehicle) and French (IVECO trucks) models.
- Disagree, it may happen but will relate to the way the supply side of the market is structured. When the market is open, it will no longer be necessary. However, Directive 81 does not have the potential to really “open up” the market in whatever way it is interpreted.

Statement 22: EU MS that required offset in the past still ask for offset when purchasing defence equipment.

- Neutral, the outcome is not clear yet.
- Neutral, due to among other declining budgets, difficult to make a general statement.

Statement 23: Defence contractors that tender to supply defence equipment to EU MS still include offset in the form of local content, work-packages and transfer of technology in their offers.

- Fully agree, just less transparent now as it is not officially recorded.

- Neutral, I believe DCs still offer offsets but only if required by the MS, not proactively.
- Disagree, only the bigger MS with a complete supply chain can do that.

One comment stated that DCs are including clauses in supply contracts that they agree with the offset requirements of MS but, in case the EC would deem that the essential security interests are not legitimate, the offset agreement will be considered null and void.

Statement 24: EU MS still purchase most defence equipment from their national suppliers.

- Agree, they invoke Article 346.
- Agree, bigger MS are still able to do so but some smaller EU MS can no longer purchase nationally.
- Disagree, it depends on the EU MS, because MS have varied levels of capabilities.

Statement 25: DCs that are not successful in their bids are willing to complain to the EC when they do not win a tender because they did not include an offset offer, while the winner did.

- Agree, it may be that at least some of the European companies are willing to complain if they think they have a cause.
- Agree, the Directive will produce many distortions.
- Disagree, they do not want MS as enemies.

Statement 26: The daily management of offset in defence companies that need to fulfil offset in the EU changed dramatically because of Directive 81.

- Fully agree, offset managers have to be extremely careful how they respond.
- Disagree, Directive 81 has made the daily management of offset more difficult since authorities are not clear on how to manage existing obligations or new procurements.
- Disagree, everything is more unclear.
- Neutral, it depends on their business volume outside the EU.

Statement 27: After Directive 81, offset managers need new skills and mandates to manage defence procurement in EU MS effectively.

- Agree, companies will need to develop new methods to ensure a legitimate business footprint (local presence) in MS where they want to do business with the relevant MoDs.

Statement 28: Directive 2009/81/EC makes national laws in EU MS pertaining to defence procurement irrelevant, diminishing their sovereignty.

- Agree, that is the objective.
- Agree—a dangerous path!
- Disagree, if Directive 81 is transposed cleverly, it will not limit MS that much; however, the problem is the interpretation of the EC of the Directive including, for example, the Guidance Note on Offset.

Statement 29: Directive 81 will result in one military force and one MoD for the EU.

- Agree, this appears to be the goal of the EU.
- Agree, one military but not soon.
- Agree, but we are far from achieving that objective; Europe should establish a department similar to the US Defense Logistics Agency (DLA).
- Neutral, depends on politics.
- Disagree, bigger MS will do their own thing.

Statement 30: The question in the case of Directive 81 is not whether or which types of defence procurement contract may be excluded from the scope of the new Directive, but what legal standing EU MS have to resist the authority of the EC.

- Agree, the latter part of the statement is indeed more important, while the first part would result in never-ending discussions and the EC is too clever to engage in this type of discussion.
- Agree, it's a matter of money! Who gets the EU funding?
- Neutral, the EC should focus on more important matters, such as agricultural subsidies.

Summary of comments

The largest number of comments related to Statements 12 (All aspects of a defence contract include elements relating to national security and therefore 100% of the contract value should be subjected to offset) and 15 (Indirect offset is important to purchasing countries, because it develops a country's general infrastructure, skills, know-how and industrial capabilities that eventually ensure national security). Perhaps not coincidentally, these areas represent two of the greatest uncertainties in the new legislation. Also receiving a high volume of comments were Statements 3, 11, 22, 24, 26, and 29. A further analysis of comments is found in 7.2 Analysing the findings.

6.4 CONCLUSION

Responses linked to the main objectives of the study

The responses to the questionnaire address the main objectives of the study and offer an overview of offset managers' views and perceptions of the objectives and possible outcomes of Directive 81. Nearly three years after the launch of Directive 81, the perceptions and experience of offset managers globally regarding the goals, implementation and impact of Directive 81 are that the application of the legislation is still not clear, but that every EU MS has the exclusive right to decide whether and when it wants to apply Article 346 to exempt a defence and security procurement contract from EU law and require offset.

Offset managers strongly believe that the elimination of offset will not result in the EU defence market becoming more competitive, and that Directive 81 cannot guarantee that EU MS will purchase defence and security equipment and resources from one another.

Nearly three-quarters of offset managers who completed the survey agreed that indirect offset develops a country's general infrastructure, skills, know-how and industrial capabilities that eventually ensure national security. They believe that if these aspects feature in governments' goals and can be proven to relate to national security interests, indirect offset should not be eliminated.

More than 56% of respondents stated that EU MS still purchase most defence equipment from their national suppliers. Some respondents were neutral, demonstrating that some MS may no longer have the capability to supply their national needs or that respondents may not be privy to the information required.

More than 50% of respondents indicated that as long as "national security interests" are not defined, Directive 81 is nearly meaningless; however, some observed that decisions relating to Directive 81 are purely a matter of politics or that the uncertainty offers opportunities for creative interpretation.

Nearly three-quarters of respondents agreed that EU MS in need of offset may decide to act outside the scope of Directive 81.

In the uncertainty that has prevailed since the launch of Directive 81, 46% disagreed with the statement that Directive 81 has dramatically changed the daily management of offset in defence companies fulfilling offset in the EU.

The findings resulted in recommendations useful to the EC, to policy makers in EU governments, to offset managers at DCs that have to fulfil offset, and to DC senior managers involved in government procurement at the global level.

In Chapter 7 the findings are further analysed, discussed and placed within the context of the literature review.

CHAPTER 7

ANALYSIS AND DISCUSSION OF FINDINGS AND LINKAGES TO THE LITERATURE REVIEW

7.1 INTRODUCTION

The aims of this study were to identify the influence of legislation and government policy on patterns of international defence trade, focusing on offset and future markets. New EU legislation on defence procurement in the form of Directive 81 was analysed, assessing its influence on:

- offset policies in the EU;
- the sovereignty of EU governments regarding their decisions related to their relevant defence industries;
- the competitiveness of the EU defence market in view of global developments;
- intra-EU trade in the defence and security industry;
- offset benefits that the EU received in the past;
- indirect offset;
- the interpretation of “national security interests”;
- future decisions by EU MS regarding offset requirements; and
- the daily management of offset by defence companies fulfilling offset in the EU.

The background research led to development of a comprehensive 30-item survey administered to a representative collection of offset managers. The findings of this survey, presented in Chapter 6, will be analysed in this chapter and compared to the literature review in order to assess congruences and inconsistencies and identify new information.

7.2 ANALYSING THE FINDINGS

Review of background information

This chapter compares primary data (i.e. the questionnaire responses by offset managers) with secondary data presented in Chapters 2 to 4 that discussed the nature of offset, the current defence market in the EU and worldwide, and the purpose and impact of Directive 81. This background research sought to discover where Directive 81

fits into the European policy-making regime; how it supports the aims of the EU Single Market; whether it aligns with other relevant legislation; its implications for offset in the EU; and how it influences international trade and future markets. The literature review unearthed numerous issues that could be affected by Directive 81 (such as SoS, protectionism, regionalisation, the use of dual-use items for military applications, the congruence between civil and military markets, and the outlook for DCs).

The review justified further investigation aimed at determining the current and prospective influence of Directive 81 on the EDTIB against the backdrop of the international arms trade and future market expectations. It found a significant knowledge gap with regard to the implementation and outcomes of Directive 81. Although the EC's policies, views and regulations are known, the bigger picture, relating to the influence of Directive 81 on offset management in the EU and the sovereignty of EU MS, has not been analysed in context.

Survey responses and the primary study objectives

In this section, responses to the nine statements most closely aligned with the study's main objectives are presented.

1. The application of Directive 81 is not clear (Statement 2):
 - 62% (n = 44) of respondents agreed, indicating that the extended implementation period of Directive 81 may have nothing to do with reluctant MS but could be a result of unclarity in the legislation itself. Only 14% disagreed and 24% were neutral.
2. In order to protect its national security interests, every EU MS has the exclusive right to decide whether and when it wants to apply Article 346 to exempt a defence and security procurement contract from EU law (Statement 14):
 - a strong majority of respondents (83%; n = 59) felt that MS should have this right, while only 7% disagreed with this statement and 10% were neutral.
3. The EU defence market will not become more competitive when offset is eliminated (Statement 3):
 - 78% (n = 56) agreed and 9% disagreed; this result suggests that blaming the non-competitiveness of the EU defence industry on offset is a false simplification. A total of 11% were neutral.

4. EU MS still purchase most defence equipment from their national suppliers (Statement 24):
 - A total of 56% (n = 40) of respondents agreed. MS with developed defence industries are able to purchase nationally, but in cases where MS do not have the capabilities to supply their own defence materiel they purchase from foreign suppliers, requiring offset in order to develop the local skills needed to operate and maintain the equipment. 17% disagreed and 27% were neutral.
5. Directive 81 will not result in EU MS purchasing more defence equipment from one another (Statement 8):
 - Altogether 73% (n = 52) of respondents agreed, indicating that MS, since they want to ensure Sol and SoS when purchasing defence and security equipment, will continue to make decisions that are in their own nation's best interest. 8% disagreed and 18% were neutral.
6. Indirect offset is important to purchasing countries, because it develops a country's general infrastructure, skills, know-how and industrial capabilities that eventually ensure national security (Statement 15):
 - the great majority of respondents (72%; n = 51) felt that indirect offset supports a country's ability to manage defence and security equipment effectively. Only 15% disagreed and 13% were neutral.
7. The fact that "national security interests" are not defined makes Directive 81 nearly meaningless, because the gist of the whole Directive is based on such an interpretation (Statement 20):
 - Half of the respondents (50%) (n = 36) agreed; Directive 81 has been constituted, but its ambiguity results in uncertainties and inaction. 25% of respondents disagreed and 24% were neutral.
8. Until the interpretation of Directive 81 becomes clear, EU MS in need of offset may decide to act outside the scope of Directive 81, completely separating agreements for industrial benefits from the defence procurement contracts (the UK's DSIEP is an example) (Statement 21):
 - A total of 75% (n = 53) agreed, indicating an expectations that MS may search for other routes to ensure defence proficiency. Only 9% disagreed and 16% were neutral.

9. Directive 81 has dramatically changed the daily management of offset in defence companies fulfilling offset in the EU (Statement 26):

- A total of 46% (n = 33) of respondents disagreed; as long as confusion persists, the management of offset in the EU is controversial. 21% agreed and 32% were neutral.

Disagreements exceeding 20%

Overall, the responses from respondents generally confirmed expectations. In only two of the nine cases discussed above did the number disagreeing with the statement exceed 20%. With regard to Statement 20 on the failure of Directive 81 to define “national security interests”, the 25% disagreement could indicate some respondents’ view that Directive 81 cannot be considered “meaningless” since it has been transposed into national law.

However, an analysis of other statements by the respondents confirmed that the interpretation of provisions in the Directive is disparate. With regard to Statement 26, the 21% of respondents saying that Directive 81 has not dramatically changed offset management could be interpreted as a reflection that, at least for some DCs, the confusion surrounding Directive 81 has not resulted in many applications of the new legislation and therefore major changes are not yet apparent.

Analysing the highest scores

The three statements that received the highest scores in each of the categories (fully agree, agree, neutral, disagree and fully disagree) were stated in Chapter 6, see 6.2, heading “Highest scores”. The implications of these results can be analysed as follows:

- fully agree (Statements 17, 1, and 10): respondents are concerned about stringent offset requirements that are still a reality outside of the EU; they believe that offset has proven benefits, specifically with respect to accessing new markets, and that the substitution of national offset rules with a case-by-case assessment will result in less transparency.
- agree (Statements 23, 16, and 22): DCs still include offset proposals in tenders; EU defence companies currently develop partnerships with non-EU companies and producers; and EU MS that required offset in the past still ask for offset when purchasing defence equipment.

- neutral (Statements 25, 6, 26 and 30—the last two with equal numbers of neutral answers): it is not clear whether DCs that are not successful in their bids and feel they have been disadvantaged are willing to complain to the EC, especially since governments are the main clients of DCs and have dominant ruling power; the new Sol clauses in Directive 81 should be sufficient to safeguard classified and sensitive information, but respondents were not sure that these provisions will be sufficient in all instances and did not want to eliminate outright the possibility to call upon the Article 346 exemption. Even though Directive 81 includes provisions for Sol, offset may retain its prominence when considering national security interests. Respondents were uncertain to what extent the daily management of offset by defence companies that fulfil offset in the EU has changed, and an interpretation of related answers could indicate that the uncertainty surrounding Directive 81 did not result in compliance with what the EC requires. A 32.4% neutral vote for Statement 30 indicates that respondents were uncertain whether EU MS have any chance to expect that the new legislation will be interpreted in a way that retains their right to protect their national security interests.
- disagree (Statements 2, 3, and 5): respondents' highest disagreement related to the statement that the application of Directive 81 on defence procurement is clear; they feel overwhelmingly that it is not the case. Disagreements on a similar level were declared regarding the claim that the “banning” of offset will create a more competitive EU defence market. Note that this statement also received the highest vote under “fully disagree”, indicating how strongly offset managers deny such a possibility. Respondents disagreed with the statement that SoS is always ensured in EU-wide defence and security procurements, making it clear that bilateral agreements are preferred for defence procurement and that it may be implausible to expect EU MS to trust all other MS equally when it pertains to their defence and security.
- fully disagree (Statements 29, 3, and 8): respondents do not foresee Directive 81 resulting in one military force and one Ministry of Defence for the EU, suggesting that EU MS will retain their sovereignty in this domain; a high disagreement with Statement 3 reiterates that respondents do not see how the “banning” of offset will create a more competitive EU defence market, and they equally do not foresee how Directive 81 will ensure that EU MS purchase more defence equipment from

one another in a scenario where the EU's defence budgets have been decreasing or have been stagnant, with non-EU markets becoming more competitive.

The strongest agreement was recorded for Statement 17 (“Contrary to the declining budgets in the EU, some developing countries are increasing defence spending and applying stringent offset requirements that require transfers of technology, expertise, skills and economic benefits”). The strongest disagreement was recorded for Statement 3 (“By 'banning' offset, Directive 81 will be successful in creating a more competitive EU defence market”).

Analysis of the comments

In some cases, respondents as a whole appear to have recorded conflicting responses because some interpreted the intended *goal* of Directive 81 and disagreed with the statement, while others interpreted the actual *outcome* of Directive 81, agreeing with the statement. Examples include Statements 5 (“When a EU MS supplies defence and security equipment to other EU MS, SoS is always ensured”) and 8 (“Directive 81 ensures that EU MS purchase more defence equipment from one another”).

In the case of Statement 11 (“More than two and a half years after the launch of Directive 81, little has changed”), some agreed because they believe that Directive 81 has not been properly implemented because of uncertainties, while others stated that there are changes because MS had to implement Directive 81, resulting in less transparency.

The respondents who disagreed with Statement 12 (“When a country purchases foreign defence equipment, offset is necessary to protect national security interests”) stated that offset also assists with ensuring the viability of industry and develops skills and know-how, thereby referring to the benefits of indirect offset that Directive 81 now wants to ban through its interpretation of Article 346 and the term “national security interests”. It is further accepted that offset managers primarily view offset as a responsibility—a requirement that has to be fulfilled according to rigorous rules in order to win a supply contract. The MS' objectives related to offset in the past also did not primarily focus on national security interests and this phrase was not often mentioned in offset policies.

A total of 55% of respondents disagreed with Statement 13 (“All aspects of a defence contract include elements relating to national security and therefore 100% of the contract value should be subjected to offset”); however, some of these made comments such as that 100% is acceptable but maintenance contracts should be excluded, or that 100% should be required when a DC is the supplier but not for G2G sales. Therefore it can be suspected that more respondents agreed with this statement than the quantitative data indicated.

Statement 19 (“By including newcomer SMEs in the defence supply chain, product quality and project milestones become unpredictable, exposing the procuring nation and the armed forces to risk”) obtained mixed responses, showing that some companies had better experiences than others in working with SME sub-contractors.

Statement 20 (“Since ‘national security interests’ are not defined, Directive 81 is nearly meaningless”) also received differing responses. Some respondents agreed, some stated that only the part of Directive 81 relating to offset is meaningless, and others stated that the uncertainty leaves room for creativity.

Some respondents agreed with Statement 24 (“EU MS still purchase most defence equipment from their national suppliers”), while others stated that certain MS are no longer able to purchase from national suppliers because these companies no longer have the capabilities to supply their governments, meaning that these MS are not able to do so even if they wished to.

Comments from respondents mostly agreed with Statement 26 (“The daily management of offset in defence companies that need to fulfil offset in the EU changed dramatically because of Directive 81”); however, some stated that, because of the uncertainty that Directive 81 is creating, it cannot be evaluated yet.

Statements 29 and 30 pertain to the political position of the EU, and comments varied because the outcome is by no means certain. Comments relating to Statement 29 (“Directive 81 will result in one military force and one Ministry of Defence for the EU”) stated that this might be the ultimate goal, while others stated that larger MS will oppose such decisions.

While 59% agreed with Statement 30 (“The question in the case of Directive 81 is not whether or which types of defence procurement contract may be excluded from the scope of the new Directive, but what legal standing EU MS have to resist the authority of the EC”), suggesting that the outcome of Directive 81 would be determined by future political realities, a high percentage of respondents (32%) remained neutral, and their comments indicated that the EC should focus its efforts on more important issues.

7.3 COMPARING PRIMARY AND SECONDARY FINDINGS

Offset as a practice

In Chapter 2, offset was described as a global practice in public procurement. Evidence was presented that offset has strategic importance, representing an estimated average of 23.37% of overall global trade. The research demonstrated how offset prioritises independent potential to ensure national security and infrastructure development whenever a government procures defence and security equipment, and that indirect offset develops local capabilities. Survey respondents appeared to endorse this view of offset, as 90% agreed or fully agreed that offset makes it possible for local companies to access the global defence industry, gain access to new markets and grow technological capabilities (Statement 1). This view demonstrates a strong conflict with the aims of Directive 81 and proposes that some benefits of offset be retained in defence and security procurement in the EU.

Offset trends

An analysis of offset requirements and solutions outside the EU showed that offset is a growing trend globally. Chapter 3 demonstrated that offset makes it possible for local companies to become integrated with the global defence industry, prioritising access to regional markets and growing technological capabilities (Varoğlu, 2011:32) This opportunity is especially important for emerging nations seeking to strengthen their global defence standing. Military offset obligations in the top 20 markets (Figure 3.24) are expected to increase by 35% between 2012-2021, reaching US\$49.6-b in 2021 (Shanson, 2013d:6).

Saudi Arabia, India, Brazil, South Korea and the UAE are at the top of the list. In Statement 17, only one offset manager disagreed with the statement that contrary to the

declining budgets in the EU, some developing countries are increasing defence spending and applying stringent offset requirements that require transfers of technology, expertise, skills and economic benefits. Given this continuing requirement to fulfil offset in non-EU markets, the EDTIB will not be realised and non-EU joint ventures are the more likely future trend.

Offset benefits received

Available information on offset in the EU was analysed to determine which countries appear to have fulfilled the most offset or industrial participation from the 1980s to the launch of Directive 81 in 2011, which countries received the most offset benefits as importers, and how much benefit the EU nations stand to lose if Directive 81 is successful in eliminating traditional offset in the. It was determined that, prior to 2011, EU MS received more offset benefits than they fulfilled—benefits that they now stand to lose. Offset managers expressed strong views about the potential loss to EU MS, as 52% stated that if EU MS no longer receive offset benefits when they purchase defence and security equipment, the EU will not benefit from high technologies, which will limit the EU's technology base as well as R&D possibilities (Statement 9).

EU aims

The literature review examined the EU's rationale for eliminating offset, noting its desire to create a Single (Internal) Market based on the free movement of goods, services, people and money, with the EU's robust competition policy supporting the rules on free trade (Europa, 2011b:3-4) (see 4.4 Competition law).

As of April 2014, the EC Commissioner was reiterating his determination to eliminate offset "as quickly as possible" (Shanson, 2014d:2). Since 2011, offset in EU has become a political football, with MS caught between a push for conversion and EU supremacy, on one hand, and an argument for national sovereignty on the other. Ironically, both emphases desire to advance similar defence goals, but they are driven by two different power structures, a situation that is bound to create strife.

Survey respondents were not favourable to the EC and EU view of the situation. Only 9% respondents agreed that by banning offset, Directive 81 will be successful in creating a more competitive European Union defence market (Statement 3). The EC

could perhaps strengthen its case by clarifying in greater detail how it foresees that increased competition will ensue from the abolition of offset, especially given the current global defence market.

Moreover, only 6% of respondents disagreed with the claim in Statement 30 that the deeper question in the case of Directive 81 is what legal standing EU MS have to resist the authority of the EC (Statement 30). The ambiguous nature of Directive 81 and the unwillingness of the EC to explain the goals and risks in more detail have placed the focus not on the protection of MS' national security interests but on the authority of the EC to intervene and refer a possible transgression to the ECJ.

With regard to the statement that Directive 81 will result in one military force and one Ministry of Defence for the EU (Statement 29), more than 80% fully disagreed or disagreed. Although this may be the EU's ultimate aim, stakeholders do not seem to view it as a serious possibility in the near future.

Integrating defence and general industry policies

The EC may view an increase in dual-use technology and a closer convergence between the military and civil sectors as motivators to integrate defence and general industry policies at a national level (Ecorys, 2010, 44). However, there is no common policy to serve as a first step in this direction, and while that is lacking direct cross-border procurement in defence remains low, collaborative procurement is not pursued and governments practise policies that favour domestic industries. Collaborative defence procurement is still mostly performed through international organisations that were established for that purpose and apply differing procurement rules (Heuninckx, 2011:33). Cooperative procurement may also not eliminate protectionism (offset) because MS still require that a proportion of their investment must benefit their own defence industry.

Survey respondents indicated that they see a low level of collaborative procurement. Only 17% of respondents disagreed with Statement 24, which asserted that EU MS still purchase most defence equipment from their national suppliers. Only MS that have the required capabilities are able to purchase from national sources, and DCs with the strongest capabilities will get opportunities to supply other MS.

The EU defence industry

Privatisation, globalisation, and the increase use of dual-use products have diminished governments' influence in the defence industry and intensified competition in the market. Regionalisation of the EU defence and security industry through Directive 81 introduces a form of supranationalism that may further remove EU MS' authority in national security. In the survey, 45% of respondents agreed that Directive 81 makes national laws in EU MS pertaining to defence procurement irrelevant, diminishing their sovereignty (Statement 28), with more than 31% taking a neutral position. With the outcomes of Directive 81 still unclear, there is no certainty as to how the sovereign rights of MS may be influenced. Resistance from MS may change the path of implementation followed by Directive 81.

The EU defence base and capabilities

National defence industries in the EU are challenged by modest or declining domestic defence budgets and growing international competition, while the cost of technologically complex weapon systems result in receding procurement quantities. Non-EU offset requirements may lead to further cutbacks in factories and employment in Europe (EC, 2012f:2) and fewer industry participants ultimately may mean less innovation and fewer military capabilities (Hofbauer, 2010:42-3) Given the lower defence budgets in EU MS, survey respondents did not believe that Directive 81 would create more opportunities for EU-to-EU purchasing. Only 8% of respondents agreed that Directive 81 ensures that EU MS will purchase more defence equipment from one another (Statement 8).

Furthermore, only 4% of respondents disagreed with the statement that EU defence companies currently develop partnerships with non-European companies and producers in order to stay viable (Statement 16). The EU should realise that decreasing budgets will create market forces that lure DCs to new markets and should support such endeavours, while mitigating the negative implications that this shift could have on the EDTIB.

Access to emerging technologies

With defence spending growing in many parts of the world but not in the EU, the European defence market is facing serious competitive pressure. Already since 2001-2010, military budgets heralded a possible shift in defence spending (Anderson,

2012:slide 7) (see 3.21 Global military expenditures). Between 2001 and 2010, the fastest growing military budgets were China (189%), Russia (82%), the US (81%), Saudi Arabia (63%) and India (54%) (Gill, 2012c:3; SIPRI, 2012h:3, Table 4A.1) (see 3.20 The justification for defence spending). Offset managers expressed the view that Directive 81 could weaken European companies' ability to keep pace technologically. A total of 52% of respondents fully agreed or agreed that under Directive 81, EU companies' ability to access American or other high technologies is drastically reduced, thereby severely limiting the EU's technology base as well as R&D possibilities (Statement 9). If EU MS receive limited or no offset benefits when procuring defence and security equipment from leading global companies, MS will no longer receive high technologies that can support the development of the EU defence base.

The EU defence market

More than 50% of the sales of the top 15 European industry suppliers in 2011 sales were to non-European buyers (EC, 2013f:26) (see 3.19, heading "Internationalisation and risks"). World military expenditures are increasing each year, but the top spenders since 1985 indicate that defence priorities are moving away from Western Europe (Klare, 2013:1). In non-EU markets, European suppliers compete with one another, with the EU not able to support a specific EU supplier (EC, 2013e:15).

Survey respondents confirmed (with only 10% disagreeing with Statement 18) that the main European armaments producers are actually competitors in the export market, which defeats the cooperation aim of Directive 81. Thus the EU's aim to ensure competitiveness of EU-based DCs may be a step in the wrong direction and can be seen as ring-fencing the EU industry. The only way in which the EC can ensure EU-wide competition is if it supports the development of only certain DCs, a strategy that would end up creating monopolies.

Directive 81 and national security interests

Although the EC recognises that local key industrial capabilities in certain strategic sectors may be regarded by MS as an essential security interest (EC, 2010b:1-2), Directive 81 aims to eliminate circumstances that justify invocation of Article 346 (Weiner, 2010:slide 9). MS may be expected to prove the link between offset and the country's national security interests (Shanson, 2011h:5) (see 4.5 Directive 81, heading

“Four-part test”). The new legislation requires DCs and contracting authorities to re-assess their offset policies and find new ways to achieve goals that offset previously made possible.

Respondents were divided as to whether offset is necessary to protect national security interests when a country purchases foreign defence equipment. More than 44% agreed, 32% disagreed and 24% were neutral (Statement 12). This varied feedback could be based on the fact that “national security interests” are not currently defined, that MS’ offset policies hardly included this term in the past, and that respondents still believe that indirect offset should be regarded as a useful means of supporting domestic industries. Offset managers may tend to rather view SoS and Sol as important goals that justify requiring offset.

In addition, more than 50% of respondents fully agreed or agreed that since “national security interests” are not defined, Directive 81 is nearly meaningless, while 24% were neutral (Statement 20). The responses to both Statements 12 and 20 that relate to “national security interests” indicate that the basis of the legislation should be made clearer so that affected parties can interpret and apply it correctly.

Security of information provisions

Countries must ensure that they do not make the characteristics and specifications of defence equipment available to potential enemies. Directive 81 includes provisions that allow contracting authorities to include safeguards that require bidders to protect classified information against unauthorised access (Sol). Article 346 stipulates that in defence procurement MS do not have to disclose information when it is considered to be contrary to the essential interests of their security (OJEU 2009a:94). Directive 81 allow for the protection of classified information and can be applied throughout all phases of the contract award procedure (EC, 2010e:1).

Only one respondent agreed with the statement that the new Sol clauses in Directive 81 alone would be sufficient to safeguard classified information and that therefore the Article 346 exemption will no longer be necessary (Statement 6); 65% disagreed and 33% were neutral. This response may be an indication that MS are less reluctant to

trust EU MS suppliers than to rely on non-EU suppliers, since many MS have purchased from sources outside their own country in the past.

Sub-contracting

Special rules on sub-contracting within Directive 81 state that contracting authorities are able to award a maximum of 30% of the contract value to sub-contractors in “third countries”. Preamble 3 of Directive 81 states that MS should contribute to the diversity of the European defence-related supplier base, in particular by supporting the involvement of SMEs and non-traditional suppliers (OJEU, 2009a:76) (see 4.8 Sub-contracting and Directive 81). . However, the EC interprets “third countries” as other EU MS and demands that only SMEs in the EU be included.

The 30% sub-contracting permitted, even if the EC did interpret this provision more broadly so as to include SMEs globally, does not necessarily ensure that purchasing countries receive skills and technology related to their purchase, because the integral knowledge of the system remains with the prime contractor. When the sub-contracting is allowed only to SMEs in the EU and MS may not choose local sub-contractors, MS will benefit foreign SMEs, while their own economies may depend on the financial viability of their own SMEs. In times of economic downturn, this represents a major problem.

Nearly 48% of respondents agreed that the 30% sub-contracting allowed in Directive 81 can be to companies globally and not only to SMEs in the EU, while 26% were neutral, indicating that they were not sure whether the interpretation of the EC will eventually be binding or whether sub-contracting to SMEs will ensure competition (Statement 7). As for the likely results of the sub-contracting provision, 43% of respondents agreed that the aim of Directive 81 to include SMEs in the defence supply chain will result in unpredictable product quality and project milestones, exposing the procuring nation and the armed forces to risk (Statement 19); 34% disagreed and 23% were neutral. This result may indicate offset managers’ perception that some SMEs are more accomplished than others and that, when one is including SMEs in the supply chain, great care has to be taken to ensure effective management.

Security of supply

SoS clauses in Directive 81 aim to guarantee the timely and reliable execution of contracts and the continued availability of maintenance, repair and upgrade capabilities. Prior to 2011, SoS was a main motivator for offset. In its Guidance Notes on how to interpret the SoS provision in Directive 81, the EC indicates that a contracting authority can exclude a tenderer from the procedure “if it considers that the geographical location of non-EU sources could compromise their ability to comply with the MS’ requirements—in particular those related to SoS” (EC, 2010a:8). The EC expects EU MS to demonstrate a high level of mutual trust and to ensure EU-wide SoS in all circumstances. However, some EU MS may have better political relationships with their non-EU neighbours than with countries within the EU.

Offset managers endorsed these concerns. Only 14% of respondents stated that SoS is always ensured when an EU MS supplies defence and security equipment to other EU MS (Statement 5). Until the Directive has been analysed to the satisfaction of stakeholders and the word offset enters the discussion, at the very least MS should be allowed to assess SoS on a case-by-case basis.

Article 346 and other exemptions

In the literature review it was argued that EU law does not oppose offset. Article 346 TFEU, together with Article 47 of Directive 81, offers MS ample rights to claim exemption from EU law and request offset to protect their national security interests. Such exclusions may be based on various aspects that includes technical assistance, SoS and interoperability (OJEU, 2009a:112) (see also 4.16 Legal loopholes).

The EC has no clear control over how MS go about protecting their national security interests, but may investigate defence and security procurements when it believes that competition in the common market is affected by such decisions. Not surprisingly, offset managers strongly endorsed this exemption, with 83% of respondents stating that in order to protect its national security interests, every EU MS has the right to decide whether it wants to apply Article 346 to exempt a defence and security procurement contract from EU law (Statement 14). It will be difficult for the EC to prove misuse of this exemption, since the TFEU clearly states that MS have the discretion to decide when it is necessary to protect their national security interests.

Indirect offset

Although there is no explicit exclusion of indirect (non-defence) offset, it is clear that the EC would like to banish this practice. Recital 45 in Directive 81 states that performance conditions have to pertain to requirements that relate to the performance of the contract itself (OJEU, 2009a:82). It is proposed that the “performance” of a contract is based on more than the product being delivered and may include various capabilities and skills on various levels and in various project phases. It can be argued that the term “the subject matter of the contract” in Article 47(1)(a) of Directive 81 (Contract award criteria) can be seen as to include even more aspects or elements than the “performance of the contract”. For example, when the subject matter or substance of the procurement contract is stated to be ‘national protection, it seemingly covers a wider sphere of activity than the “performance of the contract”, which may include only activities related to specific systems being procured. In other words, *there is no explicit exclusion of indirect offset*, be it defence-related or civil. Article 346 requires that measures have to ensure national security interests.

Recital 53 further states that the specific nature of the contracts subject to Directive 81 also demonstrates the need to provide for new circumstances that may arise in the fields covered by it (OJEU, 2009a:83). This is by no means a conservative stipulation that opposes change or favours traditional views. Dual-use technologies are increasing and require certain manufacturing processes as well as products; there is more confluence between the civil and military domains; and a merging of defence and security issues require new mindsets that make it possible for MS to successfully justify requirements for non-defence offset by proving that a certain technology or an activity in a specific or non-defence related industry is crucial for the performance of the contract.

Military capability is furthermore as much about the use and effect of the relevant equipment as it is about a knowledge of technical intricacies and maintenance. The link between indirect offset and the performance of the contract is becoming more and more a matter of interpretation, affected by the growth of dual-use technologies, the state of development of certain supporting industries in a country and the advancement of the technology that the purchased equipment represents. Indirect offset supports the infrastructure that safeguards national security interests.

Survey respondents strongly favoured maintaining MS' opportunity to require indirect offset. Only 15% of respondents disagreed with the statement that indirect offset is important to purchasing countries because it develops a country's general infrastructure, skills, know-how, and industrial capabilities that eventually ensure national security (Statement 15). This response shows strong sentiments that conflict with the aims of Directive 81.

National procurement

The EC maintains that in the EU "a fully adequate EDTIB is no longer sustainable on a national basis", but should represent something more than the sum of its national parts (Hartley, 2011:95). However, the essence of offset is still to ensure national security, which requires the involvement of defence industries in the country purchasing the defence materiel. Only about five European nations can procure as much as 80% of their defence equipment from domestic sources (Shanson, 2013f:2).

The highest agreement with any statement among survey respondents was recorded for Statement 4, as 91% of respondents agreed with the statement that smaller EU MS with less developed defence industries will rely on foreign imports for their defence equipment but that there is no guarantee that they will purchase from other EU MS. Only one respondent disagreed with this statement. If the EU wishes to promote intra-EU contracting, the level of trust and communication between EU MS will need to be increased, with MS being more transparent about the benefits or losses in which Directive 81 may result. In this way the various MS and the EU could identify possible improvements and amendments.

Directive 81 and offset management processes and skills

The offset process followed by EU MS before Directive 81 was explained in the literature review, with the activities of offset managers in the various project phases represented graphically (Table 2.7). Since the adoption of Directive 81, instead of complying with national offset rules in EU MS, offset managers have had to manage offset on a case-by-case basis, based on requirements in singular RfQs. Offset management in the EU is currently hampered by incomplete legal interpretation, with few examples to establish a trend. There is little transparency between MS with regard to their reactions to Directive 81, making it more difficult for offset managers to base

solutions and processes on any identifiable pattern. The EC's guidance notes offer further interpretations but are not legally binding and do not always seem to align with the intent of the legislation.

Offset managers acknowledged the appropriateness of some limits of offset. More than 55% of respondents disagreed that all aspects of a defence contract include elements relating to national security and that therefore 100% of the contract value should be subjected to offset (Statement 13). As for the daily management of offset, 46% stated that it has not changed dramatically because of Directive 81, while 32% were neutral (Statement 26). Directive 81 is not clear and MS follow different approaches to it. The survey responses could indicate that, because the EC has not intervened and investigated procurements post-Directive 81, the status quo regarding offset requirements and offers has not changed substantially.

Offset skills

Various offset management skills were listed and explained in Chapter 2, showing that offset managers require similar skills to that of a manager of a global enterprise, including marketing/business development, legal, financial, and management acumen. It was a challenging job before Directive 81, but the Directive has made it even more so (see 4.29 Offset management changes and new skills).

Half of the respondents believed that, since Directive 81, offset managers need new skills and mandates to manage defence procurement in EU MS effectively (Statement 27). With regard to new skills, comments indicated that offset managers will have to find new methods to ensure a legitimate business footprint (local presence) in MS where they want to do business with the relevant MoDs. Offset managers may also need new skills in interpreting relevant EU legislation and increasing their knowledge of the roles and responsibilities of EU institutions. Only when it is possible to determine more clearly how the process will change can offset managers know how essential these skills will be.

Outcomes: Offset in all but name

Directive 81 aims to regulate offset, yet the word does not once appear in the body of its text. That can be compared to drafting a law against drug trafficking without identifying

the crime; such a law would not be likely to result in much compliance. Similarly, if MS are not granted discretion in decisions regarding their national security interest, Directive 81 may cause them to take offset underground. Offset could survive in all but name, and thus Directive 81 may be more successful in showing how important offset is to EU MS than in making the EU defence and security industry more competitive. Offset managers strongly agreed that these concerns are justified. More than 75% of respondent agreed that until the interpretation of Directive 81 becomes clear, EU MS in need of offset may decide to act outside the scope of the Directive, completely separating agreements for industrial benefits from the defence procurement contracts (Statement 21). Confusion and the possibility that MS' motivation for offset may not be accepted by the EC could result in a search for loopholes or creative ways to separate the procurement process and the industrial development endeavours.

Similarly, 77% of respondents fully agreed or agreed that the elimination of official, published offset rules in EU MS will result in less transparency (Statement 10). The monitoring and reporting of offset in the EU have not been efficient, with statistics available for Europe but not for the EU. When offset is managed on a case-by-case basis, monitoring and reporting will become even more problematic and non-transparent.

Remedies

Before Directive 81, offset in the EU was a matter of negotiation between the contracting authority in the MS and the DC. The new Remedies Directive allows for review procedures concerning the award of public contracts (Graber-Soudry, 2011:slide 2). The intentions of a MS may be stymied by any party who has an interest in the supply contract and may result in the retroactive cancellation of all contractual obligations, which can have devastating outcomes in the defence and security environment or result in the prospective cancellation of all unperformed obligations (Ellison and Baudrihaye, 2012:6) (see 4.13 The Remedies Directive).

Survey respondents were uncertain (41% neutral votes and 35% agreement) whether DCs would be likely to avail themselves of the opportunity to complain to the EC if they did not win a tender because no offset proposal was included (Statement 25). DCs may not be privy to the details in agreements made by contracting authorities in EU MS

because they are protected by non-disclosure agreements, and therefore the DCs may not be able to assess whether the prescribed process was followed. DCs may also believe that they would risk jeopardising future possibilities if they crossed swords with contracting authorities. It may also be that there is trepidation to step out as a pioneer and test the waters.

Nothing has changed

Overall, the survey responses leave a strong impression that, despite the promulgation of Directive 81, not much has changed. In April 2014, an EC defence expert stated that EU law is concerned only with what the contracting authority requests. This sanction has significant ramifications (Shanson, 2014e:1), meaning that unsolicited offers can be accepted (see also 8.3 Measuring the impact of Directive 81).

Only 14% of respondents stated that the application of Directive 81 is clear (Statement 2). It is evident that the application and implications of Directive 81 have to be explained in a more transparent way.

More generally, 55% of respondents stated that, more than two and a half years after the launch of Directive 81, little has changed (Statement 11). The respondents who believed that changes have occurred described the consequences as largely negative. They stated that offset has become less transparent; that the uncertainty surrounding Directive 81 makes MS are hesitant to negotiate offset requirements; and that EU MS are realising that they are losing their defence industries.

The paucity of tenders involving international defence contractors has resulted in few actions to determine the impact of Directive 81. Some of the respondents who believed that something has changed may have been referring to the uncertainty that reigns in the industry after Directive 81.

Finally, 71% of respondents agreed that DCs that tender to supply defence equipment to EU MS still include offset in the form of local content, work-packages and transfer of technology in their offers (Statement 23). In this sense DCs are standing on the sideline, waiting for some clear indication of how the potential contest between the EC and MS may play out. Only 11% of respondents disagreed with the statement that EU MS that

required offset in the past still ask for offset when purchasing defence equipment (Statement 22). With the outcome of the Directive 81 process being uncertain, it is understandable that the legislation has not been adhered to—there are too many loose ends.

7.4 SUMMARY OF LINKS BETWEEN PRIMARY AND SECONDARY SOURCES

In comparing the responses and comments from respondents with information gleaned from the literature review, definite links become evident. The literature review indicated that offset is based on government policy and the political economy, that it is integrated in world trade and linked to defence procurement, and that each country claims the prerogative to make decisions regarding its national security. Respondents have offered their views on offset as a discipline, its requirements, and goals. Notably, not one respondent disagreed with the statement relating to the benefits that offset can ensure (Statement 1).

The literature further demonstrated the role of the EU and its institutions in the defence and security domain, as well as a direct link between offset and the advancement of defence industrial bases globally. Respondents have also confirmed the political role of offset (Statements 14, 24, 28, 29, and 30) and its link to industrial development (Statements 9, 15, and 17).

The literature review explained the characteristics of the defence industry and the dynamics of the relevant market, analysed defence expenditures, and highlighted government and DC strategies. Respondents demonstrated strong views on future defence trade and the partnerships between countries and companies (Statements 4, 8, 16, 18, 22, 23, and 24). Respondents assessed the goals and possible outcomes of Directive 81 in all statements except for 1, 12 and 13.

The essence of Directive 81 has been discussed against the backdrop of EU law and the Single Market. Although the literature did include speculations about possible outcomes of Directive 81, it did not contain any feedback from a group of offset managers at DCs globally. The present study has confirmed the widespread perception that the controversy between the EC and the MS is unresolved.

7.5 ANSWERS TO THE MAIN OBJECTIVES OF THE STUDY

The controversy and uncertainty described in this study and further documented through the survey of offset managers indicate that the application of Directive 81 is not clear. Article 346 prioritises the right of MS to protect their national security interests and gives EU MS the exclusive right to decide whether and when it wants to apply an exemption. In calling this right into question, Directive 81 remains open to ambiguous interpretation and leaves much room for diverse and creative interpretation.

The EU defence market will not become more competitive when offset is no longer required in the EU and, for now, Directive 81 will not increase intra-EU defence trade. If EU MS are forced to purchase defence and security equipment from one another and not domestically, the DCs with the strongest capabilities will get opportunities to supply other MS; however, MS with strong defence and security capabilities may be forced to purchase from DCs in other MS, which gives rise to a somewhat illogical outcome.

Protectionism is still a reality, especially in times of austerity, and where possible most EU MS that can afford to purchase defence and security equipment still obtain most of it from national suppliers or investigate other routes to ensure national benefits. Indirect offset plays an important role in supporting infrastructure development needs or specific capabilities, and dual-use trends and civilian-military convergence will further justify an ongoing focus on non-defence offset.

As long as “national security interests” are not defined, the core of Directive 81 remains inaccessible. Without clear examples of how Directive 81 is applied, the changes in offset management since Directive 81 can be based only on probable outcomes, and this situation currently creates even more confusion in defence procurement in the EU. Without clear national offset policies, there is no way to assess the sentiments of EU MS, and with so much room for creative interpretation there is no way of predicting how inventive DCs will become. Thus the need for offset managers to possess new skills in dealing with EU MS cannot be assessed definitively and could vary, determined by divergent interests and scenarios.

7.6 RESEARCH MODELS THAT ASSIST IN MANAGING OFFSET IN THE EU

The study has previously presented research models that can be applied to manage offset in the EU post-Directive 81. These have included:

- the four elements identified to have the greatest influence on the transformation of the defence industry from a state-owned status, including privatisation, globalisation, the proliferation of dual-use and regionalisation (Figure 3.7);
- a summary of the offset process pre-Directive 81 (Figure 4.9);
- comparing offset process changes after Directive 81 (Figure 4.10);
- offset management changes in the EU post-Directive 81 (Table 4.12);
- the changing roles of offset authorities in MS and of offset managers post-Directive 81 as offset moves from a political-economic to a sovereign domain governed by the EC (Figure 4.4); and
- offset changes in the EU after Directive 81 (Figure 4.11).

Three more models are proposed below:

- the Furter National Security Chart©, which analyses aspects of national security and assesses which countries may have to make a bigger effort to protect their national security interests;
- the Furter Factor for International Cooperation©, a process model for offset managers to use in identifying the components of the government supply contract that can be sub-contracted to foreign partners to protect their essential national security interests by ensuring SoS to the purchasing country; and
- the Furter Cooperation Model for Innovation©, which identifies cooperation opportunities between MS when procuring defence and security equipment.

Furter National Security Chart©

The Furter National Security Chart© considers aspects that contribute to national security interests and analytically assesses which countries may have to make a bigger effort to protect their national security interests and therefore may request higher offset quotas. The chart (Figure 7.1, including Tables 7.1 to 7.7) assesses six elements:

- a. defence capabilities;
- b. sensitive borders;
- c. remote geographical position;
- d. history of conflict;

- e. political instability; and
- f. national level of education and skills.

The elements all have only one criterion, with five performance levels associated with the five colors. Each country receives a colour code describing its position with regard to each element. A green assessment indicates that the country possesses capabilities to protect its national security interests, whereas a red score indicates that the country cannot protect its national security interests without offset. Any country that shows more orange and red than green may need offset to ensure national security interests.

Figure 7.1 Further National Security Chart© rubric



Green	possess local capabilities to protect national security interests
Light green	possess some, but not all capabilities to protect national security interests
Light orange	need to increase some local capabilities to protect national security interests
Orange	need to substantially increase local capabilities to protect national security interests
Red	lack local capability to protect national security interests

Comparative severity

In comparing the severity of weaknesses between countries, two light green assessments can be considered the equivalent of one light orange, three light greens become one orange, and four light greens equal a red assessment. In the same way, two light orange assessments can be converted to one orange, while three light orange scores equal a red assessment. Two orange aspects also result in a red assessment.

The same model can be used to make assessments of capabilities in other industries. The following discussion will briefly illustrate the application of the chart to each of the six elements covered. The rubric is applicable to the assessments in Tables 7.1 to 7.7.

Table 7.1 Measuring defence capabilities

a. Defence capabilities

Country listed as one of the top 5 global exporters	Green
Local defence companies mostly OEMs	Light green
Most defence companies are global exporters	Light orange
Strong national defence sub-contractors	Orange
A fair number of SMEs in defence industry	Red

The colours represent various levels of capabilities. Green indicates a positive position relative to the theme, while red shows that there is much room for improvement or that the situation creates risks.

In assessing a country's defence capabilities, it is postulated that a MS with the following profile would own sufficient local defence capabilities to protect its national security interests:

- the MS is included in the top 5 list of the world's largest arms exporters, meaning the country has good defence capabilities (green);
- the local DCs are mostly OEMs, that is, the country has original manufacturers in the defence domain (light green);
- most of the local DCs are global exporters and they can probably become original manufacturers (light orange because the position of the DCs can be improved);
- the MS has developed, competitive national defence sub-contractors, but they cannot compete globally, meaning that the country has to rely on foreign suppliers (orange); and
- the MS has a fair number of SMEs in defence industry and the defence capabilities cannot be deemed to be strong (red).

Germany may be rated as light green, because the country's local defence companies are mostly OEMs.

Table 7.2 Counting sensitive borders

b. Sensitive borders

No foreign neighbours	Green
Foreign neighbours	Light green
No sensitive border	Light orange
One sensitive border	Orange
Two sensitive borders	Red

Example: Finland may be rated orange because it has one sensitive border, with Russia.

Table 7.3 Assessing remote geographical position

c. Remote geographical position	
Situated within central European infrastructure	Green
Situated just outside the Central European infrastructure	Light green
Situated in far northern Europe	Light orange
Situated in far eastern Europe	Orange
Separated from central Europe by ocean, mountain range	Red

Example: Norway may be rated red.

Table 7.4 Establishing a history of conflict

d. History of conflict	
Never experienced any military conflict since WWII	Green
Not likely to experience any military conflict in future	Light green
Neighbours have been involved in military conflict since WWII	Light orange
Country has been involved in one conflicts in the past	Orange
Country has been involved in two conflicts in the past	Red

Example: Poland may be rated red.

Table 7.5 Establishing political instability

e. Political instability	
MS and its neighbours have never experienced political instability since WWII	Green
MS has not experienced political instability in past 5 years	Light green
One of MS' neighbours has experienced political instability in past 10 years	Light orange
Two of MS' neighbours have experienced political instability in past 10 years	Orange
MS itself has experienced political instability in its government	Red

Example: Greece may be rated red.

Table 7.6 Measuring national level of education and skills

f. National level of education and skills	
Level of education is advanced with a propensity toward engineering and IT studies	Green
Level of education is advanced and the majority of nationals have university degrees	Light green
Level of education is advanced, but the work force lacks skills in specific sectors	Light orange
Level of education is intermediate	Orange
Level of education is elementary	Red

Example: Portugal may be rated orange.

Combining all assessments for one country

If one MS is chosen and assessed for all five elements, it may yield a result similar to Table 7.7.

Table 7.7 Assessing Finland's national security ability

Defence capabilities	Orange	➔	Red
Sensitive borders	Orange		Red
Remote geographical position	Red	➔	Orange
History of conflict	Light orange		Light green
Political instability	Light orange		
Level of education and skills	Light green		

The assessment for Finland results in two red assessments and one orange, only including one light green and no green. It becomes evident that Finland would need capabilities to protect its national security interests.

Global firepower

The Global Firepower list can also be used to indicate a country's military strength.

Table 7.8 Global Firepower

(EU MS and Norway highlighted in blue)

1. USA	18. Poland	36. Austria	54. Colombia
2. Russia	19. Indonesia	37. Philippines	55. Argentina
3. China	20. Australia	38. Malaysia	56. Bangladesh
4. India	21. Ukraine	39. Norway	57. Greece
5. UK	22. Iran	40. Ethiopia	58. Chile
6. France	23. Vietnam	41. South Africa	59. Peru
7. Germany	24. Thailand	42. UAE	60. Serbia
8. Turkey	25. Saudi Arabia	43. Denmark	61. Hungary
9. South Korea	26. Syria	44. Singapore	62. Venezuela
10. Japan	27. Switzerland	45. Yemen	63. Kenya
11. Israel	28. Spain	46. Croatia	64. Georgia
12. Italy	29. Sweden	47. Nigeria	65. Morocco
13. Egypt	30. Czech Republic	48. Uzbekistan	66. Tunisia
14. Brazil	31. Algeria	49. Finland	67. Jordan
15. Pakistan	32. Netherlands	50. Azerbaijan	68. Iraq
16. Canada	33. Mexico	51. Romania	69. Oman
17. Taiwan	34. Belgium	52. Belarus	70. Bulgaria
	35. North Korea	53. Portugal	71. Slovakia

Source: Global Firepower (2014).

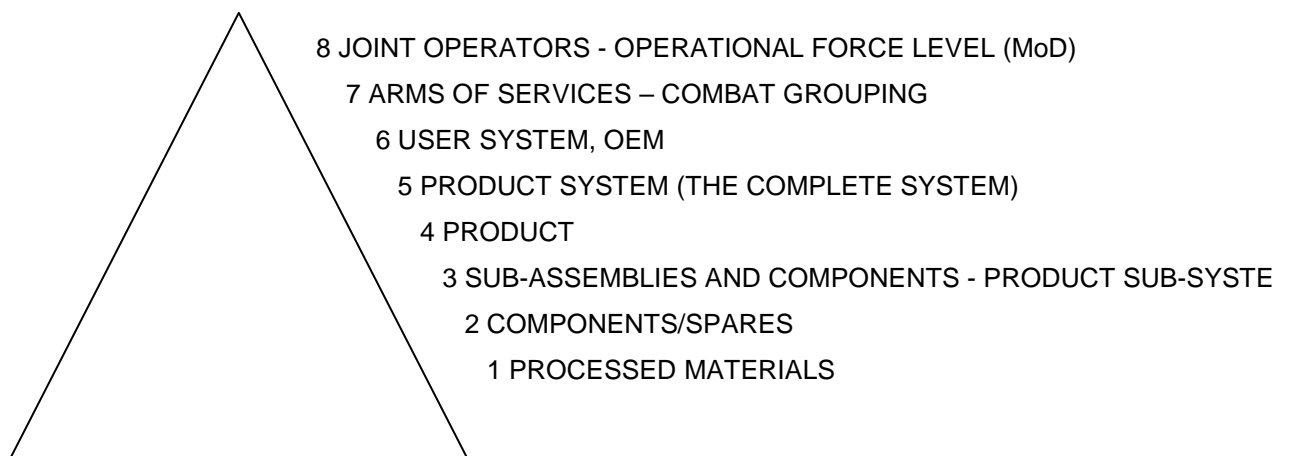
The Further Cooperation Model for Innovation©

In ensuring EU defence cooperation, the Further Cooperation Model for Innovation© can be used to determine which EU DCs can be involved in a supply contract. MS that cannot afford to develop new systems by themselves can cooperate with other MS, while expertise in EU companies needs to be harnessed to ensure innovation in defence and security products. An armoured engineering tank (Figure 7.3) can be used as an example:



As assessment of the various system levels (Figure 7.4) is used to determine cooperation possibilities at the various product levels. Levels 1-5 represent production activities, and 6-8 combat capabilities.

Figure 7.4 System levels



Each of the levels offers unique options. For instance, when a DC is the OEM and is delivering a product system (level 5), the DC will endeavour to include the latest and

best technology in its new product. This may include sub-contracting to EU companies in levels 1-4. These steps can be followed:

- categorise the supply contract according to the system level hierarchy (above);
- determine what part of the contract the DC will perform itself as prime contractor, and which DCs have unique expertise to optimise the product system and are able to deliver each category effectively and efficiently;
- look for synergies between the levels that will result in innovation; and
- determine what kind of agreements the prime contractor will conclude with partners.

The process can be represented as shown in Figure 7.5.

Figure 7.5 The Furter Cooperation Model for Innovation©

FURTER COOPERATION MODEL FOR INNOVATION©				
	DCs OWN CAPABILITIES AND EXPERTISE (Development, Industrialisation, Production, Operation, Business development)	SYNERGIES THAT WILL OPTIMISE THE PRODUCT (Standardise, Innovate, R&D, Design, Integrate, Manufacture, Assemble, Logistics, Marketing)	FOREIGN DCs THAT OWN THE NEEDED CAPABILITY	STRATEGY TO INITIATE COOPERATION (Strategic alliance, Cooperation agreement, Consortium, JV, Merger, Acquisition)
8 OPERATIONAL FORCE LEVEL (MoD)				
7 COMBAT GROUPING (ARMS OF SERVICES)				
6 USER SYSTEM (INCL PERSONNEL)				
5 PRODUCT SYSTEM				
<i>Military tank (engineering vehicle)</i>	Modification of vehicle platform			
4 PRODUCT				
<i>Engine</i>				
3 SUB-ASSEMBLIES & COMPONENTS (PRODUCT SUB-SYSTEM)				
independent operation capability with usable output		Design engineering features for a military tank	Company A in Canada	Strategic alliance
<i>Turret</i>		Turret serves as base for hinged-arm excavator		
2 COMPONENTS / SPARES				
lowest level of assembly without independent usable output				
<i>Mine breaching system</i>		Design system with mine-clearing device	Company B in the UK	Acquisition
1 PROCESSED MATERIALS				
composite materials, special metal alloy...				
<i>Armour steel</i>		Improved steel: include protection properties	Company C in Germany	Cooperation agreement, followed by licensing

Source: Furter, 2014.

7.7 SUMMARY

The literature review was used as a basis for exploring government policy and legislation related to international trade, focusing on the defence industry. The study yielded information on the implications of Directive 81 for offset in the EU, projecting how it could influence future defence markets in the EU and elsewhere. Available literature has now been supplemented by responses from offset managers globally to the survey administered in this study. Both primary and secondary data regarding offset in the EU have been reported, categorised and analysed.

The study found a gap in knowledge that relates to the implementation and outcomes of Directive 81. The survey of offset managers addressed the main objectives of the study as listed in Chapter 1. Directive 81 sets out to harmonise EU law in the domain of defence and security procurement, yet the implementation of Directive 81 is challenged by uncertainties and anomalies. Disparities in EU MS result in interpretations that could discriminate against some MS while favouring others.

It is astounding that EU law can expect MS governments to discriminate against their own defence sector, which represents the core of their national security. The level of resistance by MS may determine the final outcome of Directive 81; in the meantime some MS are increasing protectionist measures to bolster their defence and security industries. Offset managers and offset authorities have to align their tasks, aims and processes to ensure success. In working together, MS authorities and DCs can ensure that offset results in national and regional security.

Results of this study will be presented at an international GOCA conference in Colombia in October 2014. This communication is especially relevant in that conferences has been identified as the major source of information relating to offset (Furter and Bozas, 2011:86).

Chapter 8 presents the study's conclusions. Recommendations for the application of the findings to the practise and discipline of offset management are offered, along with suggestions for future research.

CHAPTER 8

CONCLUSIONS AND RECOMMENDATIONS

8.1 INTRODUCTION

This study's analysis of Directive 81, against the background of specificities found in the defence industry and trends and changes in the global defence market, reveals the reasons why most MS are reluctant to forego the benefits ensured by industrial cooperation. MS view offset as a means to receive the necessary knowledge, technology and skills to independently use and manage their systems effectively.

It is not clear how Directive 81 will reach its stated goals. Privatisation, globalisation and the increased number of dual-use or civil-military applications have transformed the industry to an extent that partnerships are mostly not national or regional, but international. The regionalisation of a globalised industry therefore seems to be a step behind the times. At a time when technology in developed countries can be merged with elements of production in emerging markets, the EU is seeking to segregate its industry.

The proposed benefits related to cost savings, increased intra-EU competition based on publicly advertised tenders and a stronger home market, and collaborative procurement are questionable. Austerity in Europe has not triggered broad cooperation, and multilateral programmes of the past left a "toxic legacy" of cost and schedule overruns (Anderson et al., 2013:24). The profiles and ownership structures of the defence industries in the EU MS also vary, making decisions regarding collaboration delicate and complex. During a period of stagnant and declining budgets, no commitments can be made to multinational procurement and European development programmes, because these possibilities do not even exist.

An expansive analysis of Directive 81 cast serious doubt on the claim that the EU defence market will become more competitive if offset is abolished (Research Objective 3 of this study). It is also not clear how Directive 81 will increase intra-EU defence trade, ensuring that EU MS purchase more defence equipment from one another (Research Objective 5). In February 2014, the defence and security tenders advertised by EU MS included no major purchases. Only 45 elements were listed in TED (TED, 2014:1). The

tenders included requests from EU MS for footwear; fire-fighting equipment; bullet-proof vests; and laboratory, optical and precision equipment. A tender for repair and maintenance services for military aircrafts, missiles and spacecraft from Finland-Tampere was valued at only €510 997.

Political conflict

The EC's belief that the future of the EDTIB depends on increased intra-EU trade in the defence and security domain involves more facets than are addressed by Directive 81. The EU represents a collection of MS with diverse interests and goals. Their differing geographic situations and features contribute further to a conglomeration of dynamics that results in differing political, economic and military realities. For example, some are confronted by greater challenges from their neighbouring countries than others are, while natural geography further prevents armies to be consolidate—especially across national borders (see heading “Erosion of influence³” under 3.22).

Institutional reform in Europe has achieved some measures of economic integration in the EU, but has not reached political integration (see Appendix H on EU initiatives to harmonise frameworks across the Union). The EU has not evolved institutionally to the point where it can make its MS give up their national components for the sake of a stronger common defence and security industry, and national sovereignty is regarded as the main obstacle to the EU becoming a stronger military actor (Juvan and Prebilič, 2012:136).

By reinterpreting Article 346 and not being forthcoming about the dynamics of the legislation, the EU escalated the political considerations inherent in offset. Instead of ensuring collaboration, Directive 81 is resulting in increased protectionism as uncertainty about the future of their industries and capabilities causes MS to amend past policies (Research Objective 4). The multiple and varied players in the EU defence and security industry, the various multinationals with foreign ownership, and the unpredictable nature of armed conflict make governments hesitant to enter into agreements that may determine their fate for years to come.

Natural disasters, the discovery of natural resources or the establishment of a long-term alliance can change the position and means of countries overnight. With political

interactions constantly changing and influencing the relationships between various countries, and given that defence equipment can be used for more than 20 years, governments would be short-sighted to be coaxed into dependence on foreign suppliers.

Historically, arms embargoes have taught countries to avoid strategic squelch points and governments have grasped that narrow procurement reliance is not the best way to maximise value (IHS Janes, 2013a:slide 9). For instance, the German army's reliance on radios produced by a Swedish company could put deployed German troops at risk if the owners of a Swedish defense firm should decide to stop producing or supplying such equipment. Some MS may refuse to stand in line' for equipment when they are experiencing a threat or conflict, and chances are high that whatever armed conflicts arise in the future will affect more than one MS concurrently.

The implementation of Directive 81 has further resulted in a political conflict based on the various interests that are protected by EU primary and secondary law. The interpretation of "national security interests" has given rise to many debates and postulations. National security does not depend simply upon the wealth that a country possesses, but rests on its economic, scientific and technological base (Hittle, 1999:1). National security interests are therefore perceived to cover a broader spectrum of activities and industries than SoS. It is therefore understandable that more intense measures may be taken to ensure protection in this domain and that commercial trade rules commonly used to obtain such goals should not be inadmissible (Research Objective 7).

Financial implications

On the financial front, EU defence companies currently develop partnerships with non-European companies and producers in order to stay viable. Contrary to the declining budgets in the EU, some developing countries are increasing defence spending, but they are also applying stringent offset requirements that require transfers of technology, expertise, skills and economic benefits. This requirement means that EU DCs will increasingly fulfill offset outside the EU, making Directive 81 less pertinent in the current defence market.

The EC's view

Without offset EU MS will not be in a position to require all the information, know-how, and skills pertaining to the defence and security systems they procure, which can compromise national security. The EU's new legislation demonstrates that the EU may believe that:

- no conflict will ever arise between EU MS—even if conflict internationalises and MS choose sides;
- an EU military force will be able to protect the whole Union adequately against any type of attack;
- politically, MS will agree to a “Unionised” arrangement and accept regional defence decisions;
- MS governments will relinquish their sovereign responsibility to protect their people and assets; and
- the disparity of national contributions will not impact the EU's responsiveness to the needs or demands of various countries.

However, some argue that the ultimate test of reform in the EU will not be policy-related, but will depend on politics and the alignment of long-term interests.

8.2 MAIN IMPLICATIONS

Directive 81 established a legal framework for procurement in the defence and security domain, including provisions that consider specificities and aim to eliminate trade barriers. The main changes brought about by Directive 81 can be summarised as follows:

- direct offset is not automatically justified and MS may need to defend their decisions to exclude EU law when purchasing defence and security equipment;
- competition can be ensured by EU MS advertising all tenders in the OJEU;
- post-tender negotiations are allowed;
- contracting authorities can oblige successful bidders to award a maximum of 30% of the contract value to third parties;
- provisions are available to protect defence and security interests, aiming to eliminate the use of an exemption, with regard to:

- SoS: ensuring reliable and on-time delivery of sufficient quantities of defence and security equipment and services and guaranteeing continued availability of maintenance, repair and upgrade capabilities, especially in crisis situations;
- Sol: helping governments to protect classified information throughout the award and performance of the contract by requesting candidates to submit specific guarantees that will ensure the security of sensitive information. Bidders may be requested to indicate the relevant measures and requirements they will take to keep all sensitive information confidential during the contract's entire duration and afterwards.

Before using the Article 346 exemption, contracting authorities need to establish that the Sol and SoS regulations are not sufficient to meet their requirement and they need to be prepared to prove their contention.

Indirect offset

According to the EC, indirect offset is no longer acceptable; however, under the Article 346 exception offset is arguable only if it does not serve the interests of national security.

In an environment where attacks can take on a wide range of profiles and levels of sophistication, non-traditional solutions are required. The facts that the EU defence and security industries are consolidated and that governments are procuring dual-use equipment considered essential to protect national security expands defence activities into various other domains and industries, forcing a reconsideration of what has traditionally been considered indirect offset (Research Objective 6). Dual-use and civ-mil trends, together with major threats in cyber defence, could furthermore turn the indirect offset solutions of the past into the direct solutions of the future.

Figure 8.1 The exclusions regime

REGIME	OFFSET
TFEU (Treaty on the Functioning of the EU)	Article 346
	Pre-Directive 2009/81/EC: 'All' defence procurement requires offset*
Directive 2009/81/EC	No offset but Sol, SoS, 30% sub-contracting <div style="text-align: right; margin-right: 20px;"> ← EU SMEs Globally </div> Article 346 is still available as well as Directive 2009/81/EC exclusions
Commercial law Agreements: DCs and EU MS companies	Non-defence local benefits

Source: Furter 2014.

In public defence procurement, offset is now sanctioned by exclusions under Directive 81, while commercial law is built on interchange between various parties and is ruled by agreements between business partners. DCs may choose to detach local benefits from defence and security procurement, such as by establishing industrial development investment funds. Such ventures will be ruled by commercial law that does not prohibit reciprocity.

Economic benefits of offset

The economic benefits that offset ensures may also not be obliterated. It can be argued that a country enhances its national security when it is in a position to manufacture its defence equipment cost-effectively. Thus, a country's efforts to develop or stimulate its own defence industrial base are in line with its national security interests. In this sense, a valid argument based on national security interests can be presented to justify complete self-sufficiency and protectionism in related industries.

Interpreting national security interests and loopholes

The biggest questions nearly three years after the launch of Directive 81 are how "national security interests" will be defined by the ECJ—which will eventually determine in which cases EU MS may exclude EU law governing procurements—and whether EU MS will introduce other legal means of ensuring industrial cooperation. Ways to

circumvent the legal requirements in Directive 81 that EU MS can use to require offset have been discussed in 4.16 Legal loopholes.

Offset projects linked to a public purchase are eventually detailed in agreements between the supplying DC and local companies. If DCs conclude private agreements with local companies that establish extra benefits, the context of such benefits will determine whether they can be deemed offset or not. A MS may also award all defence procurement contracts to a local defence company that is state-owned. A competitive process is not called for and MS may be allowed to carry on with developing their national defence and security industries.

It is a matter of location

When assessing national security interests, numerous aspects need to be taken into account, including infrastructure, geography, routes, hostility, stability, economy, trade and politics. Moreover, these interests do not pertain only to the situation and foreign relationships of a single country. The national security interests of a country are also affected by what other countries are doing.

An unguarded or insecure border, for example, or a political decision by one country can have devastating results for its neighbours. Greece and Romania, for example, are the two MS that currently form the buffer between the EU and potential conflict situations that could spill over into Turkey from Iraq or Syria. MS may therefore decide to collectively apply Article 346 to protect their national security interests. Further National Security Chart© rubric (Figure 7.1) can be applied to assess the which countries may have to make a bigger effort to protect their national security interests and therefore may request higher offset quotas. ECJ case law will be the ultimate determining factor regarding the application of Directive 81 and Article 346.

Interestingly, since the launch of Directive 81 there has not been a single ruling by the ECJ that indicates how “national security interests will be interpreted and stakeholders may have to wait until 2016 for this to happen, since that is the due date for the EC’s implementation report on the Defence Package that includes Directives 81 and 43. However, for Directive 81 to be applied, EU MS governments need to purchase defence and security equipment, of which they are currently obtaining very little.

8.3 MEASURING THE IMPACT OF DIRECTIVE 81

It has not been easy thus far to measure the impact of Directive 81 on industries in the defence market, because of declining defence procurement in EU MS and because of the monopsony nature of the defence market, together with the fact that preferences for national security cannot be compared to other industries. It may be that some EU MS that “abandoned” their offset policies after Directive 81 actually had not used their previous official offset policy for many years. Also, only EU MS that do purchase defence materiel after the launch of Directive 81 can test their new or updated defence procurement rules against Directive 81 requirements.

The impact of Directive 81 will seemingly not be clearly observed for some time, but meanwhile the implementation of this legislation is hampered by some significant impediments:

- MS are hesitant to implement Directive 81, because its outcomes or implications are not clear;
- the EC is not forthcoming in explaining the new legislation, but rather treats the implementation and interpretation of Directive 81 as if it were a big secret;
- DCs are expected to be whistle-blowers and complain to the EC when a MS or other DC is breaching Directive 81, but the EC has not been able to create a position of trust or leadership in this regard;
- the EC’s interpretation of Directive 81 could completely eliminate defence capabilities in some EU MS, making them fully dependent on foreign States to protect their people and assets;
- if EU MS can no longer make decisions about their defence and security forces, which are the bastion of their sovereignty and national security, their political status as sovereign nations could be severely endangered.

Much depends on the following aspects:

- the definition of “national security interests”, a term that is currently interpreted on a case-by-case basis for each procurement and by each MS;
- whether “third parties” in the context of sub-contracting are interpreted as companies globally or SMEs in the EU;
- the political will of EU MS to follow the EC’s interpretation of Directive 81 as per its guidance notes;

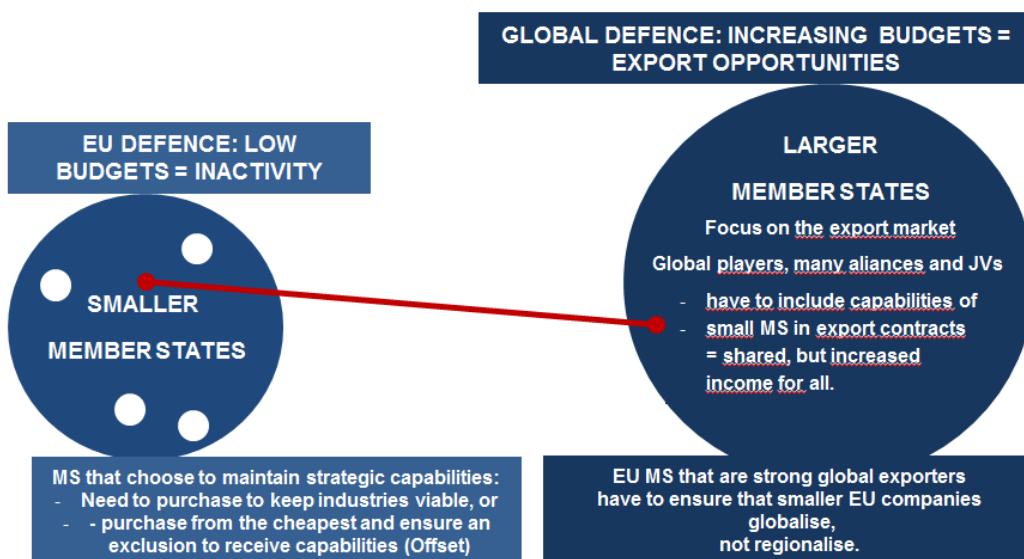
- the EC’s ability to enforce the new directives; when it clearly states that it cannot take EU MS to court and has to rely on stakeholders to “police” the Directive; and
- whether a clear and sensible CSDP will emerge to lead the European defence and security industry in a definite, coordinated direction.

“Achieving a strong European defence depends on the EU’s ability to implement a coherent European armaments policy” (Teissier, 2010:6). However, this concept still seems highly theoretical when we look at the real state of bilateral relations.

Only solution

The only solution that seems plausible for the moment is that bigger MS with economic and political aspirations and access to foreign markets will include the capabilities of smaller MS in their export contracts—substituting the idea of EU CoEs that could result in monopolies for the idea of inclusiveness in trade.

Figure 8.2 Bigger MS to partner with smaller MS for export contracts



Source: Furter, 2014.

Instead of sidelining businesses in smaller EU MS, bigger EU MS have to ensure that the whole of the EU remains active in trade and improves global market positions.

Trust and the political will to integrate are further factors required to move the collaboration paradigm further, creating interdependence among the current 28 EU MS plus Norway (which is implementing Directive 81 as an EEA member).

Offset benefits lost

One of the biggest challenges in this study was how to calculate the offset benefits that EU MS stand to lose if Directive 81 eliminates offset. Statistics are mostly available for Europe, but not for the EU, making an assessment of arms imports to this region less clear. In an effort to determine the offset that EU MS have either been fulfilling or receiving, the SIPRI import and export figures have been used in this study as an absolute minimum baseline, while information on projects or annual reports has been further researched in an attempt to establish a more accurate figure.

A calculation of offset benefits recorded between 2000 and 2012 (Table 3.27 Offset that EU MS received from other EU MS; and Table 3.30 Offset that EU MS had to fulfil in non-EU countries) indicated that EU MS received more offset than they had to fulfil. Collectively EU MS appear to have received annual offset benefits exceeding US\$9-b on average. Depending on future sales and how the EU MS implement Directive 81, EU MS that may lose the most offset benefits if they keep procuring defence and security equipment include Finland, Greece, Poland, Italy, Sweden, the Netherlands, the UK and Spain, with Norway, Austria, and Belgium also being affected.

The biggest defence exporters in the EU may gain by no longer having to fulfil offset in EU MS and by improving their market positions, because EU MS with smaller defence capabilities would no longer receive offset benefits to develop their own defence industrial bases and would have to rely more heavily on the MS with the strongest defence industries. The biggest benefits will seemingly go to the US and Germany. Other countries that may benefit include France, Italy, Sweden and the UK (see 3.38 Future view of offset benefits).

Future EU MS defence budgets will determine which MS could benefit from the continuation of offset, with the interpretation of “national security interest” and the transparency of future defence and security procurement seemingly determining to what extent such benefits will remain available. Non-EU countries that stand to benefit the most from future offset include India, South Korea, China, Pakistan, the UAE, Saudi Arabia, Turkey and Australia.

The question of what percentage of offset EU MS may request and receive in the future when spending tax money to procure defence and security equipment is still unresolved.

Still confusing

Nearly three years have passed since the launch of Directive 81, yet its interpretation remains confusing, resulting in various possible outcomes (Research Objective 1). The EC has not explained the Directive properly and has not yet sought a judicial review at the ECJ. The EU overall maintains discriminatory trade practices, while the right of MS to protect their national security interests is clearly stated. It therefore seems odd for the Directive to question what is arguably a trend, as well as a legal right. It is further expected that MS need to interpret essential national security interests differently.

However, with offset in the EU mostly being managed on a case-by-case basis, it becomes more difficult to determine what is required for fulfilment of offset or compliance with governing legislation, or to manage offset proactively.

Business as usual

Although the various aims mentioned in different EC documents referring to Directive 81 can be confusing and strategies are not always clear, in the meantime it has been largely business as usual for DCs. If procuring governments still include offset requirements in their RfQs, DCs will have to abide by them, with offset managers expected to interpret requests and advise DCs on offset risks, sub-contracting and industrial collaboration. Depending on what happens after the launch of the RfQ, the offset offer may possibly not be deemed acceptable and much effort would have been wasted. Offset managers have to rely on the perceptions of procuring EU MS that they are in a position to justify their national security interests if required to do so (Research Objective 9).

The process

Procurements that are exempt from Directive 81 are also exempted from offset constraints. If a country claims exemption from Directive 81 based on Article 346, it may have to articulate the specific national security interest motivating the offset. If an exclusion contained within Directive 81 itself is claimed, that particular exclusion may

have to be defended as well. As countries seek to develop solutions for non-traditional threats such as cyber attacks, non-defence offset will still prove to be essential. Contracts exempted from EU law on the basis of Article 346 or the exclusions contained within in Directive 81 are not covered under the Directive, but the EDA's Code and the national offset rules of each MS remain valid. In such cases, offset requirements still have to comply with the principles of the treaty related to transparency and non-discrimination.

If contracting authorities keep requesting offset, deeming it essential to protect their national security interests, and industry agrees to play along because it does not want to question the authority of the MS government, offset will go underground. On the other hand, if DCs question processes and awards, thereby policing the Directive 81 process through their complaints, award decisions may become public knowledge and the EC or ECJ will become a player in the dissension. It is an intricate three-way game of Chinese checkers at this point.

Three possible scenarios

In defence procurement, Directive 81 may result in these three scenarios (or a combination of them) in the EU:

- "slip through": an offset requirement by a contracting authority is not scrutinised, all parties play along and offset becomes a matter between the purchasing government and the seller;
- legal: an offset requirement is questioned by some party but sanctioned by the EC or ECJ, making it legal and enforceable;
- illegal: an offset requirement is questioned by some party and not sanctioned by the EC or ECJ, with the result that the requirement has to be rescinded.

8.4 FUTURE OFFSET

Meanwhile, offset requirements in non-EU countries generally require the transmission to the purchasing country of technology and knowledge related to the system. Offset participation demands are growing, showing signs of more focused demands than in previous decades (IHS Janes, 2013b:7). Virtually all high-growth markets prioritise national industrial development to ensure greater self-sufficiency. EU DCs may prioritise

short-term profitability above a long-standing political commitment to the EDTIB, relying more and more on foreign markets. With non-EU countries owning the bargaining power, DCs may be willing to commit to ambitious offset requirements in purchasing countries, including transfers of technology (Ungaro, 2013:11).

Developing non-EU countries

There seems to be no viable strategy to stop EU DCs from developing and supporting non-EU countries by creating infrastructure and transferring technology, skills, and know-how that can fuel the recipient nations' economies through industrial development. In the race for survival, DCs in the EU will ensure low costs and competitiveness by linking technology and know-how in the developed world with affordable infrastructure in the developing world. DCs globally will join the race to capture markets and this priority will optimise offset benefits in purchasing countries where currencies are much weaker.

To this extent the spending growth in emerging markets has the possibility to strip the West of its advances in defence, while at the national and EU levels the impact of non-EU offset on the EDTIB has not been thoroughly assessed. In cases where the defence industry is mostly government-owned, governments may still determine where their technology may be transferred, or they may deny such transfers. This is not the case in the private domain. In fulfilling offset outside the EU, EU DCs may prioritise indirect offset solutions where possible, so as to retain their intellectual property.

Offset more significant globally

The significance of offset in Northeast Asia and China will increase over the coming few years as these countries attempt to further modernise their defence industries. All countries in this region, except Japan, are expected to increase defence spending over the next decade. The BRICK countries are now making decisions about the development of their defence industries.

Contrary to decisions that MS made years ago, countries are likely to specialise in particular segments, and their criteria for industry development will favour one of three segments (Ecorys, 2010:15) to ensure long-term viability:

- national capability: ensuring a degree of autonomy for their armed forces;

- market penetration: providing strategic equipment not available on the market; or
- export orientation: focusing on niche products for the purpose of exporting.

Top offset markets between 2012 and 2021 are projected to be Saudi Arabia (US\$62-b), India (US\$50-b), South Korea (US\$33-b), UAE (US\$31-b) and Taiwan (US\$11-b). During this period, Poland is forecasted to make high offset demands, as well as Australia, South Africa, Australia and Norway. The UK is included because of its DSIEP engagement policy, and the Netherlands and Germany are featured because Frost & Sullivan, which compiled the report, stated that for the purposes of the assessment, European collaboration programmes were classified as offset (Shanson, 2013d:7).

8.5 ANOMALIES IN DIRECTIVE 81

Industry expected to police the Directive

The EC states that Directive 81 is a body of law that belongs to the European Council and the European Parliament, and that therefore the EC is in a position only to note its disagreement with EU MS decisions relating to offset (Schmitt, 2014). It is expected that industry will be the whistle-blowers and the ECJ will be the judge; however, procurement and industrial development agreements will remain confidential and DCs may not want to make enemies at the government level—specifically in an industry where governments are the only clients.

All secret

The process followed to draft and launch Directive 81 does not resemble transparency and clear strategies; information and insights are limited in both content and context and offset is not explicitly addressed at all. The EC is very guarded and does not want to interact with industry and clarify uncertainties or queries. If EU MS adopt the same attitude and keep their agreements with suppliers secret, the new legislation will not reach its goals.

Creative solutions

Suppliers may decide to be creative in fulfilling the customer needs by concluding separate cooperation agreements with local industry that prioritise reciprocity as well as the government's ambitions (Research Objective 8). Such creative interpretations may

result in MS following various and diverse routes when procuring defence and security equipment. In April 2014, an EC representative stated clearly that Directive 81 regulates only the activities of the contracting authority and not those of DCs. Indirect offset is clearly still believed to support national security interests through ensuring the viability of some industries and developing infrastructure and skills (Research Objective 6).

Clashes of interest

Directive 81 herded the EC, EU MS and the industry into three camps. The EC wants to move defence and security procurement into the Single Market, making it part of the commercial domain. EU MS want to protect their local defence capabilities in the name of sovereignty and in light of the fact that armed conflict is not predictable but is known to escalate, cross borders and place countries in opposing positions unexpectedly. While many EU MS are in the grip of austerity and dwindling defence budgets cannot ensure new equipment, the possible elimination of offset dramatically lessens opportunities to develop defence capabilities that would also strengthen the EU defence base. Currently MS want to use the industrial factors of defence to assist their industries in facing the defence budget crunch (Cassier, 2010:25).

Small DCs similar to SMEs

Directive 81 advocates the stringent pruning of defence capabilities in the EU in an effort to strengthen the EDTIB. As noted above, one likely result is the elimination of capabilities in smaller MS in order for more globalised DCs to take the lead. The anomaly is that the EC prioritises the strengthening of SMEs, which are not dissimilar to smaller DCs in MS. The status of the EU defence and security industry may lead to the disbanding or takeover of some established DCs and in the proliferation of SMEs.

Consulting after launch

Only after the launch of Directive 81 did the EC indicate its plans to issue a Green Paper on industrial capabilities in the defence and sensitive security areas, and to consult stakeholders on possible shortfalls of the current system (EC, 2013e:7). It plans to identify European capacities and explore options for the establishment of an EU-wide monitoring system, including mechanisms of notification and consultation between MS (EC, 2013e:7). These steps may indicate awareness on the part of the EC that the new frameworks created through Directives 81 and 43 may not be sufficient to ensure SoS.

Economic implications more significant

While equipment considered essential to national security interests will continue to be protected by Article 346 (Edwards, 2011:12), the launch of Directive 81 refocused the rationale for offset, defining it as a means to ensure national security interests.

However, the implications of the economic downturn in the EU may have bigger implications for the EU defence and security industry than the new legislation.

More anomalies

Other anomalies uncovered by this study follow, categorised by theme.

Regarding policy and DIBs:

- the EC is responsible only for ensuring that measures taken by MS to protect their respective industries do not adversely affect the conditions of competition in the common market regarding non-military and non-security products; it has no role in determining how MS go about protecting their national security interests—nevertheless, its guidance notes on Directive 81 are prescriptive;
- since defence capabilities reside with DCs and not with governments, and the defence industry has been totally privatised in some MS, a further anomaly is that in an effort to establish an EDTIB, Directive 81 addresses EU MS governments that in most cases no longer own DIBs;
- the latest EU legislation in the defence and security industry is not seen as helping EU MS or DCs to overcome a very trying financial time and most EU MS find themselves fighting global as well as regional hurdles; and
- Directive 81 results in MS with limited production capacity relying more on MOTS purchases, which represent less exclusivity and innovation and may be purchased from non-EU suppliers, in both instances weakening the EDTIB.

Related to Directive 81 and its outcomes:

- the EC stated in April 2014 that EU law (Directive 81) is concerned only with what the contracting authority requests, meaning that unsolicited offers from DCs should not be questioned;
- in launching a directive that aims to abandon offset, yet never using the term “offset” in the text of the directive, the EC created a mechanism for political power plays;
- EU MS may be less reluctant to trust EU MS suppliers than to rely on non-EU suppliers;

- it can be argued that the requirements for “equal treatment and non-discrimination”, as well as for the requirement for diversity of the European defence-related supplier base—especially the requirement to involve non-traditional suppliers in the EDTIB—determine that non-EU companies should be included as sub-contractors;
- the competitiveness of DCs in the EU will be judged according to global measures and it is not clear how Directive 81 assists in ensuring that DCs in the EU can stay competitive on the global market;
- FMS are seen as a means to circumvent EU procurement law, which may motivate MS to purchase from US rather than EU suppliers;
- if offset is not required or accepted, the purchasing country will remain dependent on the supplier for various aspects of the operation, monitoring, repair and maintenance of the purchased equipment, which will escalate the cost of owning defence equipment;
- globalisation has resulted in fewer borders and less national authority, with Directive 81 heralding less sovereignty for MS;
- intra-EU trade cannot happen without EU defence budgets; and decreased defence budgets are luring EU DCs to focus on non-EU markets;
- in order to be sustainable, DCs will follow the market, while governments will have to make increased efforts to ensure national security;
- the current economic climate in the EU limits growth and will result in fiercer competition, with MS competing feverishly to retain leading positions and therefore resisting EU cooperation;
- Directive 81 does not result in structures that can compete successfully within a European context or on the global stage and does not consider the possible future forms and tasks of the defence market;
- instead of streamlining the defence procurement process in the EU, the debate around Directive 81 has shifted predominantly to the definition of national security interest and MS’ political motivations to oppose the EC’s interpretations, thereby retarding the process; and
- when an RfQ or award procedure by a MS is contested, a MS can face delays in procuring essential defence equipment.

Regarding offset and protectionism:

- in endeavouring to replace national offset benefits with EU ones, EU secondary law is moving closer to offset-like practices;
- while the EC is motivated to eliminate offset, its latest activities aim for some form of EU content that may result in a type of “EU offset”;
- with Directive 81, the EC may just substitute one trade barrier for another; the legislation stipulates that a MS may decide to exclude non-EU DCs from bidding, and new “buy European” regulations propose to allow EU contracting entities to reject bids that consist of more than 50% non-EU-based goods or services;
- in apparent contradiction to the intent of Directive 81, EU law does not oppose offset;
- the increased use of dual-use items in the military domain, the integration of the defence and security industries, the removal of boundaries between the civil and military arenas and the concentration on cyber defence may result in direct offset activities taking place in non-defence domains;
- in moving defence and security procurements into the commercial domain, indirect offsets should be retained and not eliminated, because civ-mil applications, dual-use technology and cyber defence requirements—which do not relate to traditional defence domains—make it logical to relate indirect offset to the performance of the contract or the subject matter of the procurement and its related technology; and
- in no longer wanting to allow indirect offset, the EU discriminates against less-developed EU MS by no longer permitting them to use offset to generate the skill-intensive jobs and advanced technologies required for an effective defence industry.

Regarding Directive 43:

- a licence-free zone as proposed by Directive 43 favours a zero percent denial rate for defence and security transfers; and even though the denial rate was marginal, Directive 43 does not assure safety in a crisis situation, because countries would not be able to regulate their arms trade.

8.6 RISKS RELATED TO DIRECTIVE 81

This study makes projections about consequences of Directive 81 that may be amplified because of external forces. The uncertainty that surrounds the application of Directive 81 poses the following risks:

- the “harmonisation” of regulations pertaining to defence and security procurement does not establish a definite paradigm, resulting in a process that is more divergent than coherent and could also be interpreted as leaving too much room for creativity;
- unclear legislation not only poses challenges to MS and DCs, but further implicates risks related to the retention of the EU’s future defence and security capabilities;
- in trying to balance security ambitions and economic aspirations the EC may easily jeopardise one for the other;
- it has not been proved that the EU defence market will become more competitive when offset is no longer required in the EU, nor how Directive 81 will increase intra-EU defence trade, ensuring that EU MS purchase more defence equipment from one another; in seeking additional markets outside Europe to maintain their current size, EU DCs are in direct competition with each other;
- competent national DCs that are still partly government-owned, may be excluded from national tender awards;
- the global market has become more competitive, increasing the role of incentives such as offset, technology transfers, and/or FDI at just the time when the EC is trying to end them in the EU;
- increasing defence spending in developing countries offers new markets to DCs in the EU, but these countries also apply stringent offset requirements that will result in technology, expertise, skills and economic benefits being transferred outside of the EU;
- after the launch of Directive 81, it may be too late for the EC to establish a dialogue with stakeholders on how to support the European defence industry in third markets, and on how to mitigate possible negative impacts of offset in non-EU markets on the Single Market and the European DIB;
- if EU governments do not make major defence purchases in the next four years and if DCs in the EU focus mainly on emerging markets, the EC’s process of eliminating the use of offset may take years to implement;

- the establishment of CoEs may result in fewer industry participants, which may ultimately translate into less innovation and fewer military capabilities;
- decreasing budgets in the EU may favour an increase in MOTS products, resulting in less development and implementation of new defence projects, which may slow the advancement of new technology in the EU;
- increased COTS products may result in DCs becoming only integrators;
- the 30% sub-contracting provision will not ensure that purchasing countries receive skills and technology related to their purchase, because the integral knowledge of the system is owned by the prime contractor;
- offset managers will no longer be able to do offset cost and risk assessments in the sales phase because the eventual offset requirement will be disclosed only in the RfQ (see Table 4.12) (Research Objective 9);
- as long as offset is managed on a project-by-project basis, tenders will be based on information in the RfQ, drastically shortening the time available for devising and preparing compliant tenders, which may affect the quality of tenders;
- the Single Market may craft the cheapest SMEs into the leaders of tomorrow; and
- if the EU keeps segregating the EU defence and security industry, monopolies may result.

8.7 RECOMMENDATIONS

Based on the study and the survey responses, the following recommendations are offered, categorised under the survey statements that represent the nine main research objectives of the study.

The application of Directive 81 is not clear (Research Objective 1):

- the EC should prioritise open communication and transparency, explaining the application and impact of Directive 81 to ensure that all stakeholders have the same understanding and perception of the Directive;
- the clauses in Directive 81 that give rise to contradictions should be clarified in a transparent way;
- the role of the EC's guidance notes should be placed in context and not used in an attempt to reinterpret Directive 81;
- offset management in the EU should be managed by clear legal structures, or by illustrative examples of permissible and impermissible practices;

- MS should join forces and confront the uncertainties in defence procurement rather than adopting a wait-and-see attitude, which is slowing down activity in the EU defence industry; and
- the apparent inability of relevant EU institutions to address and solve matters in a transparent and effective way raises deeper questions over what actions the MS are willing to take to protect their interests, and instead of adopting a decision process that is based on consensus-seeking, it is recommended that the required debates take place at the EU level in order to contemplate and record the feedback and requests from all MS.

The EU defence market will not become more competitive when offset is eliminated (Research Objective 3):

- if the EU accepts the real reasons for the non-competitiveness of the European defence industry, that may be one key step toward fixing it; MoDs' proclivity to prioritise unique defence solutions and integrations, not offset, appears to be the main reason for the fragmented EU market; it is not offset that has put Europe at risk of losing its industrial and technological capabilities, but the fact that the EU has not as yet established a legitimate basis for institutionalising the EU defence and security market;
- instead of making EU cooperation mandatory, cooperative approaches by *willing* MS or groups of MS to develop common capabilities to ensure national security should be supported;
- the focus needs to be on internationalising the EU defence industry, and willing MS and DCs need to work together to ensure that critical technologies are developed or maintained and that such products are competitive abroad;
- a Buy European Act would ensure competition as well as benefits;
- offset can ensure an improvement of EU defence and security capabilities when foreign DCs establish some presence in EU MS, and therefore the practice should not be eliminated; offset can also make it possible for local companies to access the global defence industry, gain access to new markets and grow technological capabilities, and therefore some benefits of offset should be retained in defence and security procurement in the EU;
- policy makers cannot assume that free trade will result in all countries around the world automatically converging toward a high-growth trajectory in the long run;

- the European defence industry has to be able to adapt, specialise, restructure, become competitive and exploit its still-substantial technological edge over most of the world—which is a very tall order in times of austerity;
- the EC has to rethink the goals of Directive 81 because it is hard to imagine that France, the UK, Germany and Italy *inter alia* will be able to come to an agreement to supply one another with defence equipment when they have the capabilities to meet their own needs domestically; and
- the EC could clarify in more detail how it foresees achieving increased competition in the market, especially in view of global developments in the defence market.

Directive 81 will not result in EU MS purchasing more defence equipment from one another (Research Objective 5):

- one solution to the fragmented market and a means to strengthen the EDTIB would entail companies in larger MS partnering with companies in smaller MS, involving these smaller players and their capabilities in export programmes;
- the route to defence integration in the EU is said to be rooted in the distinctive contributions that each European nation can make to CoEs, which will form Europe's collective defence capabilities, and therefore contributions from all MS should be prioritised;
- EU-wide sub-contracting may result in increased cross-border competitions for EU contracts, but may not result in additional global business opportunities and the EC should rethink its interpretation of the sub-contracting provisions in Directive 81; and
- further consolidation should not result in monopolies that would bring a complete end to competition in the EU defence market.

In order to protect its national security interests, every EU MS has the exclusive right to decide whether and when it wants to apply Article 346 to exempt a defence and security procurement contract from EU law (Research Objective 2):

- while MS retain the right to make decisions about their national security interests and request offset, Directive 81 offers an opportunity for contracting authorities in MS and DCs in the EU to improve their relationships and coordinate their goals;
- until the Directive has been analysed to the satisfaction of stakeholders, SoS should also be assessed on a case-by-case basis and not solely rest on the new provisions in Directive 81;

- MS should claim their exclusive right to protect their national security interests and decide whether and when they wish to apply an exemption based on Article 346;
- MS should ensure that their reliance on the Article 346 procedure is *prima facie* credible; and
- in cases where legislation and interpretations pose contradictions in defence and security procurement, the protection of national security interests should take precedence.

EU MS still purchase most defence equipment from their national suppliers (Research Objective 4):

- MS have to procure defence and security equipment to keep facilities viable; in this sense defence budgeting is more critical than the procurement process;
- if the EC believes that offset requirements are affecting the commercial market and it wants to make a case that an exemption does not relate to a MS' national security interest, it will be difficult for the EC to prove such contravention because the TFEU clearly allows MS to determine when it is necessary to protect their national security interests; when it comes to national security, new threats and the global effects of globalisation are motivating countries to become even more protective of their defence and security capabilities, and the EC should realign its interpretation of Directive 81.

Indirect offset is important to purchasing countries, because it develops a country's general infrastructure, skills, know-how and industrial capabilities that eventually ensure national security (Research Objective 6):

- the use of dual-use items in the military domain will result in the popularity of indirect offset not receding at all; and
- cyber defence needs and other developments in the defence market will refocus the attention on non-defence offset.

The fact that "national security interests" are not defined makes Directive 81 nearly meaningless, because the gist of the whole Directive is based on such an interpretation (Research Objective 7):

- the paradigm encompassed by the term "national security interests" should be clearly defined by MS; and
- until 2011, SoS and Sol were main motivators for MS to pursue offset; however, the SoS and Sol provisions in Directive 81 are not sufficient to ensure MS control over their national security interests, which can include national defence; foreign

relation; political identity, framework and institutions; economic well-being; and contributing to international order to support the vital interests a country and its allies; because one piece of legislation does not change the political realities in the EU, or in the world.

Until the interpretation of Directive 81 becomes clear, EU MS in need of offset may decide to act outside the scope of Directive 81, completely separating agreements for industrial benefits from the defence procurement contracts (the UK's DSIEP is an example) (Research Objective 8):

- in order to ensure that Directive 81 does not result in more protectionism, EU governments and DCs need to coordinate their strategies to ensure the technology and capabilities in the EU that are required to establish effective armed forces that can serve the Union.

Directive 81 has not dramatically changed the daily management of offset in defence companies fulfilling offset in the EU (Research Objective 9):

- offset managers have to grasp the interplay between national security interests and defence and security requirements—a skill that was not as important for them previously;
- generally, offset managers need to improve their understanding of Directive 81;
- increased transparency between MS regarding to their reactions to Directive 81 will make it easier for offset managers to base solutions and processes on EU law and establish a new, compliant trend;
- only when transparency is prioritised and stakeholders are privy to supply agreements will disadvantaged parties be in a position to call for remedies; and
- offset managers may decide to include a clause in each offset proposal stating that it will be valid only if not contested by the EC or the ECJ.

8.8 FUTURE MARKETS

A forecast of anticipated global defence spending for 2013-2017 by region shows that the overall trend of spending will keep shifting from an Atlantic concentration in the post–Cold War era to a more balanced world market (IHS Janes, 2013a:slide 6). The US industry remains the main competitor for Europeans, with less stringent export controls in the US presenting increased competition to DCs in the EU (see 3.13 on the EU-US transatlantic relationship). If Directive 81 was a reciprocal measure destined to

respond to the US decision to fully waive the restrictions under the Buy American Act for most EU MS (see heading “Buy American Act” under 4.20), it is doubtful whether the Directive will motivate the US to amend its global strategy and prioritise partnering with EU MS in the future. However, Directive 81 may result in EU MS not receiving the quite extensive offset benefits that it received from the US in the past. The developments anticipated in BRICK countries could further imply increasing competition for EU companies as these nations develop stronger capabilities and infiltrate world markets.

The convergence of defence and security markets may also result in the new forms of competition within the defence market, such as with security companies and non-traditional manufacturers globally that prioritise low-cost mass production. The new rise in cyber security markets, for instance, is placing the players in the defence market in direct competition with leading IT companies, which generally have enough profits to ensure research and are ahead of the game in their global marketing strategies (see 3.20 The justification for defence spending).

Competition in the global defence market will be fuelled by:

- China increasing its position in defence through dual-use expertise;
- uncertainty regarding budgets and processes in the EU;
- the US taking a different position on its export regulations;
- the winding down of US military commitments in Iran and Afghanistan;
- the willingness of governments to pay a premium for defence equipment with a unique capability, offering the country a one-of-a-kind solution;
- many governments’ desire to retain offset as a competitive element in bidding so as to maintain some level of domestic defence production capacity;
- developing countries reaching a sufficient level of maturity to make an impact on the international export market, which requires new partnerships to be formed;
- the Gulf States broadening procurement relations;
- the possibility that EU DCs, due to declining demand for their services in Europe, to pursue markets in the Middle East, Asia and South America more aggressively; and
- Russia’s desire to retain its market share and become the leading defence supplier to countries east of Iran.

Russia occupies a special position in Tehran's regional and international strategy, and in April 2014 Russian President Vladimir Putin was planning to visit Iran to further consolidate a new era in relations (Khajepour, 2014:1). China announced in March 2013 that it would purchase multi-billion-dollar systems from Russia (Horta, 2014:2). China's need for foreign investment may give EU DCs the opportunity to establish joint ventures, but in the military sector the opportunities may still be some years away. Russia is increasingly concerned about China's economic dominance in Moscow's traditional spheres of influence, including resource-rich Central Asia (Horta, 2014:2) and Russia may therefore opt to strengthen cooperation with India.

If the US decides to focus on technology development with low-cost partners such as India, the UK may join this affiliation based on the past and current cooperation between these two countries. In a military sense, India wishes to become less reliant on Russia (Matur, 2012:slide 5). The MRO (maintenance, repair and overhaul) segment in India is estimated to reach US\$2.6-b by 2020 and India aims to capture 25% of the offshore engineering expenditure, which is expected to grow from US\$150-b to US\$250-b by 2020 (Matur, 2012:slide 5). India may offer vast future opportunities, but regional conflicts, complex tax laws and corruption may make India a less coveted partner. The interaction and dynamics between China, Russia and India may determine how the opportunities for EU companies will pan out.

Future cooperation with South America may depend on agreements between Argentina and possibly other South American countries and these countries' relations with nations such as Iran relating to nuclear or other sensitive technology.

South Korea has impressive technologies in some areas and could therefore be a future partner, but also a possible contender. South Korea has achieved much success in global exporting, and in selling to South Korea, DCs may get the opportunity through offset to forge long-term and growing partnerships. In the short or medium term, South Korea will become an aggressive competitor in some niche markets or specific large segments such as advanced training aircraft, light combat aircraft, helicopters and missiles (Ecorys, 2010:18).

Postulations

It is possible that Russia will take the global lead in defence production, alongside the US, on the strength of its sales to India and China.

Figure 8.3 A possible global split in markets



Russian success in defence exporting could eventually result in the development of a bi-polar world in which two types of incompatible defence equipment are available globally—American or Russian (Figure 8.3). Russia’s well-rounded defence offerings make it a potential partner, but also a major competitor, and that country’s political direction in the upcoming years will indicate whether it could be a good partner with the EU.

Influencing future markets

The following factors may also have significant influence on future markets:

- India will not be favoured as a low-cost partner because the defence industry is not efficient and foreign companies are not allowed to own majority shares in defence-related companies;
- Brazil may become a new seat to fight rising Iranian-Argentinian anti-West actions, creating conflict between Brazil and other South American countries;
- South Africa and Brazil may carve a niche with lower-cost products for cash-strapped markets;
- Serbia and Bulgaria could continue to supply small arms and ammunition to various countries;

- for financially constrained customers, the ability to countertrade will become essential again as it was in the 1980s;
- a semi-split in the EU may result in northern countries forming their own sub-coalition, the UK following the US, and central Europe joining forces with South American countries, especially Brazil;
- France may set the pace in the EU with sales to Russia and China; and
- China may become an increasingly prominent defence spender.

With defence strategies in the EU already focusing on non-EU markets, it may take a minimum of four to ten years for EU companies to devise turnaround strategies that will benefit the EDTIB. Most DCs in Europe may be able to reach sufficient size to operate globally only through mergers or acquisitions.

Future opportunities in the global defence and security industry include:

- solutions to internal security issues in South America;
- military purchases from foreign sources expected in South Korea, Taiwan, Japan, Singapore, Indonesia, India, the UAE, Saudi Arabia, Qatar and Turkey (see also Metzger and O'Donnell, 2013:1);
- border disputes and internal security issues that will drive procurement in Southeast Asia; and
- alliances between countries with economic resources and those with relevant technology.

8.9 CONCLUSION

Procurement in the defence market remains distinct from procurement in commercial markets and is strongly influenced by broader political and industrial considerations that may affect free trade. In institutionalising defence in the EU, the EC in its guidance notes reinterpreted Article 346 in a way that curtails the right of MS to determine the means to protect their national security interests.

In an effort to ensure SoS on a EU-wide basis, the EC endeavours to eliminate the very practice that ensures national SoS. It may have been less confusing had the EC made it clear that only EU DCs that have established viable export markets and can sustain themselves in the open market would be supported in further developing their

capabilities, and that these DCs would be placed in charge of CoEs in the EU. The EC needs to be careful in its balancing act between security ambitions and economic aspirations.

While Directive 81 specifically provides for SoS and Sol, national security is viewed as pertaining to a broader paradigm, making the Article 346 exemption and specific exclusions still pertinent. Directive 81 does not change the state of law concerning the legality of offset contracts.

The EC's guidance notes seem to contradict the essence of the legislation. Recital 67 in Directive 81 states that "nothing in this Directive should prevent a contracting authority [MS] from excluding an economic operator at any point in the process for the award of a contract if the contracting authority/entity has information that to award all or any part of the contract to that economic operator could cause a risk to the essential security interests of that MS" (OJEU, 2009a:84). This is a clear prioritisation of the authority of a MS over its essential security interests.

The EC has no authority over how MS go about protecting their national security interests. The EC may investigate defence and security procurements when it believes that competition in the common market has been affected, but the decision regarding the means required is in the discretion of the MS (Research Objective 2). However, MS should also not extend Article 346 to a point where it is claimed to apply to the procurement of army boots.

Indirect offset logical

EU law prioritises the equal treatment of all tendering parties and because offset favours local companies it is seen as discriminatory and therefore unacceptable. However, defence and security procurement constitutes unique scenarios, demanding specific circumstances that is dissimilar to an environment of free trade. Article 346 allows for exceptions whenever it is necessary for a country to protect its national security interests. The exception does not exclude indirect offset—be it defence or civil. The defence industry today requires industrial assimilations, which have little to do with the product that a government is purchasing. In an aim to protect national security

interests, dual-use trends, civ-mil convergence and cyber threats are giving new relevance to indirect offset requirements.

As long as MS do not stretch the law to the maximum, offset seems to continue as before. The interplay in the security arena between countries of differing strengths and needs may call for a new approach to offset. With the dramatic transformations taking place in the defence industry, it may also be time to redefine the meaning of direct and indirect offset.

EU protectionism

With the EU as a whole now able to require the offset benefits that were national up to now, protectionism has moved from the national to the EU level. However, in a globalised defence market, such measures may not benefit commercial companies, but may only be a measure to ensure political power. The debate about the interpretation of Directive 81 has reinforced the political role of offset, but it has also made defence procurement reliant on the readiness of EU MS to resist the interpretation of Directive 81 presented in the EC's guidance notes.

MS stand to lose industrial benefits that they have received in the past, with the consequence that a preference for intra-EU trade will make some MS completely reliant on other MS for their defence and security equipment. MS also stand to lose the leading technology that they have received in the form of offset benefits from foreign suppliers such as the US.

Most EU MS no longer possess their own national defence capabilities. The ownership of the so-called EDTIB is also no longer purely under the command of EU players. MS that aim to improve their individual capabilities may further undermine the EDTIB. If the process of Community integration is not supported by an industrial policy in the armaments area, the transformation of the EU may be propelled by cooperative relationships between State and non-State actors. In such a case further privatisation and the selling off of assets to foreign owners may be in the cards, with MS selling assets to multinationals in an effort to improve GDP, or forming public-private consortiums with foreign investors.

The anomalies in Directive 81 may spawn creative interpretations that will produce further dissimilarities, less transparency and no harmonisation. However, harmonisation is necessary to support the enforcement of legal requirements in the field of defence and security procurement, because if the requirements are subject to court decisions, outcomes may be unpredictable and may not coincide with the political intent of the legislation.

While the EC wants to regionalise and DCs need to globalise, a kind of Buy European Act would make it possible for the EU to determine a share of local content, which would ensure competition, as well as providing benefits to the EU defence and security market. Global competitiveness is crucial and both the EC and MS need to re-strategise—but not without the input and support of industry as the owners of defence capabilities.

If DCs legally registered in the EU transfer most of their operations to non-EU countries over the next few years and establish joint ventures to fulfil offset in the UAE, Saudi Arabia, Kuwait, Israel, Ukraine, South Africa, Taiwan, Brazil, Chile or China, EU countries may not receive the same level of income as in the past because their shareholding will be attenuated. If no joint venture is required, the percentage of income from these ventures that is taxed may still return to the EU, but foreign activities will still have a negative impact on employment in the EU and on future know-how, as production hubs are developed in non-EU countries. Regionalisation is an unacceptable afterthought to globalisation and the EU should instead focus on assisting DCs to globalise.

For the EU to draw global political power from its collection of defence bases in EU MS, MS have to agree to work together, their equipment has to be compatible, there has to be a coordinated EU army to manage the equipment, the equipment has to be easily accessible and deployable by a MS, there has to be enough equipment available to protect the whole EU, and in times of crisis soldiers from various MS need to be willing to fight for the protection of any MS, not just the one in which they hold citizenship. Until this happens, it is not surprising that the principle of national sovereignty in defence should remain sacrosanct for EU MS, presaging further conflict over Directive 81 and over European defence policy in general.

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Appendix A Summary of arms trade history between the EU and the US, 1985-2013

The following information has been deduced from the research data.

Period	EU	US and global	Reference
1985-1994	EU received 77% more imports from US	US received 76.9% less imports from EU	Commission of the European Communities (1996:32)
1988-1992	Belgium, Germany, Spain, France, Italy, the Netherlands and the UK relied nearly completely on the US for their arms imports		Commission of the European Communities (1996:32)
1988-1992	EU received 75% of imports from US, with leading importers being Poland, Finland, Greece, Portugal and Spain		Commission of the European Communities (1996:7); Anderson et al. (2013:25)
1991	The nature of the security threats that MS faced changed; state-of-the-art technology was needed		EC (2012f:1)
Mid-1990s	Deteriorating competitiveness and rapid loss of jobs in EU defence industry; EC launched initiatives to bring the defence industry under the Single Market		Biscop and Whitman (2012:109)
1998	The European defence industry was seen as losing its competitiveness in the global market		Vlachos (1998:7)
Post-1991	EU MS started developing defence industrial and technological bases to ensure national security and increase capabilities after the US withdrawal from Europe		Cassier (2010)
2000	UK's BAE Systems, France's Thales and one consolidated EU company, EADS in Top ten list of suppliers		Lungu (2005:4)
2003	The top five in EU (BAE, EADS, Finmeccanica, Thales, Rolls Royce) accounted for 44% of the global market		Dunne (2006:7)
1988-2005	Exports from EU dropped from US\$20-b in 1998 to US\$8-b in 2005		Brzoska (2007:2)
2005	The EDA initiated actions to strengthen the industrial and technological base of the defence sector and provide better equipment for soldiers		Van Iersel and Hrusecká (2012:3)
2005	France and UK comprised over 55% of European defence industrial output, showing		Flournoy and Smith (2005:73)

	increased concentration since 2003		
1989-2009	EU received 33% of all US defence exports	US received 50% of its imports from EU (Note: US imports much less than EU imports)	Decision–US Crest (2009:2)
1999-2009	Europe received 50% of its imports from the US	US received 33% of its imports from Europe	Decision–US Crest (2009:2)
2001-2005	Europe received 20% of total international transfers of major conventional weapons		Holtom, Béraud-Sudreau et al. (2011:6)
2002-2006	EU MS accounted for 31% of global arms transfers (68% of these exports to non-EU recipients)		Wezeman et al., (2008:396)
2007	50% of EU imports came from non-EU countries; loss of EU competitiveness vis-à-vis other suppliers; MS acknowledge that the way in which they regulated their defence markets was highly inefficient		Eriksson (2007:4); Brzoska (2007:1); O'Donnell (2012:2)
2003-2007	EU received 23% of its imports from the US	US imports from EU decreased: received 27% of imports from the EU	SIPRI (2013d); Holtom et al., (2008:2)
2003-2007	EU received an average of US\$1.35-b of arms from the US per year		SIPRI (2013d:1)
2003-2008		Volume of transatlantic defence trade flow increased by more than 60%; but US imports from Europe shrank. US received 25% of its imports from EU	Decision–US Crest (2009:2)
2008	EU received 12% of defence purchases from the US		Decision–US Crest (2009:16)
2008	EU defence industry was losing its competitiveness and a reorganisation of the industry was taking place		Hofbauer (2010:22)
2008	UK received 35% of US exports; Poland received 25%	US received more than 50% of imports from UK	Decision–US Crest (2009:2, 65).
2009	75% of defence equipment in the EU was procured within national boundaries		Edwards (2011:3)
2009	EU announced its aim to open the EU defence market to ensure competitiveness and create an EDEM		Hofbauer et al. (2010:27)
2000-2010		Russia showed the biggest increase in defence sales (13%)	Anderson (2012:slide 7)

		compared to 1992-2000; US global defence market share fell by 18.7%	
2001-2010	EU's expenditure compared to that of the US kept declining from 68% to 41%	The fastest growing military budgets: China (189%), Russia (82%), US (81%), Saudi Arabia (63%) and India (54%)	Gill (2012c:3); SIPRI (2012h:1, Table 4A.1); Perlo-Freeman et al. (2012b:2-3)
2001-2010	EU expended an annual average of 77.18% of the total European expenditure; Europe spent on average 51.27% (bare half) that of the US		Perlo-Freeman, Cooper et al. (2012b:2-3, Table 4A.4)
2003-2010	Greece was the biggest importer of US arms (US\$5.98-b), UK second (US\$3.6-b), Turkey third (US\$2.3-b), Poland fourth (US\$2.2-b)		Grimmett (2011b:5)
2005-2010	European defence spending declined by almost 10% in real terms		EC (2013f:6)
2006		US' sales to non-EU countries increased	US Department of Commerce, BIS (2007a:4-7, 4-8)
2006		Offset values in Europe still the highest, but offset requirement percentages in non-European countries increased	US Department of Commerce, BIS (2007a:4-7, 4-8)
2006-2010	Europe received 21% of international transfers of major conventional weapons	US' arms expenditure averaged at 43% of the world total	Holtom, Béraud-Sudreau et al. (2011a:6); see also Table 3.5
2006-2010	EU MS imported 17% of global arms imports; EU MS accounted for 34% of global weapons exports with main recipients being Europe 41%, Asia and Oceania 28% and Middle East 9%		Holtom, Béraud-Sudreau et al. (2011a:6); SIPRI (2013d:1)
2007-2010		Main recipients of US exports were Greece, Poland, UK, Turkey and the Netherlands	Grimmett (2011:5)
2010		Top ten have not changed marginally over the years, with US companies Lockheed Martin, Boeing, Northrup	<i>Defense News</i> (2013:1)

		Grumman, Raytheon and General Dynamics featuring consistently	
2010	37 of the top 48 EU defence firms were based in France, Germany, Italy, or the UK; UK, France, Germany, Italy, Spain and Sweden represented 90% of the EU defence industrial capability, 85% of its defence spending and 98% of its R&D spending	Companies sought to fill gaps in product lines, diversify into related sectors, or divest non-core activities, while acquisitions of firms related to cyber security and intelligence continued	Ecorys (2010:10); Arrowsmith (2010:262); Jackson (2012b:232)
2010	The six Letter of Intent countries (EU MS the UK, France, Germany, Italy, Spain and Sweden) represented 90% (10% more than in 2005) of the EU defence industrial capability		Flournoy and Smith (2005:73)
2010	The strength of the European industry lies in its technology and exporting		Seibertz, Stähle and Hensler (2010:23)
2010	EU MS committed to political aims and a military goal of becoming more coherent on defence matters, cooperating to overcome existing capability gaps and investing in future capabilities		Mölling and Brune (2011:9)
2007-2011	EU received 21% of all US exports	US received 35% of imports from UK, 11% from Germany, 10% from Norway	<i>The Economist</i> (2011:1); Holtom et al. (2012a:6-7)
2008	Since the recession started in 2008, spending has fallen by 10% in 20 of the 37 countries in Western and Central Europe		<i>The Economist</i> (2013:1)
2008-2011	EU lost about 11% of market share	US increased its market share by 25% (compared to 2004-2007)	Decision–US Crest (2009:2)
2011	EC launched Directive 81; a more “efficient” EU defence market will lead to job losses as less efficient European defence companies lose out on contracts; however, new EU rules (Directive 81) do not define which military equipment is so sensitive that it should remain excluded from EU competition		OJEU (2009a); O'Donnell (2012:3); O'Donnell, (2012:2)
2011	EU received 18% of its defence budget from the US		Decision–US Crest (2009:2)
2011	Western European (and Russian) companies	US entered new markets,	Grimmett and Kerr

	lost a big share of their business with developing nations as US won new markets	raising its market share from 44% in 2010, to 79% in 2011	(2012:25)
2011	Defence industrial capabilities and defence spending were highly concentrated in a few MS		Mölling and Brune (2011:9)
2011	The competitiveness of French industry allowed it to maintain its position as the world's fourth-largest exporter of defence equipment		<i>Defpro Daily</i> (2011:1)
2011	UK and France's defence industrial output decreased by 15% since 2005, together accounting for about 40% of European defence spending and 50% of the European equipment budget		De Vries (2011:1)
2011	EU DCs looked for more viable markets; Germany had to find new orders to make up for the loss of its best client, Greece. KMW and Rheinmetall hope for contracts from Saudi Arabia, the UAE and Brazil; EADS Cassidian looked towards the Middle East and India		Grimmett and Kerr (2012:5); EC Services (2012:1); Fasse (2012:1-2)
2011	EU governments had to address the social consequences of a declining defence industry, the loss of know-how and its effects on human capital; a radical change in mindset and policies was needed for Europe to maintain its competitiveness and capabilities in the industry		Van Iersel and Hrusecká (2012:5)
2011	MS are concerned: shared military assets might lead to disagreement about time and place of use; MS fear that their national defence companies will be deprived of vital contracts; MS find it politically difficult to sign up for costly multinational procurement programmes at a time when they are cutting back on personnel		O'Donnell (2012:1)
1998-2012	EU MS Germany, France, the UK, the Netherlands, Spain, Sweden and Italy featured most in the Top ten arms exporter list	Lockheed Martin, US has been the biggest DC, with Boeing in position two. Others in the Top ten included BAE Systems (UK) and US companies Raytheon, Northrop	SIPRI (2013d:1); <i>Defense News</i> (2013:1); Weidacher and the SIPRI Industry Network (1999:328)

		Grumman and General Dynamics	
2000-2012		Main importers from US: Canada, Norway, South Africa, the UK; also Germany, France, Israel, Austria and Australia	SIPRI (2013i:1)
2001-2012		US arms exports between 2001 and 2012 represent an annual average of 30% of global arms exports	Deduction, comparing US arms exports to global exports, 2001-2010
2003-2012		Since 2003, US export volumes has remained quite stable at an average of 30.65% of world defence supplies	SIPRI (2013c)
2008-2012	Europe received 18% of its imports from US		Holtom et al. (2013b)
2009-2012	EU MS Germany, France, the UK, Italy and Spain accounted for 21% of global defence export figures		SIPRI (2013e:1)
2012	Only three EU MS suppliers reached the Top ten export list: BAE Systems, UK (third), EADS, Trans-Europe (seventh) and Finmeccanica, Italy (eighth), with the other seven being US companies	US spending \$685.3-b	<i>Defense News</i> (2013:1).
2012	UK and France no longer featured in the top five exporting list	The top four suppliers globally were all non-EU countries (US, Russia, China and Ukraine) responsible for more than 70% of the global arms supply	SIPRI (2013d)
2012	EU defence companies in the top 55 exporters list included mostly UK and French companies	The top 20 list for 2012 included mostly US companies	<i>Defense News</i> (2013:1)
2012	EU defence capability already shrunk, reducing the ability to procure from European sources and achieve economies of scale		Hofbauer (2010:19, 47)
2012	Development in BRICK countries could imply increasing competition for the EU		Ecorys (2010:22)
2012	European purchasers start strategic alliances and JVs with developing countries to		RUAG (2012:44)

	overcome the financial crisis and ensure new markets		
2012	EU defence companies make acquisitions in other non-European markets and build partnerships with non-European producers		EC (2013f:26)
2008-2013	EU defence spending dropped from €200-b in 2008 to €170-b in 2013		O'Donnell (2013:1)
2010-2013	In striking contrast to global trends, it was forecasted that European defence spending would show a further decline of about 10%		EC (2013f:6)
2013	France views Germany and the UK as the best collaborative partners		Globalsecurity.org (2013:2)
2013	A traditional concern of SoS is the dependence on supply of equipment from the US and Russia		Briani et al. (2013:10)
2013	Dependence of EU seriously diversified especially in the industrial dimension, both on exports and imports		Briani et al. (2013:10)

Source: Furter 2014.

Appendix B Ranking of countries' defence expenditures, 1988-2012

(Rankings are according to 2011 expenditures. Figures are in US\$m at constant 2011 prices and exchange rates, except for the 2012 figures, which are in US\$m at 2012 prices and exchange rates. The table is presented in two sections)

1988-1999

Country	Notes	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
USA		557522	551839	527174	463013	489226	463504	435273	411675	389287	387258	378533
China, PR		..	18336	19820	20833	25317	23454	22432	23059	25424	26335	29901
Russia/USSR	big change after USSR disbanded	371073	344074	291082	..	72244	63822	62197	36834	32529	36090	23031
France		69983	70841	70527	70986	68753	67991	68341	64958	63399	63617	61955
UK		58235	58746	58828	59508	55582	53046	51587	48384	48095	46581	46838
Japan		45697	46592	47802	49399	52486	54607	56181	56827	57124	56988	57725
India		17877	19093	18807	17561	16783	18956	19040	19611	19966	22102	23060
S Arabia		20732	19591	24620	23478	22067	23387	20186	17794	17765	24126	27866
Germany		68353	68162	71841	67986	64656	58127	54207	53317	52275	50378	50538
Italy		38056	38353	36892	37412	36337	36531	35627	32539	35868	37606	38847
Brazil	highest in 1990	22313	23279	52182	15783	12426	17073	20326	22853	21252	21107	22687
S Korea		14387	14826	15059	15535	16439	17194	17698	18617	19620	20095	19399
Australia		15384	15255	15330	15591	16046	16654	16841	16313	16113	16398	17202
Canada	1988 spending level only in 2007	20705	20602	20582	19008	18798	18750	18474	17416	15989	14741	15255
UAE		..	..	..	..	..	..	..	..	..	6034	7116
Turkey		9475	10966	13246	13607	14328	15833	15483	15905	17808	18553	19441
Israel		15543	13284	13647	18090	14130	15181	14235	12549	13372	13730	13744
Spain		15831	16386	15346	14868	13750	14950	13461	13947	13626	13750	13514
Netherlands		13812	13943	13550	13174	13098	12036	11608	11278	11342	11224	11183
Colombia		2678	2370	2661	2635	3009	3876	4049	4727	7327	4711	5627
Taiwan		9857	10810	11406	11737	11865	13450	13297	12313	12703	12650	11833
Iran		2069	2597	2813	2735	2434	3302	5105	3677	4086	4554	4804
Poland		8465	7138	7415	5221	5059	5544	5535	5569	5860	6412	6651
Singapore		2992	3313	3802	3934	4182	4315	4459	5341	5851	6567	7436
Algeria		716	700	748	766	1281	1378	1676	1624	1849	2224	2352
Norway		5707	5859	5906	5727	6207	5784	6082	5492	5568	5475	5837
Greece		7562	7090	7169	6799	7065	6896	7015	7165	7594	8093	8818
Pakistan		4039	4036	4259	4560	4841	4835	4712	4790	4783	4582	4575
Mexico		2402	2546	2644	2787	3094	3302	4151	3468	3681	3688	3804
Sweden		8178	8273	8428	7939	7715	7693	7675	7693	7793	7404	7615
Iraq		..	..	..	..	..	..	..	..	..	..	..
Indonesia		1535	1574	1739	1769	1905	1829	2021	2127	2312	2503	2095
Belgium	declined since 1988	8631	8497	8336	8218	6748	6408	6373	6243	6125	6048	6046
Thailand		3419	3517	3983	4075	4672	4616	5007	5195	5197	4820	3916
Chile		2678	2370	2266	2144	2172	2372	2513	2734	2756	2941	3060
Kuwait		3661	4545	17534	22851	11582	5604	5945	6521	5546	4225	3942
Switzerland	reached high in 1990	7772	7923	8402	8112	7877	6994	6931	7013	6636	6396	6381
Portugal		3642	3823	3930	4051	4160	4027	3918	4207	4057	4145	4054
Malaysia		1404	1683	1807	2460	2444	2597	2815	2993	2878	2705	1988
South Africa	In 2011 only 60% of 1988	7741	7635	6876	5649	4863	4494	4792	4263	3705	3406	3018
Denmark	most constant	4864	4744	4747	4833	4744	4757	4638	4589	4604	4662	4713
Oman		2495	2507	2814	2332	2792	2620	2784	2805	2650	2742	2429
Egypt		5471	4411	4344	4372	4410	4321	4288	4031	3794	3848	4111
Argentina		4563	3715	2520	2527	2393	2257	2564	2513	2230	2193	2211
Ukraine		..	..	..	..	..	461	2030	2181	2102	2605	2106
Finland		2731	2724	2772	2895	2948	2865	2818	2535	2808	3020	3086
Angola		..	..	..	169	148	2373	..	1112	833	1335	412

Austria	very constant	3562	3525	3564	3581	3476	3510	3525	3494	3462	3469	3479	3551
Morocco		1820	1971	1933	2030	2014	2125	2181	2009	2004	2099	2124	1758
Azerbaijan	More than double in 2006	xxx	xxx	xxx	xxx	427	449	226	187	165	189	216	282
Philippines		2019	1929	1907	1746	1764	1907	2035	2267	2376	2122	2095	2068
Vietnam		905	1733	1682	1181	745	584	796	..	..	..	..	..
Syria		1178	1205	1117	1806	1673	1325	1505	1513	1471	1517	1601	1723
Czech Rep.		xxx	xxx	xxx	xxx	xxx	2929	3026	2902	2878	2723	2956	3205
Ecuador		439	468	497	505	467	580	528	774	649	741	816	625
Nigeria		584	397	656	629	541	731	513	591	501	539	688	1165
Venezuela		..	..	..	3395	3138	3914	2871	2758	1991	3266	2538	2205
Romania	In 2011, 23% of 1989 budget	9887	10145	4604	4706	3704	2235	2662	2592	2519	2824	2565	2315
Peru		..	197	53.7	723	1077	1225	1269	1491	1438	1731	1723	1672
Qatar		..	..	..	..	..	..	..	..	..	..	..	..
Kazakhstan		xxx	xxx	xxx	xxx	..	591	378	390	421	394	391	327
New Zealand		2033	1813	1689	1618	1514	1478	1487	1514	1526	1495	1497	1511
Sri Lanka		475	367	499	682	764	818	950	1599	1494	1326	1390	1252
Lebanon		291	..	928	721	1284	1071	1343	1376	1208	1012	975	1157
Bangladesh		474	519	516	525	605	657	736	758	791	843	856	886
Hungary	big decrease over the years	4583	3808	3237	2524	2362	2110	2095	1609	1504	1809	1632	1878
Jordan		1008	802	671	856	697	732	743	535	708	731	793	813
Ireland		834	830	1082	1071	1076	1089	1138	1147	1210	1282	1293	1337
Yemen		xxx	xxx	2958	2599	2185	1588	1421	1009	866	1084	989	1080
Croatia		xxx	xxx	xxx	xxx	2254	2862	3217	3421	3206	3235	2494	1955
Slovak Rep.		xxx	xxx	xxx	xxx	xxx	1116	1152	2041	2027	1631	1275	1114
South Sudan		xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Serbia		xxx	xxx	xxx	xxx	..	..	..	..	1185	1316	1204	1129
Uruguay		935	1030	1007	703	855	825	785	808	868	858	855	878
Bahrain		242	252	275	299	318	309	313	324	345	338	346	387
Afghanistan		..	..	..	..	..	..	..	..	..	..	..	..
Bulgaria		..	4521	3649	1980	1494	1128	967	952	781	729	843	956
Belarus		xxx	xxx	xxx	xxx	287	458	460	181	139	228	213	213
Slovenia		xxx	xxx	xxx	xxx	551	473	459	523	537	515	514	484
Kenya		868	811	843	658	483	404	336	389	454	432	407	396
Tunisia		365	377	347	355	356	371	384	390	449	443	452	447
Uganda		71	90.8	100	92.2	77.5	97.6	121	137	147	145	184	210
Cyprus		569	585	870	854	1169	525	552	495	743	942	841	520
Georgia		xxx	xxx	xxx	xxx	..	..	..	..	143	89.4	86.3	66.4
Lithuania		xxx	xxx	xxx	xxx	..	177	95.8	99.7	111	182	317	262
Namibia		xxx	xxx	374	260	196	117	93	103	111	137	146	199
Brunei		386	385	435	434	414	366	378	361	405	471	425	380
Armenia		xxx	xxx	xxx	xxx	146	81.6	..	138	119	152	150	161
Estonia		xxx	xxx	xxx	xxx	54.5	73.4	93.4	92.6	90.1	120	127	158
Botswana		209	226	285	305	283	297	273	248	229	264	324	308
Luxembourg		187	172	179	197	206	188	207	202	208	225	241	245
Côte d'Ivoire		204	219	209	214	209	207	183	..	175	175	..	..
Bolivia		..	193	262	255	244	191	235	232	228	276	341	272
Dominican Rep.		147	123	98	70.3	126	181	183	140	171	230	247	269
Cameroon		212	220	228	233	226	229	186	185	187	207	235	253
Ethiopia		640	754	720	358	212	234	216	182	204	375	789	1252

Zambia		333	483	426	285	324	157	185	155	104	104	..	155
Paraguay		..	209	212	293	287	214	215	243	223	269	250	224
Latvia		xxx	xxx	xxx	xxx	..	101	117	114	88.2	85.6	91.7	120
Tanzania		102	173	143	155	155	102	95.1	123	122	130	141	141
Nepal		65.5	71.3	74.3	76.2	79.2	82.5	82	81.1	80.7	85.5	86.8	93.8
El Salvador		580	556	517	489	439	358	311	287	261	252	244	247
Chad		..	..	..	..	..	69.3	54.6	40.5	46.1	33.4	31.5	46.4
Congo, Dem. Rep.		..	..	..	..	..	..	..	..	124	102	30.6	112
Kyrgyzstan		xxx	xxx	xxx	xxx	87.8	49.8	67.3	84.2	79.9	88.5	76.5	77.5
Bosnia-Herzegovina		xxx	xxx	xxx	xxx	..	..	..	..	..	..	..	..
Honduras		..	..	..	..	..	..	..	..	..	..	..	..
Zimbabwe		..	..	..	..	..	..	..	..	..	..	..	..
Guatemala		384	384	377	287	345	316	332	320	268	251	261	255
Albania		..	..	268	..	152	133	127	119	107	74.4	70.4	81.5
Cambodia		71.5	83.7	89.5	77.1	112	79.3	163	182	168	159	142	147
Mali		59.1	60.8	58.4	..	..	54.4	58.2	62.4	58.8	68.3	67.6	76.3
Burkina Faso		61.5	77.5	84.4	70.2	68.5	62	48.8	49.7	48.4	46.7	55	61.4
Jamaica		..	55.7	66.8	61.6	97.4	81.8	61.7	75.8	80.3	90	73.9	70.6
Macedonia, FYR		xxx	xxx	xxx	xxx	..	..	..	..	167	131	135	120
Swaziland		17.2	20.3	26.8	29	36.5	42.2	43.8	44.5	45.6	44.2	49.1	51.5
Ghana		26.3	27.9	30	42.9	46.6	54.5	59.3	60.6	51	51.2	63.6	67.4
Montenegro		..	..	..	..	..	..	..	..	..	..	..	..
Mongolia		..	..	143	97.5	43	40.9	35.6	50.2	42.4	38.7	40.1	41
Rwanda		42.2	49.8	114	158	130	126	34	72.4	103	94.8	104	106
Papua New Guinea		95.9	104	140	100	108	99.3	96.4	90.8	92.2	121	98.8	79.9
Madagascar		74.1	71.2	74.5	77.1	45.5	69.5	58.5	53.7	77.7	99.1	95.8	89.8
Togo		71.1	74.6	76.4	71.3	70.6	77.9	55.6	52.2	..	..	..	..
Lesotho		43.8	58.7	55.5	47	38.8	35.4	42.4	52.3	46.9	46.9	50.6	63.1
Malta		43.2	42.9	37.7	38.5	45.8	48.7	52.3	52.3	55.9	54.3	49.9	48.2
Fiji		50.3	57.9	56.1	55.8	51	52.1	51.6	50	45.9	43	40.9	41.9
Nicaragua		..	..	96.2	79.8	53.4	45.1	45.8	45.9	41.2	40.6	34.9	35.9
Malawi		21.3	23.1	21.8	19.4	21.4	21.7	21.2	13.1	17.4	22.5	17.9	17.5
Guyana		3.9	5.6	6.1	4.9	7.6	8.4	10.1	9.6	8.7	..	..	..
Timor Leste		xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Sierra Leone		8.5	13.3	15	25.9	32.9	35.4	33.4	32.3	23.7	11.3	..	..
Moldova		xxx	xxx	xxx	xxx	..	39.5	25.1	37.3	35.6	36.3	23.8	18.9
Iceland		..	..	..	..	..	..	..	..	..	..	..	..
Laos		..	..	..	..	215	211	214	192	137	115	87.5	38.3
Guinea-Bissau		..	8	..	..	..	..	4.3	4.5	3.7	3.5	5.2	..
Mauritius		10	13.6	17	19.1	19.8	19.1	20	20.7	19.3	16	14.7	15.5
Belize		4.8	6.7	7.1	6.9	7.5	8.6	10.8	10.7	9.9	11.6	..	7.6
Liberia		..	..	..	..	..	..	..	..	..	..	..	..
Cape Verde		11.6	..	..	..	5.9	5	6.2	9.8	6.8	6.8	7.5	8.5
Seychelles		15.2	16.8	17.4	18.9	21.9	13.8	12.2	11.2	10.8	11.7	11	11.1

2000-2012

Country	Notes	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
USA		394155	397334	446142	507781	553441	579831	588837	604292	649010	701087	720386	711402	668841
China, PR		37040	45422	52832	57390	63560	71496	84021	96906	106774	128869	136467	146154	157603
Russia/USSR	big change after USSR disbanded	32515	36090	40098	42658	44379	50505	56417	61824	67986	71566	72918	78330	90646
France		61783	61576	62840	64749	66526	65123	65470	65691	65037	69426	66251	62741	62582
UK		48003	49945	53183	57009	57669	58154	58531	60379	63074	64301	62946	60284	59795
Japan		60288	60250	60701	61460	61201	61288	60892	60574	59140	59735	59003	59572	59242
India		27653	28616	28528	29165	33879	36054	36225	36664	41585	48963	49159	49634	48255
S Arabia		27339	29118	25562	25751	28628	34495	39294	45264	44425	45655	47511	48531	54218
Germany		50738	49909	50051	49366	47851	47102	46015	46060	47382	49174	49692	48164	48617
Italy		43063	42357	43513	43867	44011	42342	40976	39736	41160	40002	38869	37670	35719
Brazil	highest in 1990	25175	29160	29549	23573	24493	26502	27441	29595	31488	34334	38127	36932	36751
S Korea		20031	20609	21177	21898	22859	24722	25613	26773	28525	30110	29912	30884	31484
Australia		17994	18711	19512	19868	20687	21414	22562	23947	24820	26676	27006	26610	25555
Canada	1988 spending level only in 2007	15651	16059	16143	16439	17062	17811	18640	20322	21900	22900	22773	23294	22382
UAE		10076	9671	8678	9170	10200	9305	9238	9816	11960	14081	17658	19166	..
Turkey		20773	19043	20261	18287	16689	15799	16511	15924	16119	17275	16976	17690	17906
Israel		14478	15346	17267	17279	16514	15898	16940	16447	15796	15933	15398	15163	15536
Spain		14364	14548	14897	14755	15230	15339	17932	18527	18584	17820	15977	13990	12185
Netherlands		11267	11560	11547	11712	11802	11821	12375	12541	12325	12590	12061	11344	10395
Colombia		6077	6683	7018	7372	7868	8011	8470	8985	10621	11158	11072	10307	11446
Taiwan		10384	10195	9860	9765	9782	9412	9030	9555	9729	10479	9903	9998	10513
Iran		9923	10949	8234	9635	12199	15128	16384	13636	10188	9809	..	..	..
Poland		6349	6542	6655	6917	7232	7731	8232	9306	8324	8924	9316	9448	9912
Singapore		7327	7502	7909	7987	8138	8645	8718	9055	9126	9430	9250	9218	9249
Algeria		2880	3153	3222	3152	3585	3753	3847	4514	5259	5712	6045	8652	9104
Norway		5676	5711	6863	6598	6764	6365	6352	6757	6794	7210	7099	7232	7189
Greece		9743	9528	9347	8008	8804	9520	9898	9891	10995	11455	8869	6709	6972
Pakistan		4630	4955	5325	5686	5924	6153	6224	6250	5899	6078	6251	6547	6630
Mexico		4131	4089	3954	3941	3797	4081	4440	5013	5019	5689	6203	6472	7103
Sweden		8190	7656	7452	7398	6962	7053	6943	7125	6337	6215	6726	6324	6424
Iraq		..	..	..	..	1882	2541	1824	2724	3401	3225	3782	5905	5693
Indonesia		..	1925	3130	4079	4194	3643	3699	4448	4150	4336	5092	5705	7048
Belgium	declined since 1988	6125	5855	5678	5739	5620	5415	5373	5798	6321	5953	5702	5544	5352
Thailand		3180	3312	3321	3377	3047	3070	3199	4216	4962	5917	5227	5520	5334
Chile		3329	3404	3387	3397	4040	4335	4937	4944	5222	4569	5131	5440	5357
Kuwait		4441	4365	4504	4854	5225	5056	4999	5309	4888	4782	4716	5393	5945
Switzerland	reached high in 1990	5818	5682	5438	5297	5199	5117	4871	4902	5021	5016	4844	4974	5136
Portugal		4393	4568	4697	4532	4813	5102	4957	4744	4762	5205	5294	4866	3980
Malaysia		2441	3037	3451	4400	4247	4543	4446	4964	5077	4792	4186	4807	4662
South Africa	In 2011 only 60% of 1988	3394	3795	4171	4122	4179	4580	4581	4475	4384	4590	4434	4596	4785
Denmark	most constant	4532	4813	4755	4614	4640	4422	4835	4663	4843	4553	4847	4518	4679
Oman		2926	3404	3505	3687	4145	4997	5343	5413	5154	4822	5094	4291	6489
Egypt		4463	4772	4990	5227	4945	4936	5050	5086	4737	4597	4473	4287	4175
Argentina		2170	2138	1822	1876	1931	2028	2091	2421	2750	3264	3607	4052	4356
Ukraine		2405	2032	2160	2496	2694	3263	3661	4449	4352	3865	3990	3922	4865
Finland		2833	2700	2753	3197	3390	3480	3542	3338	3593	3772	3692	3751	3856
Angola		2438	1469	1506	1989	1893	2682	3151	2763	3741	3640	3894	3647	3827

Austria	very constant	3635	3386	3327	3465	3471	3396	3262	3879	3759	3510	3490	3411	3411
Morocco		1362	2463	2344	2483	2413	2504	2528	2603	2904	3101	3319	3343	3582
Azerbaijan	More than double in 2006	299	338	364	454	550	644	1322	1438	1936	1708	1618	3079	3078
Philippines		2186	2062	2171	2419	2279	2322	2401	2630	2630	2532	2657	2701	2815
Vietnam		..	..	..	1471	1507	1572	1850	2386	2350	2581	2878	2686	3397
Syria		1856	1951	2025	2322	2326	2339	2104	2236	2027	2301	2366	2495	..
Czech Rep.		3305	3179	3397	3691	3541	3872	3576	3449	2941	3027	2748	2479	2379
Ecuador		608	637	745	1011	945	1240	1198	1616	1873	2109	2188	2454	2263
Nigeria		899	1281	1933	1190	1159	1024	1067	1239	1741	1825	2143	2386	2100
Venezuela		2705	2735	2009	1955	2772	3745	4940	4124	4569	3302	2574	2385	3316
Romania	In 2011, 23% of 1989 budget	2203	2311	2298	2371	2549	2697	2779	2665	2937	2498	2300	2380	2406
Peru		1578	1482	1384	1403	1487	1646	1694	1626	1591	1965	2076	2029	2363
Qatar		..	..	1252	1263	1164	1229	1320	1700	2193	1938	1913	..	..
Kazakhstan		343	504	552	654	747	942	1102	1658	1574	1485	1635	1804	2355
New Zealand		1512	1481	1426	1467	1488	1504	1583	1649	1705	1808	1838	1792	1809
Sri Lanka		1675	1398	1157	1040	1159	1073	1239	1517	1737	1794	1672	1706	1543
Lebanon		1302	1347	1253	1259	1280	1300	1291	1417	1298	1564	1665	1627	1622
Bangladesh		924	924	896	899	916	928	999	1052	1039	1212	1469	1548	1514
Hungary	big decrease over the years	2020	2230	2169	2336	2162	2141	1919	1955	1817	1619	1452	1378	1100
Jordan		835	820	794	916	850	845	924	1262	1456	1507	1400	1340	1382
Ireland		1373	1489	1430	1371	1392	1410	1398	1408	1459	1440	1373	1301	1235
Yemen		1198	1273	1612	1663	1357	1419	1328	1588	1526	..	..	1164	1243
Croatia		1378	1277	1381	1118	1016	1060	1071	1102	1266	1153	1069	1091	1015
Slovak Rep.		1158	1305	1322	1402	1303	1412	1432	1440	1474	1410	1233	1061	1072
South Sudan		xxx	xxx	xxx	xxx	xxx	xxx	..	..	..	..	736	1047	612
Serbia		1633	1300	1438	1260	1165	976	985	1110	1077	1059	1028	987	923
Uruguay		876	860	792	709	687	702	725	697	794	877	885	902	944
Bahrain		384	405	483	555	559	553	602	637	688	774	774	878	924
Afghanistan		..	..	..	205	210	189	199	313	259	309	652	877	770
Bulgaria		986	1092	1101	1123	1097	1122	1113	1293	1083	1029	978	829	782
Belarus		236	294	306	309	374	487	632	690	707	626	704	756	797
Slovenia		440	540	599	624	662	675	773	778	823	829	825	665	562
Kenya		425	489	527	532	525	553	547	613	585	597	633	647	694
Tunisia		467	486	481	500	510	548	571	525	567	586	602	623	746
Uganda		204	206	220	237	272	272	263	269	297	292	624	578	250
Cyprus		555	656	448	434	451	490	481	456	457	499	518	536	499
Georgia		45.3	57.5	82.3	96.3	134	357	607	1201	1140	695	521	469	451
Lithuania		439	478	491	543	520	562	611	668	698	532	448	445	430
Namibia		181	215	215	212	224	248	262	292	362	384	420	426	432
Brunei		359	331	352	367	290	351	395	409	422	414	432	415	402
Armenia		163	159	157	181	199	244	288	337	392	408	427	391	408
Estonia		187	218	260	301	317	395	444	538	519	473	363	374	438
Botswana		341	417	444	429	396	359	354	390	417	402	381	371	345
Luxembourg		250	313	279	296	311	314	308	319	294	293	360	363	359
Côte d'Ivoire		..	..	..	331	349	334	346	377	377	448	427	357	435
Bolivia		271	304	284	318	307	296	299	333	398	394	364	351	377
Dominican Rep.		361	425	393	293	259	321	310	310	356	350	376	349	359
Cameroon		246	245	266	285	303	299	325	341	353	358	383	347	372
Ethiopia		1129	718	591	486	527	521	471	431	345	341	345	333	329

Zambia	..	..	..	..	212	229	250	180	302	254	290	306	319
Paraguay	217	198	191	170	202	181	204	209	215	238	264	302	430
Latvia	149	188	307	354	382	444	559	609	597	379	287	297	279
Tanzania	150	174	170	155	158	170	186	195	198	221	253	266	278
Nepal	103	133	178	198	236	261	245	227	237	265	276	261	..
El Salvador	249	271	284	227	212	212	222	229	225	229	237	256	233
Chad	52.5	55.9	56.4	57.2	67.8	68.9	..	446	594	406	226	242	..
Congo, Dem. Rep.	83	..	..	142	235	275	299	282	203	154	209	239	279
Kyrgyzstan	96.1	83.6	97	110	118	131	144	174	187	193	234	232	..
Bosnia-Herzegovina	..	..	454	316	283	237	227	225	234	257	239	210	245
Honduras	91.4	104	104	132	94.2	92.5	106	126	156	175	182	201	192
Zimbabwe	..	..	..	..	..	..	..	..	..	..	102	198	303
Guatemala	322	378	280	305	182	147	172	170	182	170	187	197	205
Albania	90.1	102	102	115	126	130	160	198	233	251	202	197	194
Cambodia	136	123	114	114	111	114	140	128	135	264	194	192	210
Mali	88.5	89	88.6	101	110	115	125	130	144	150	158	161	153
Burkina Faso	62.5	61.6	66.8	67.9	80.8	84.3	90.8	112	122	112	134	139	153
Jamaica	69.4	73.8	89.1	92.8	86.1	82.7	98.4	109	147	142	126	134	123
Macedonia, FYR	137	436	189	172	181	169	161	187	171	167	142	132	139
Swaziland	49.3	46.4	47.3	55.1	60.8	79.6	79.2	80.6	90.4	130	132	123	125
Ghana	94.4	59.4	65.4	81.3	79.3	79	85	130	114	127	129	98.8	119
Montenegro	..	..	..	..	..	..	84.3	76.2	86.8	79.7	81.5	87.8	83.4
Mongolia	52.2	47.7	52.3	49.4	53.8	52.1	63.9	83.8	78.8	51.6	64.4	87.2	108
Rwanda	89.9	92.1	86.8	81	70.7	68.4	75.3	69.8	73.5	77	76.5	75.4	76.8
Papua New Guinea	73.5	67.6	46.9	42.4	47.5	55.9	54.3	64.4	51.9	57.3	57.6	73.9	68.9
Madagascar	90.6	114	90.3	104	104	92.9	89.5	108	114	82	64.3	72	70
Togo	..	..	..	45.9	45.7	44.8	..	..	58.2	..	61.8	59	..
Lesotho	60.5	63.6	48.7	45.8	42.7	43.5	45.8	49.9	36.3	60.2	74.8	58.2	50.6
Malta	46.9	50.1	49.4	51	53.8	67.9	55.1	55.2	56.6	61.7	63.4	55.9	56
Fiji	60.2	63.3	56.8	57	63.6	55.9	70	86.8	56.6	64.1	58.6	54.8	54.4
Nicaragua	41.2	37.5	47.6	48.6	43.7	43.7	46	46	43.6	43.1	45.6	51.5	65.4
Malawi	14.8	15.9	17.1	17.6	29.6	48.5	39.7	40.9	50	61.3	..	44.5	54.1
Guyana	17.5	20	21.8	21.1	20.9	22	21.4	25.1	28.6	30.5	30.2	30.2	30.1
Timor Leste	xxx	xxx	..	..	5.1	12.6	25.1	31.6	28.9	44.2	30	28.4	33.7
Sierra Leone	32.7	38.8	38.6	42.1	34.2	33.5	37.6	35.4	24.6	28.8	26.6	23.6	24.2
Moldova	14.5	16	18.7	20.4	18.2	21.2	26.9	30.6	37.7	27.2	20.8	20.8	21.5
Iceland	..	..	..	..	..	..	..	..	..	26.3	21.8	19.5	17.9
Laos	29.8	28.9	26.8	23.2	22.1	21.3	21.6	21.4	21.3	16.9	18	18.7	..
Guinea-Bissau	19.3	12.5	11.8	12	..	16.9	..	..	..	14.8	18.9	17.5	17.5
Mauritius	16	16.2	16.6	17	16.1	16.4	16	15.7	17.4	18.7	17	17.5	22.3
Belize	8.9	9.2	9.5	10.1	10.9	11.8	13	14.2	18.2	17	15	15.7	14.6
Liberia	..	..	..	1.2	4.6	11.4	5.3	4.3	4.3	7.9	9.1	13.3	13.8
Cape Verde	13.6	9.3	8.4	8.9	9.2	9.8	9.3	9.3	8.8	9	9.1	9.7	..
Seychelles	10.4	10.8	10.6	10.6	13.5	12.4	12.2	14.8	11.2	9.5	7.2	8.7	9.7

Figures in blue are SIPRI estimates. Figures in red indicate highly uncertain data.

". ." = data unavailable. "xxx" = country did not exist or was not independent during all or part of the year in question. Countries not included in the calculations and for which data were not available for all the years assessed include Benin, Burundi, Czechoslovakia, Central African Republic of Congo, Costa Rica, Cuba, Djibouti, Eritrea, Gabon, Gambia, Germany, Equatorial Guinea, Guinea, Haiti, North Korea, Libya, Mauritania, Mozambique, Niger, Panama, Senegal, Somalia, Sudan, Trinidad and Tobago, Tajikistan, Turkmenistan, Uzbekistan, North and South Yemen and Yugoslavia (former). No figures are available for Iran and Qatar for certain years.

Appendix C Volume of arms exports by country, 2003-2012

(Figures are US\$m of SIPRI trend indicator values, or TIVs, and cover deliveries of major conventional weapons only by countries included in this list)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Total 2003 - 2012
Albania									0		0
Argentina				2					1		3
Australia	44	2	49	6	1	8	55	98	126	75	465
Austria	3	3	4	63	100	14	30	34	31	9	291
Belarus	57	21	57	43	6	226	42	160	59		671
Belgium	15	47	146	59	19	217	243	7	111	21	885
Bosnia and Herzegovina									14		14
Botswana										4	4
Brazil		46	1	44	53	92	37	176	47	32	527
Brunei									24		24
Bulgaria	47	16	67	5	9	4	16	4	2	3	173
Canada	267	270	228	228	337	229	174	244	317	276	2570
Chile						100					100
China	692	380	314	623	454	579	1076	1518	1506	1783	8925
Costa Rica						0					0
Czech Republic	64	1	73	44	32	34	21	5	11	8	292
Denmark	62	173		9	6	17	14	8	22	23	333
Finland	44	32	32	107	47	62	30	34	31	62	481
France	1474	2376	1842	1752	2416	2071	2065	971	1796	1139	17901
Georgia		17									17
Germany	1732	1121	2104	2654	3184	2319	2465	2647	1295	1193	20714
Ghana			19								19
Greece	6	31	13	23							73
Hungary			82		9						91
India	4	26	19	33	21	11	23	4	6	2	148
Indonesia		25	8	8		1			4		46
Iran	9	1	2	92		42	45	45	85	0	321
Ireland			15	30	29	26	26	25	1	25	178
Israel	364	618	426	379	523	326	708	609	518	533	5004
Italy	355	249	823	521	694	391	501	542	878	847	5802
Japan					40						40
Jordan		42	20		13	12	60	79		12	237
Kazakhstan		5		6							11
Kyrgyzstan	92			18	18	14					142
Libya	16	113	113	18	10	18	32	28			346
Luxembourg					0						0
Malaysia							0				0
Malta		10									10
Moldova	10		18	3	19	29	20		11		111
Montenegro				71	109			18			198
Netherlands	336	218	568	1158	1235	467	502	381	563	760	6188
New Zealand		1	0							75	76

North Korea	134	47	20	20	20	20	20				281
Norway	84	66	12	17	61	115	147	159	156	169	986
Oman			1								1
Pakistan	8	9	24	4		1					46
Peru		5									5
Philippines, the					4						4
Poland	81	47	18	282	163	73	75	28	8	140	915
Portugal						99	46		0	0	145
Qatar				6							6
Romania	24		3	8	32		2	1	1	108	178
Russia	5428	6194	5196	5156	5608	6710	5877	5974	8620	8003	62766
Saudi Arabia				18				1	58		77
Serbia				4	4	45	1	30	4	1	90
Singapore		66	3				31	24	12	76	213
Slovakia		48		7	22	8					85
South Africa	43	72	30	184	135	152	103	234	59	145	1156
Korea, South	96	29	48	98	219	78	163	97	212	183	1223
Spain	98	56	112	847	594	610	971	280	1455	720	5743
Sweden	508	280	523	416	350	403	384	658	658	496	4676
Switzerland	181	249	247	286	295	482	256	198	285	210	2691
Syria				3			20	20			43
Taiwan							0			2	3
Thailand	7	7									14
Turkey	42	28	13	72	40	69	37	43	33	53	430
Ukraine	296	200	295	559	728	367	348	475	553	1344	5165
UAE		3	11	17	3	1		39	3		76
UK	752	1234	1009	949	1008	1003	1004	1121	1006	863	9949
US	5677	6787	6796	7711	7990	6808	6921	8335	9672	8760	75455
Unknown country	14	9	44	8	0	35	13	24	0	16	162
Uzbekistan	252	126	4					209	209	209	1009
Venezuela		1		7		3	40				51
Vietnam				14							14
Total	19416	21405	21452	24688	26661	24391	24853	25587	30465	28172	247090

Source: SIPRI (2013b).

Appendix D Government and industry data on the annual financial value of arms exports, export agreements and export licences, 2001-2011

(Figures are in 2013 US\$ prices and were updated on 1 May 2013; the calculations were added by the researcher)

Country	Currency/unit	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	TOTALS	Explanation of data
Austria	US\$-m	41	131	5	141	182	170	308	483	494	598	2'552	Arms exports	
	US\$-m	345	220	278	20	318	384	1'887	1'386	3'126	2'342	2'269	12'574	Arms export licences
Belgium	US\$-m	760	1'079	752	675	318	1'103	1'232	1'956	1'531	1'328	1'161	11'894	Arms export licences
Bosnia & Herzegovina	US\$-m	..	..	..	43	80	63	52	85	64	37	..	424	Arms export licences
Brazil	US\$-m	290	167	49	285	285	352	160	38	99	..	..	1'725	Arms exports
Bulgaria	US\$-m	..	..	..	..	177	141	203	220	201	342	321	1'604	Arms exports
	US\$-m	..	..	..	..	397	551	517	696	439	392	310	3'302	Arms export licences
Canada	US\$-m	382	432	517	495	266	317	304	523	474	..	..	3'710	Arms exports (excludes US exports)
Czech Rep.	US\$-m	55	72	94	112	109	117	238	278	243	287	254	1'860	Arms exports
	US\$-m	..	..	120	154	150	228	653	311	542	597	481	3'236	Arms export licences
Denmark	US\$-m	69	106	90	125	111	163	268	239	350	498	329	2'349	Arms export licences
Estonia	US\$-m	..	..	..	0	1	0	4	9	11	3	487	514	Arms export licences
Finland	US\$-m	36	51	55	52	128	66	103	136	121	78	135	961	Arms exports
	US\$-m	33	56	115	407	55	108	78	494	260	81	256	1'942	Arms export licences
France	US\$-m	2'789	4'169	4'847	8'632	4'616	4'990	6'184	4'601	5'128	4'906	5'070	55'932	Arms exports
	US\$-m	3'617	3'534	4'762	4'198	5'116	7'218	7'747	9'644	11'341	6'778	7'669	71'625	Arms export licences
Germany	US\$-m	328	299	1'504	1'402	2'027	1'724	2'067	2'090	1'860	2'806	1'786	17'895	Arms exports (covers 'war weapons')
	US\$-m	3'298	3'066	5'490	4'727	5'243	5'255	5'020	8'478	7'006	6'296	7'526	61'405	Arms export licences
Greece	US\$-m	46	49	126	19	36	110	45	70	315	391	314	1'522	Arms export licences
Hungary	US\$-m	..	..	12	11	15	20	23	22	24	25	25	178	Arms exports
	US\$-m	..	..	55	50	40	78	131	174	176	183	217	1'104	Arms export licences
India	US\$-m	..	23	94	70	58	95	83	198	69	..	..	690	Arms exports
								Apr08-Mar09		Apr-Dec				
Ireland	US\$-m	48	34	40	34	37	58	45	45	63	32	38	473	Arms export licences
Israel	US\$-m	2'000	2'000	2'350	2'600	2'600	3'000	..	..	6'900	7'200	>7,000	28'650	Arms exports
	US\$-m	2'519	4'024	3'000	3'700	3'500	4'900	5'600	6'326	7'400	>7,300	6'000	46'969	Arms export agreements
Italy	US\$-m	496	458	711	596	1'033	1'217	1'734	2'603	3'063	816	1'422	14'150	Arms exports
	US\$-m	772	866	1'447	1'850	1'693	2'750	6'493	8'292	9'298	4'306	7'316	45'083	Arms export licences
Korea, South	US\$-m	200	144	241	418	262	253	845	1'031	1'166	1'188	2'382	8'130	Arms export agreements
Lithuania	US\$-m	..	..	..	..	..	5	60	45	61	20	67	258	Arms exports
	US\$-m	0	13	..	4	6	10	86	69	110	30	71	399	Arms export licences
The Netherlands	US\$-m	..	..	..	..	848	1'014	1'196	732	788	895	1'073	6'547	Arms exports
	US\$-m	583	424	1'299	775	1'461	1'411	981	1'843	1'827	1'209	578	12'391	Arms export licences
Norway	US\$-m	178	288	427	299	381	455	546	690	716	607	638	5'225	Arms exports
Poland	US\$-m	..	..	207	327	361	345	393	539	1'932	605	1'180	5'888	Arms export licences
Portugal	US\$-m	10	6	28	15	9	1	..	104	22	26	35	256	Arms exports
	US\$-m	17	..	35	21	15	1	37	111	39	28	43	347	Arms export licences
Romania	US\$-m	25	44	69	42	46	100	84	122	136	163	182	1'013	Arms exports
	US\$-m	34	..	..	..	99	110	169	174	229	201	256	1'273	Arms export licences
Russia	US\$-m	3'705	4'820	5'600	5'780	6'126	6'500	7'400	8'350	8'500	10'000	13'700	80'481	Arms exports
Slovak Rep.	US\$-m	..	..	..	25	26	40	51	56	61	20	14	292	Arms exports
	US\$-m	..	..	43	81	62	80	101	104	149	77	42	739	Arms export licences
South Africa	US\$-m	202	243	410	424	..	428	568	714	922	1'138	1'265	6'313	Arms export licences
Spain	US\$-m	207	259	432	504	521	1'060	1'277	1'368	1'871	1'494	3'379	12'373	Arms exports
	US\$-m	305	533	301	546	1'530	1'626	2'685	3'700	4'436	2'964	3'991	22'617	Arms export licences
Sweden	US\$-m	296	353	801	992	1'155	1'406	1'421	1'927	1'772	1'907	2'143	14'172	Arms exports
	US\$-m	2'314	604	1'116	883	2'027	2'038	1'011	1'457	1'451	1'835	1'678	16'414	Arms export licences
Switzerland	US\$-m	153	178	281	323	207	317	387	667	669	615	983	4'781	Arms exports
Turkey	US\$-m	134	248	331	196	337	352	420	576	670	634	817	4'715	Arms exports
UK	US\$-m	6'069	6'175	7'421	9'451	8'231	8'642	10'953	..	..	..	..	56'942	Arms exports (defence and aerospace)
	US\$-m	5'989	7'555	7'971	8'323	7'253	10'170	19'311	8'010	11'296	9'007	8'652	103'535	Arms export orders (defence and aerospace)
	US\$-m	..	3'009	5'066	3'694	3'751	2'991	1'796	3'612	4'809	3'757	9'735	42'220	Arms export licences
Ukraine	US\$-m	500	500	500	..	..	..	700	800	800	957	1'004	5'761	Arms exports
US	US\$-m	9'138	9'744	10'845	11'610	11'765	12'302	12'297	11'917	14'220	11'973	16'160	131'971	Arms exports
	US\$-m	11'340	12'914	14'286	13'368	12'099	15'435	23'691	36'323	22'002	21'103	66'274	248'835	Arms export agreements
Country (current prices)		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011		Explanation of data
TOTALS											Total 2011	180'327		1'188'210

.. = No data available.

Source: SIPRI (2013g: The financial value of national arms exports, 2001-2011, in current US\$).

Appendix E Transfers of major conventional weapons from EU to non-EU countries, 2012

The transfers of major conventional weapons by DCs in the EU to non-EU recipients in 2012 offer an overview of the latest non-EU defence markets of EU MS. Deals with deliveries or orders made for 2012 are included as deduced from the information in the SIPRI 2012 trade list (SIPRI, 2013c:1-38). The information is sorted in alphabetic order by recipient country and where known, amounts are included:

- Italy (transport aircrafts financed by the US, US\$321-m) to Afghanistan;
- France (helicopters €79-m) to Albania;
- Denmark (radars), Finland (diesel engines), Germany (armoured personnel carriers €195-m, ships), Italy (missiles, ship), Poland (helicopters) and UK (helicopters €402-m) to Algeria;
- Finland (diesel engine), France (radars), Germany (vehicles and vessels), Italy (helicopters) to Argentina;
- France (air search system, torpedo €150-m and helicopters US\$1.5-b), Germany (diesel engines, personnel carriers), Italy (transport aircraft US\$1.4-b), Norway (vessels US\$137-m), Sweden (radars US\$86-m), UK (air refuelling system), Ireland (armoured personnel carriers) and Spain (aircraft US\$1.1-b, aircraft carrier US\$2.4-m and ships US\$4.1-b) to Australia;
- France (helicopters, diesel engines), Germany (aircraft) and Italy (radars) to Bangladesh;
- France (aircraft, patrol craft) and Germany (diesel engines) to Benin;
- Denmark (radars), France (missiles estimated €2.9-b, helicopters €1.9-b, patrol craft, submarine and nuclear submarine—part of €6.8-b), Germany (tanks US\$86-m, diesel engines and anti-aircraft guns), Italy (radars €682-m, armoured personnel carriers €2.5-b) to Brazil;
- France (missiles) to Brunei;
- France (aircraft) to Burkina Faso;
- Spain (transport aircraft) to Cameroon;
- France (radars US\$39-m), Germany (armoured recovery vehicles US\$54-m), the Netherlands (tanks CA\$650-m and radars), Sweden (radars) and Norway (turrets) to Canada;
- Netherlands (patrol craft €10.9-m) to Cape Verde;
- France (armoured personnel carriers) and Sweden (diesel engines) to Chad;

- Finland (diesel engines), France (missiles), Germany (armoured personnel carriers US\$45-m, vessels US\$45-m), Norway (missile systems—part of US\$100-m) and UK (helicopters) to Chile;
- France (helicopter, missiles, search radars, diesel engine), Germany (diesel engines) and UK (turbofans for combat aircraft) to China;
- Denmark (sea search radar), Finland (diesel engines), Germany (diesel engines, submarines, off-shore patrol vessels US\$66-m, torpedoes), Italy (naval guns, US\$6-m), the Netherlands (electro-optical multi-sensors, air search and fire control radars) and Spain (transport aircraft) to Colombia;
- Norway (turrets), Sweden (diesel engines), Finland (armoured modular vehicles, €238-m) to Croatia;
- France (landing crafts) to Djibouti;
- France (sonars, light helicopters) and UK (radars) to Ecuador;
- France (radars), Germany (diesel engines, submarines), Italy (naval guns, helicopters, US\$38-m), the Netherlands (radars) and Spain (transport aircraft and turboshafts) to Egypt;
- Austria (aircraft), Germany (missiles €38-m) and Spain (aircraft) to Ghana;
- the Netherlands (patrol crafts US\$62-m lease) to Honduras;
- France (diesel engines, missiles US\$1.1-b, submarines US\$4.5-b, radars, aircraft €12.6-b), Germany (diesel engines, turbofans, missiles, aircraft US\$280-m), Italy (naval guns, air radars), Spain (aircraft), the UK (sonars US\$50-m and air refuelling system, aircraft US\$3.7-b), the Netherlands (radars), Poland (armoured recovery vehicles US\$275-m) and Sweden (towed guns) to India;
- Belgium (turrets), France (radars, diesel engines, self-propelled guns, helicopters, sonars, defence trucks), Germany (diesel engines, aircraft, armoured recovery vehicles, tanks, infantry fighting vehicles), Italy (naval guns), the Netherlands (vessels US\$220-m) and Spain (transport aircraft US\$325-m) to Indonesia;
- Germany (diesel engines) to Iran;
- Bulgaria (amphibious armed tracked vehicles), Czech Republic (combat aircraft, US\$1-b) and Germany (light helicopter €360-m) to Iraq;
- Germany (diesel engines, submarines €1.4-b) and Italy (aircraft US\$600-m) to Israel;
- Austria (training aircraft) to Jamaica;
- Germany (light helicopters), France (mortars), Sweden (propulsion engines) and the UK (helicopters, US\$518-m and turbofans) to Japan;
- The Netherlands (infantry fighting vehicles, armoured personnel carriers, self-propelled guns) and Spain (transport aircraft) to Jordan;

- France (helicopters), Germany (helicopters and diesel engines) and Spain (transport aircraft) to Kazakhstan;
- Germany (diesel engines), Spain (vessels US\$60-m) to Kenya;
- Italy (missiles US\$65-m) to Kuwait;
- Italy (armoured personnel carriers) to Libya;
- France (anti-ship missiles, mortars and warships), Italy (fore control radars), the Netherlands (electro-optic search/fire control) and Sweden (naval guns) to Malaysia;
- France (trainer aircraft) to Mauritania;
- Denmark (sea search radar), France (helicopter), Italy (transport aircraft), Spain (aircraft) and the Netherlands (patrol craft) to Mexico;
- France (warships, anti-ship missiles, air search radars), Italy (naval guns) and the Netherlands (warships) to Morocco;
- Portugal (light aircraft) to Mozambique;
- Italy (naval guns) to Myanmar;
- France (light helicopters) to Niger;
- France and Italy (helicopters) to Nigeria;
- France (helicopters, missiles), Italy (naval guns), the Netherlands (radars), Spain (aircraft) and the UK (aircraft) to Oman;
- France (engines), Germany (sonars), Italy (missiles), Spain (transport aircraft) and Sweden (missiles) to Pakistan;
- France (missiles), Italy (air search radars, warships) and Poland (helicopters) to Peru;
- France, Italy and Poland (helicopters) to the Philippines;
- France (missiles, military vehicles) and Italy (helicopters) to Qatar;
- Czech Republic (transport aircraft), France (landing crafts, man-portable defence systems) and Italy (light vehicles) to Russia;
- Belgium and Finland (turrets), France (guns, search radars, missiles and vehicles), Germany (missiles, unmanned aerial vehicles), the Netherlands (surveillance radars), Spain (aircraft), Sweden (aircraft) and the UK (refuelling systems, guided bombs, combat aircraft) to Saudi Arabia;
- Germany (tanks), Italy (torpedoes, combat aircraft), Sweden (submarines, man-portable systems, air search radars) to Singapore;
- Sweden (aircraft, diesel engines) and Finland (military vehicles) to South Africa;
- France (aircraft), Italy (naval guns), Germany (submarines), the Netherlands (weapon systems, air search radars), Sweden (fire control radar) and the UK (aircraft radars, helicopters) to South Korea;

- Denmark (sea radars), France (helicopters), Germany (missiles, diesel engines), Italy (naval guns, helicopters, air search radars), Sweden (aircraft, fire control radar) and the UK (air missiles) to Thailand;
- France (aircraft radar), Germany (tanks, diesel engines, submarines), Italy (naval guns, aircraft), the Netherlands (radars) and Spain (aircraft) to Turkey;
- Italy (naval guns) and the Netherlands (air/sea search radar) to Turkmenistan;
- Denmark (sea search radar), Finland (turret), France (missiles and radars), Germany (diesel engines), Italy (naval guns, fire control radars, warships, anti-ship missiles), Spain (transport aircraft), Sweden (air search radar, naval guns) and the UK (air refuelling systems and turbofans) to the UAE;
- France (missile) and Italy (torpedoes, naval guns) to Ukraine;
- Germany (diesel engines), Italy (naval guns), the Netherlands (air search radars, patrol craft) and Spain (vessels) to Venezuela;
- Spain (transport aircraft) to Yemen; and
- Italy (trainer aircraft) to Zambia.

Appendix F Cover letter

Dear Offset Manager

I am conducting a survey and your response would be appreciated. All answers from the respondents will be used as a data set for a thesis to fulfil the requirements of a PhD degree.

The research focus of the thesis is the effect of legislation on international trade, specifically offset practices. As an experienced offset manager, your response is very important in exploring this topic. I would like to thank you in advance for your participation. If you believe there is someone else in your company who should receive this survey, kindly inform me. The link to the survey is uniquely tied to the survey and your e-mail address. Therefore, please do not forward this message.

Here is a link to the survey:

https://www.surveymonkey.com/s.aspx?sm=2eRC_2fw0QVCAwmWlqyHniEg_3d_3d

All responses will be confidential. Neither your name nor that of your employer nor other identifying information will be included in the thesis or subsequent papers or reports. All data will be summarised and presented in the aggregate. Please note: The sender will send no further e-mails regarding the survey to your address, but for legal purposes the Remove Link is included:

https://www.surveymonkey.com/optout.aspx?sm=2eRC_2fw0QVCAwmWlqyHniEg_3d_3d

If you have any questions or comments, please contact me at one of the sources listed below.

Kind regards

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Appendix G All response data represented per statement in percentages and response count

International business: Offset, defence procurement and future markets

1. Offset makes it possible for local companies to access the global defence industry, gain access to new markets and grow technological capabilities

Answer Options	Response Percent	Response Count
Fully agree	50.7%	36
Agree	39.4%	28
Neutral	9.9%	7
Disagree	0.0%	0
Fully disagree	0.0%	0
Comment (optional)		9
<i>answered question</i>		71
<i>skipped question</i>		0

2. The application of Directive 2009/81/EC on defence procurement is clear

Answer Options	Response Percent	Response Count
Fully agree	4.2%	3
Agree	9.9%	7
Neutral	23.9%	17
Disagree	49.3%	35
Fully disagree	12.7%	9
Comment (optional)		7
<i>answered question</i>		71
<i>skipped question</i>		0

3. By 'banning' offset, Directive 2009/81/EC will be successful in creating a more competitive European Union defence market

Answer Options	Response Percent	Response Count
Fully agree	2.8%	2
Agree	7.0%	5
Neutral	11.3%	8
Disagree	47.9%	34
Fully disagree	31.0%	22
Comment (optional)		13
<i>answered question</i>		71
<i>skipped question</i>		0

4. Smaller European Union (EU) member states with less-developed defence industries rely on foreign imports for their defence equipment, but there is no guarantee that they will purchase from other EU member states

Answer Options	Response Percent	Response Count
Fully agree	38.0%	27
Agree	53.5%	38
Neutral	7.0%	5
Disagree	1.4%	1
Fully disagree	0.0%	0
Comment (optional)		4
<i>answered question</i>		71
<i>skipped question</i>		0

5. When a European Union member state supplies defence and security equipment to other EU member states, security of supply is always ensured

Answer Options	Response Percent	Response Count
Fully agree	1.4%	1
Agree	12.7%	9
Neutral	29.6%	21
Disagree	47.9%	34
Fully disagree	8.5%	6
Comment (optional)		7
<i>answered question</i>		71
<i>skipped question</i>		0

6. The new security of information clauses in Directive 2009/81/EC are sufficient to safeguard classified information and therefore the Article 346 TFEU exemption will no longer be necessary

Answer Options	Response Percent	Response Count
Fully agree	0.0%	0
Agree	1.4%	1
Neutral	33.8%	24
Disagree	43.7%	31
Fully disagree	21.1%	15
Comment (optional)		3
<i>answered question</i>		71
<i>skipped question</i>		0

7. The 30% sub-contracting allowed in Directive 2009/81/EC can be to "third parties", which include companies globally

Answer Options	Response Percent	Response Count
Fully agree	5.6%	4
Agree	42.3%	30
Neutral	26.8%	19
Disagree	21.1%	15
Fully disagree	4.2%	3
Comment (optional)		10
<i>answered question</i>		71
<i>skipped question</i>		0

8. Directive 2009/81/EC ensures that European Union member states purchase more defence equipment from one another

Answer Options	Response Percent	Response Count
Fully agree	1.4%	1
Agree	7.0%	5
Neutral	18.3%	13
Disagree	45.1%	32
Fully disagree	28.2%	20
Comment (optional)		9
<i>answered question</i>		71
<i>skipped question</i>		0

9. Under Directive 2009/81/EC, EU companies' ability to access American, or other high technologies is drastically reduced, which will severely limit the European Union's technology base, as well as research and development (R&D) possibilities

Answer Options	Response Percent	Response Count
Fully agree	22.5%	16
Agree	29.6%	21
Neutral	18.3%	13
Disagree	23.9%	17
Fully disagree	5.6%	4
Comment (optional)		9
<i>answered question</i>		71
<i>skipped question</i>		0

10. The elimination of official, published offset rules in European Union member states results in less transparency

Answer Options	Response Percent	Response Count
Fully agree	45.1%	32
Agree	32.4%	23
Neutral	11.3%	8
Disagree	5.6%	4
Fully disagree	5.6%	4
Comment (optional)		8
<i>answered question</i>		71
<i>skipped question</i>		0

11. More than two and a half years after the launch of Directive 2009/81/EC, little has changed

Answer Options	Response Percent	Response Count
Fully agree	16.9%	12
Agree	38.0%	27
Neutral	16.9%	12
Disagree	22.5%	16
Fully disagree	5.6%	4
Comment (optional)		13
<i>answered question</i>		71
<i>skipped question</i>		0

12. When a country purchases foreign defence equipment, offset is necessary to protect national security interests

Answer Options	Response Percent	Response Count
Fully agree	21.1%	15
Agree	22.5%	16
Neutral	23.9%	17
Disagree	28.2%	20
Fully disagree	4.2%	3
Comment (optional)		14
<i>answered question</i>		71
<i>skipped question</i>		0

13. All aspects of a defence contract include elements relating to national security and therefore 100% of the contract value should be subjected to offset

Answer Options	Response Percent	Response Count
Fully agree	7.0%	5
Agree	23.9%	17
Neutral	14.1%	10
Disagree	46.5%	33
Fully disagree	8.5%	6
Comment (optional)		11
<i>answered question</i>		71
<i>skipped question</i>		0

14. In order to protect its national security interests, every European Union member state has the right to decide whether it wants to apply Article 346 TFEU to exempt a defence and security procurement contract from EU law

Answer Options	Response Percent	Response Count
Fully agree	40.8%	29
Agree	42.3%	30
Neutral	9.9%	7
Disagree	7.0%	5
Fully disagree	0.0%	0
Comment (optional)		5
<i>answered question</i>		71
<i>skipped question</i>		0

15. Indirect offset is important to purchasing countries, because it develops a country's general infrastructure, skills, know-how and industrial capabilities that eventually ensure national security

Answer Options	Response Percent	Response Count
Fully agree	38.0%	27
Agree	33.8%	24
Neutral	12.7%	9
Disagree	14.1%	10
Fully disagree	1.4%	1
Comment (optional)		14
<i>answered question</i>		71
<i>skipped question</i>		0

16. In order to stay viable, European Union defence companies currently develop partnerships with non-European companies and producers

Answer Options	Response Percent	Response Count
Fully agree	15.5%	11
Agree	60.6%	43
Neutral	19.7%	14
Disagree	4.2%	3
Fully disagree	0.0%	0
Comment (optional)		6
<i>answered question</i>		71
<i>skipped question</i>		0

17. Contrary to the declining budgets in the European Union, some developing countries are increasing defence spending and applying stringent offset requirements that require transfers of technology, expertise, skills and economic benefits

Answer Options	Response Percent	Response Count
Fully agree	66.2%	47
Agree	32.4%	23
Neutral	0.0%	0
Disagree	1.4%	1
Fully disagree	0.0%	0
Comment (optional)		2
<i>answered question</i>		71
<i>skipped question</i>		0

18. The main European armaments producers are actually competitors in the export market, which defeats the cooperation aim of Directive 2009/81/EC

Answer Options	Response Percent	Response Count
Fully agree	25.4%	18
Agree	50.7%	36
Neutral	14.1%	10
Disagree	7.0%	5
Fully disagree	2.8%	2
Comment (optional)		4
<i>answered question</i>		71
<i>skipped question</i>		0

19. By including newcomer small and medium enterprises (SMEs) in the defence supply chain, product quality and project milestones become unpredictable, exposing the procuring nation and the armed forces to risk

Answer Options	Response Percent	Response Count
Fully agree	12.7%	9
Agree	31.0%	22
Neutral	22.5%	16
Disagree	25.4%	18
Fully disagree	8.5%	6
Comment (optional)		10
<i>answered question</i>		71
<i>skipped question</i>		0

20. Since “national security interests” are not defined, Directive 2009/81/EC is nearly meaningless

Answer Options	Response Percent	Response Count
Fully agree	11.3%	8
Agree	39.4%	28
Neutral	23.9%	17
Disagree	16.9%	12
Fully disagree	8.5%	6
Comment (optional)		10
<i>answered question</i>		71
<i>skipped question</i>		0

21. Until the interpretation of Directive 2009/81/EC becomes clear, European Union member states in need of offset may decide to act outside of the scope of Directive 2009/81/EC, completely separating agreements for industrial benefits from the defence procurement contracts (the UK’s Defence and Security Industrial Engagement Policy (DSIEP) is an example)

Answer Options	Response Percent	Response Count
Fully agree	28.2%	20
Agree	46.5%	33
Neutral	15.5%	11
Disagree	8.5%	6
Fully disagree	1.4%	1
Comment (optional)		10
<i>answered question</i>		71
<i>skipped question</i>		0

22. European Union member states that required offset in the past still ask for offset when purchasing defence equipment

Answer Options	Response Percent	Response Count
Fully agree	7.0%	5
Agree	56.3%	40
Neutral	25.4%	18
Disagree	9.9%	7
Fully disagree	1.4%	1
Comment (optional)		13
<i>answered question</i>		71
<i>skipped question</i>		0

23. Defence contractors that tender to supply defence equipment to European Union member states still include offset in the form of local content, work-packages and transfer of technology in their offers

Answer Options	Response Percent	Response Count
Fully agree	8.5%	6
Agree	62.0%	44
Neutral	26.8%	19
Disagree	2.8%	2
Fully disagree	0.0%	0
Comment (optional)		12
<i>answered question</i>		71
<i>skipped question</i>		0

24. European Union member states still purchase most defence equipment from their national suppliers

Answer Options	Response Percent	Response Count
Fully agree	7.0%	5
Agree	49.3%	35
Neutral	26.8%	19
Disagree	16.9%	12
Fully disagree	0.0%	0
Comment (optional)		13
<i>answered question</i>		71
<i>skipped question</i>		0

25. Defence contractors that are not successful in their bids are willing to complain to the European Commission when they do not win a tender because they did not include an offset offer, while the winner did

Answer Options	Response Percent	Response Count
Fully agree	7.0%	5
Agree	28.2%	20
Neutral	40.8%	29
Disagree	18.3%	13
Fully disagree	5.6%	4
Comment (optional)		12
<i>answered question</i>		71
<i>skipped question</i>		0

26. The daily management of offset in defence companies that need to fulfil offset in the European Union changed dramatically because of Directive 2009/81/EC

Answer Options	Response Percent	Response Count
Fully agree	4.2%	3
Agree	16.9%	12
Neutral	32.4%	23
Disagree	45.1%	32
Fully disagree	1.4%	1
Comment (optional)		13
<i>answered question</i>		71
<i>skipped question</i>		0

27. After Directive 2009/81/EC, offset managers need new skills and mandates to manage defence procurement in European Union member states effectively

Answer Options	Response Percent	Response Count
Fully agree	8.5%	6
Agree	42.3%	30
Neutral	28.2%	20
Disagree	19.7%	14
Fully disagree	1.4%	1
Comment (optional)		7
<i>answered question</i>		71
<i>skipped question</i>		0

28. Directive 2009/81/EC makes national laws in European Union member states pertaining to defence procurement irrelevant, diminishing their sovereignty

Answer Options	Response Percent	Response Count
Fully agree	11.3%	8
Agree	33.8%	24
Neutral	31.0%	22
Disagree	19.7%	14
Fully disagree	4.2%	3
Comment (optional)		6
<i>answered question</i>		71
<i>skipped question</i>		0

29. Directive 2009/81/EC will result in one military force and one Ministry of Defence for the European Union

Answer Options	Response Percent	Response Count
Fully agree	1.4%	1
Agree	5.6%	4
Neutral	12.7%	9
Disagree	43.7%	31
Fully disagree	36.6%	26
Comment (optional)		13
<i>answered question</i>		71
<i>skipped question</i>		0

30. The question in the case of Directive 2009/81/EC is not whether, or which types of defence procurement contract may be excluded from the scope of the new Directive, but what legal standing European Union member states have to resist the authority of the European Commission

Answer Options	Response Percent	Response Count
Fully agree	9.9%	7
Agree	49.3%	35
Neutral	32.4%	23
Disagree	7.0%	5
Fully disagree	1.4%	1
Comment (optional)		8
<i>answered question</i>		71

Appendix H EU initiatives to harmonise frameworks across the Union

YEAR	INITIATIVE	AIM OR OUTCOME
1947	Initiatives for increased cooperation across Europe	Industrial development
1948	Brussels Treaty	Promoted a Western European Union and the creation of the European Coal and Steel Community (1951), which placed strategic resources under a supranational authority
1954	Proposal for European defence community	Rejected by <i>French Assemblée Nationale</i>
1957	Treaty of Rome	Led to the founding of the European Economic Community (EEC) on 1 January 1958
1968	Customs Union	
1970	European Political Cooperation (EPC)	Served as the foundation for the Common Foreign and Security Policy (CFSP) introduced in the Maastricht Treaty
1986	Single European Act	Set for the European Community an objective of establishing a Single Market by 1992
1992	Single Market	Ensures the movement of capital, labour, goods, and services between EU MS (a common market is viewed as a first stage toward a Single Market)
1992	CFSP	Focus: foreign affairs and defence matters among Europeans Aim: to eventually establish a common defence policy, which would lead to common defence
1993	Maastricht Treaty	Created a single institutional framework, the European Union
1997	Amsterdam Treaty	Reconfirmed ambitions of 1992, including Petersberg Task that advocated a commitment to crisis management to handle future Balkan-type scenarios
1998	UK and France reached a compromise	The two MS agreed to activate the Maastricht (Treaty on European Union) and Amsterdam Treaties to revitalise European defence to manage conflicts on the continent and elsewhere: <ul style="list-style-type: none"> - EU would create credible forces; and - a common defence policy was stated as a longer-term objective.
1999	European Security and Defence Policy (ESDP)	Established at the Cologne European Council
2003	European Council adopted the European Security Strategy (ESS)	The ESS provided the conceptual framework for the CFSP, including what would later become the Common Security and Defence Policy (CSDP). The ESS emphasised "effective multilateralism" and the document became a key reference point in all European Council and Commission documents in the field of external relations.
2009	Lisbon Treaty	Amended the two treaties that form the constitutional basis of the EU
2009		The ESDP was renamed the CSDP, covering defence and military aspects as well as civilian crisis management. The ESDP was created as a new chapter in the CSDP. After the entry into force of the Treaty of Lisbon, the EU's security and defence policy was renamed the CSDP. The CSDP is an integral part of the CFSP.
2009	EC (European Commission)	Published a recommendation on "Measures to improve the functioning of the Single Market", (2009, 4728/4)
2011	Directive 2009/81/EC on defence procurement and Directive 2009/43/EC on defence exports launched	New rules for public procurement in defence and security, and export licences in Europe simplified

Future	Policies and aims	Single currency; coordination of tax policy; expand EU to countries outside Europe; respond to geopolitical trends; establish EU as global power or global player
Current through 2019	EU institutions	The CSDP will remain the focus for discussing European defence matters.

Source: Summarised from Chapter 3.