European Defence Agency

Study

"Level Playing Field for European Defence Industries: the Role of Ownership and Public Aid Practices"

EDA contract reference: 08-I&M-001

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Fraunhofer-Institut für Naturwissenschaftlich-Technische Trendanalysen

Fraunhofer Institut Naturwissenschaftlich-Technische Trendanalysen

Isdefe

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By Carlos Martí Sempere with contributions by Silke Römer, Merle Missoweit, Martin Trybus, Lucca Rubini, Elisabeth Sköns, Sam Perlo Freeman, and Axel Dyevre

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INDEX

EXECUTIVE SUMMARY 1

1. INTRODUCTION 7

1.1. Background 7
1.2. Scope of the Study 8
1.3. Phase I Results 8
1.4. Phase II Results 9
1.5. Outline of the Report 9
1.6. The Project Team 10
1.7. Disclaimer 11

2. IDENTIFICATION AND DESCRIPTION OF PMS NATIONAL POLICIES AND PRACTICES CONCERNING OWNERSHIP AND PUBLIC AIDS IN THE DEFENCE SECTOR 12

2.1. Introduction 12
2.2. The Defence Market 13
2.3. General Policies 13
2.4. Public Ownership 18
2.5. Foreign Investments, Mergers and Acquisitions 20
2.6. Public / State Aids 26
2.7. Government to Government Sales, Procurement Through International Organizations or Collaborative Procurements 43
2.8. Industry Practices 46
2.9. Other Policies and Practices which Impact on the Level Playing Field 49

3. ANALYSIS OF THE EFFECTS OF NATIONAL POLICIES AND PRACTICES ON OWNERSHIP AND PUBLIC AIDS ON INDUSTRIAL RESTRUCTURING AT EU LEVEL AND FAIR COMPETITION IN THE DEFENCE SECTOR 50

3.1. Introduction 50
3.2. Public Ownership 51
3.3. Foreign Investments, Mergers and Acquisitions 54
3.4. Public / State Aids 58
3.5. Government to Government Sales, Procurement Through International Organizations or Collaborative Procurements 68
3.6. Industry Practices 70
3.7. Other Policies and Practices which Impact on the Level Playing Field 71

4. A CLASSIFICATION ACCORDING TO THE POTENTIAL DISTORTING EFFECTS 73

4.1. Introduction 73
4.2. Public Ownership 77
4.3. Foreign Investments, Mergers and Acquisitions 78
4.4. Public / State Aids 79
4.5. Government to Government Sales, Procurement Through International Organizations or Collaborative Procurements 82
4.6. Resume 83

INDEX

5. CONCLUSIONS 86

5.1. A Complex and Very Sensitive Problem 86
5.2. Policies and Practices Strongly Rooted in pMS Culture 86
5.3. Article 296 EC Treaty: the Basic Legal Support 87
5.4. Public Ownership not an Obsolete Practice 87
5.5. Foreign Investment and Concentrations are Common in the EDTIB and Usually are not Opposed. Article 296 has Rarely been Invoked 88
5.6. Security of Supply: A Source of Market Distortion 88
5.7. Aids Following Open Selection Rules have Less Chance of Distortion 89
5.8. Government to Government Sales and International Collaborative Programmes are Another Source of Distortion on Open and Fair Competition 90
5.9. Distortion of Practices based on the Economic Size and Specific Surrounding Conditions 90
5.10. A Level Playing Field an Achievable, Yet Complex Goal 90

ANNEX A. SURVEY ANALYSIS.
ANNEX B. LIST OF ORGANISATIONS THAT HAVE PARTICIPATED IN THE SURVEY.
ANNEX C. PUBLIC OWNERSHIP IN THE EUROPEAN DEFENCE SECTOR.
ANNEX D. ARTICLES 296-298 EC TREATY.
ANNEX E. ACRONYMS AND DEFINITIONS
ANNEX F. BIBLIOGRAPHY.

List of Figures

Figure 3-1 The Consolidation Process of EADS. Source: Sipri Yearbook 2006 55

List of Tables

Table 2-1 Rights and Obligations of the Special Share (BAE). Source: Company Web Page 19
Table 2-2 Acts Regulating Foreign Investments in Defence 22
Table 2-3 Organisations Supporting Foreign Sales 34

EXECUTIVE SUMMARY

MOTIVATION AND OBJECTIVE OF THE STUDY

This study is motivated by ongoing developments in the European defence industry and market policies aimed at consolidating the European Defence Equipment Market (EDEM) and the European Defence Technological and Industrial Base (EDTIB). The main objective of the study is to analyse the impact of ownership and Public aid policies and practices of EDA participating Member States (pMS) on a level playing field for European defence industries. To enable this, a survey has been carried out and, with the information collected, an analysis has been made on the main effects of these policies and practices on fair competition and industry performance. The question related to a potential interconnection between public ownership and Public / State aids practices has been of particular concern.

The survey carried out included the distribution of questionnaires' and the conducting of interviews with various stakeholders involved in the European defence industry and market. The study outcome therefore has depended on the quantity and quality of the information collected. The inevitable limitations of this kind of studies have precluded the attainment of a more complete set of information that would have improved research results. In spite of this however, final results are beyond initial expectations.

PRINCIPAL FINDINGS

MAIN POLICIES AND PRACTICES ON OWNERSHIP AND PUBLIC AIDS

The research has highlighted six general policies that explain the pMS practices used in the defence industry and market in addition to the selection of economically advantageous solutions, namely:

a) *National industrial policy.*

   The industrial policy shall take advantage of the defence equipment demand in the pursuance of planned goals.

b) *Security of supply.*

   Key strategic equipment shall be backed as substantially as possible by the national industry.

c) *Compensation (offset) agreements.*

   Large purchases of foreign defence equipment should be performed through a balanced barter trade.

d) *Juste retour (fair return).*

   International programmes or collaborative procurements shall respect the principle of a geographically balanced distribution of work.

e) *Social welfare.*

   Defence expenditures shall support to the maximum feasible extent this objective, as the creation of jobs or regional development.

f) Export of defence equipment.

This activity shall be supported in order to keep or enhance national industrial base capabilities and improve the balance of payments.

Public ownership or public control practices on defence industry are common in the EU defence field, despite the large privatisation process that occurred in the decade of the nineties in nearly all pMS. The general trend is the maintenance of these practices, with a potential reduction of public ownership in the Central and Eastern European countries. Public ownership is still deemed by some pMS as crucial to assure the security of supply when private ownership is unwilling or not deemed reliable to produce or maintain defence equipment. The strategic nature of these industries assures a relevant role in the whole defence acquisition process.

Foreign investment on the defence industry is supervised in the majority of pMS by the government, who reserves the right of approval due once again to the particular strategic nature of this industry. Yet this power is seldom exerted in practice as investors ensure early on that the operation will not be denied. When the investment is large enough to warrant the direct control of a firm, then a concentration of undertakings that may affect competition occurs. In such a case, the scrutiny of national competition authorities, or the DG Competition of the EU Commission when it has a European dimension, is required for approval. The survey and analysis made on current **merger and acquisition practices** based upon defence concentrations of European dimensions since 1991, shows that cross-border concentrations are frequent in the European defence industry and that, in general, they are looked upon favourably by pMS and competition authorities.

There is a large variety of **Public assistance / State aids practices** that may benefit the defence industry. The main aid types, the financial instruments, and the award organisations have been succinctly described. The most common types of aid practices have been analysed, including those general aids that are available to the defence industry, but subject to EU regulations. **Public assistance** (almost but not legally considered State aid under the provision of Article 87 (1) EC Treaty) has also been considered due to its large influence on the level playing field. The analysis of methods for granting aids has identified that many of the aid awards are not based on competition rules. The most important kind of assistance is related to:

a) R&D,
b) rescue and restructuring,
c) export promotion.

Other practices that may not follow principles of open and fair competition, or may be discriminatory, and have a potential effect on the level playing field, are:

a) offset agreements associated to foreign purchases and government to government sales,

b) *juste retour* in international collaborative programmes,

c) industry practices such as collusion and competition within the supply chain,

d) other practices related to intra-community sales of defence equipment, framework agreements, tax and social security.

The *juste retour* should be highlighted as one of the practices with a significant effect on the level playing field. Cases of international organisations and programmes involved in this type of acquisition, such as OCCAR, have been studied as illustrative examples.

Effects of these Policies and Practices on Fair Competition and EU Defence Industry Restructuring

The main concern of **public ownership** influence is related to a potential favourable treatment in public procurement and Public / State aids award procedures. While facts show, in general, a higher share in public procurement and Public aids budget of publicly owned companies, the reasons behind this are often mainly supported by a legal and rational selection process to better achieve project goals, yet compromising open and fair competition. Public ownership may have a detrimental effect on **transnational restructuring** preventing foreign investments and concentrations. Still the reason may be more closely related to the desire of keeping the autonomy of key defence industrial capabilities than to pure ownership.

Main effects of **foreign investments, mergers and acquisitions** are in general positive for the defence industry. They raise the EDTIB efficiency, helping in the restructuring of the industry and passing on some of the benefits gained to the customer. Negative effects may include a creation or increase of a dominant position that may significantly impede effective competition, lower supply dependability, and a reduction in employment and wealth in local economies when the rationalisation of capabilities is undertaken.

Public assistance / State aids have a crucial role to play in solving market failures that prevent the achievement of the desired objective of common interest, namely the security of pMS. However, they also have a potential capability to provide selective advantages to undertakings that may affect trade conditions and therefore fair competition compromising the achievement of a level playing field in the EDEM.

Other policies and practices identified with potential effects on the EDEM and the EDTIB have also been evaluated, and their impact on EU restructuring and fair competition highlighted. The most relevant are **offset** agreements in foreign purchases and ***juste retour*** in international collaborative procurement. These agreements, where complex industrial policy goals are pursued, are based mainly on non competitive tendering processes for the candidate selection. This reduces the playing field and may be a source of unnecessary duplication and overcapacities in the EDTIB.

A Classification According to their Distorting Effects

When certain conditions are met, some of the abovementioned policies and practices may substantially distort competition in the EDEM and impair the EDTIB efficiency. Since practices are often selective and provide significant advantages to beneficiaries, they may create **market power and have detrimental effects on incentives to invest, attain efficiency and properly allocate resources.** This may result in the maintenance of **inefficient market structures and a lower performance of the EDTIB**.

With all caveats in mind, it can be said that practices with the most potential distorting effects are R&D, rescue and restructuring, export promotion, offset agreements, *juste retour* practices and public ownership. Yet the real distortion is an empirical issue that depends on the transaction value, concrete practice implementation and surrounding conditions.

Conclusions

1. The question of ownership and Public aids policies and practices is **a complex and very sensitive issue**, due to its important influence in market agent's behaviour and benefits they may receive. Both phenomena are profoundly interconnected with national defence, political, industrial and social policies of pMS. These policies and practices may impair the ability of defence markets to function,

and are deeply rooted in pMS culture. The study, therefore, shall be seen as a first approach to this challenging issue. Deeper analyses may be required to progress in the development of policies to consolidate a level playing field in the EDEM.

2. Policies and practices are mainly **rooted in national interests. They may have priority over a fair and competitive EDEM in case of conflict**. Questions like industrial policy, security of supply, compensations, regional welfare and exports may have a heavier influence on decisions, than the preservation of an EU level playing field. The benefits of these policies and practices may be addictive and thus not easy to eradicate on a voluntary basis.

3. **Article 296 EC Treaty is the main legal tool used by pMS to sustain these policies and practices where rules of competition must be balanced to better protect national security interests**. The lack of a notifying obligation of the use of this Article, its capability to allow derogation from EC Treaty rules, and the possibility of pMS to invoke this Article to support their contract award decisions concerning the acquisition of defence equipment may considerably curtail the level playing field where the *most economically advantageous tender* should be the award criterion. Whereas abuse of the Article can lead to investigations by the EU Commission, and ultimately a ruling of the European Court of Justice, the assessment is not easy as legitimate interests are so intermingled with other economical and societal interests that, in practice, it is very difficult to ascertain its correct use for the EU Commission and even to the European Court of Justice and relevant national courts of the pMS. This suggests that only agreed voluntary restraints would be an effective method to limit the use of the Article to justify practices that are not coherent with an open and competitive EDEM and not overly related to the safeguarding of essential security interests.

4. **Public ownership or public control of defence companies is not an outdated practice** as can be seen in Annex C. It is centred on main suppliers as well as services considered strategic. **While statistics show that the awarding of equipment procurement to publicly owned companies predominates, this preference may not be so minor for private national champions**. Here the main problem appears when the procurement of goods and services for the armed forces and / or granting aids, unfairly favours publicly owned companies and does not consider other valuable proposals offered by other competitors in the EDEM. These practices may prevent an EDEM where fair competition should be the rule, while the advantages of selecting the *best value for money* solution are lost.

5. **Mergers and acquisitions** are one of the more relevant ways to restructure markets, gain size to benefit from different economies, rationalise production and reap other efficiencies to improve competitiveness in a market increasingly more global. Part of these efficiency gains are passed on to consumers in terms of lower price, higher quality and performance, or innovation. The analysis shows that takeovers and **cross-border concentrations of undertakings are frequent in the defence field, and that few cases have been opposed by the EU Commission**. **Article 296 EC Treaty has been used to support these operations in few cases**. Main concentrations appear in the field of aeronautics, electronics and information and communications technologies. On the other hand, explicit evidence of opposition to investments and mergers based on essential national security interests has not been found, perhaps because informal consultations are carried out beforehand, and companies exercise self restraint if the operation is not looked upon favourably by the government. In this context it is hard to know the real number of failed attempts.

6. Whereas **security of supply** is a requirement for the armed forces, its implementation through national suppliers **is a source of potential market distortion, since it raises barriers when establishing requirements in the tendering process such as local development or production, composition of shareholders, etc that will not be fulfilled easily by foreign or, in certain cases, private companies**. Public procurement or State aid laws, and in the last instance Article 296 EC Treaty, are extremely powerful and flexible tools to tailor the competition level to filter a small number

of companies, even a single one, thus creating an environment where true intra-EU competition in the supply of defence products and services is low or even absent. As a secondary effect, it may create unnecessary duplication and overcapacities instead of higher specialisation, thus preventing a more efficient EDTIB.

7. Regarding State aid, the defence sector, as any other industrial sector, benefits from horizontal (cross-industry) and regional aids that are well defined and ruled by the EU. Of all types of Public assistance, **R&D through public procurement to develop a defence equipment seems to have the most potential distorting capability in the EDEM** for the following reasons:

   - They are the largest type of aids in defence.
   - They are very selective and tend to have a high value and intensity[1]. Therefore, they may favour the granted undertaking and the production of certain products and considerably affect trade conditions.
   - The openness and transparency of the award procedure may be limited by the safeguarding of essential security interests.
   - They are exempt of the EU Commission scrutiny of State aids since they are usually supported by public procurement rules.
   - The advantages they provide may crowd out private investment and other competitors from the defence market.
   - They may create negative externalities[2] that are supported by other pMS, therefore the incentive for pMS to provide excessive R&D assistance is a real risk.
   - Uncoordinated pMS aids of this kind may result in suboptimal solutions to equipment modernisation.

   Export assistance can also be considered a source of distortion due to the risk of unbalanced aids between pMS.

   The potential main distortion of rescue and restructuring of industries in difficulties is the creation of an artificial market where efficiency is not properly rewarded.

   Assistance in the form of opaque aids such as prices above market value, non monetary aids and aids in preferential terms are not uncommon in the EDEM. All of them may have a potential effect on the level playing field as a source of discretional and hidden subsidies; but with a low economic value, their real distorting effect may be small.

   The main risk is that any advantage achieved through the granting of Public assistance or State aids can be used in other activities such as predatory or anticompetitive practices, not only in defence but in other markets such as exports or civilian markets, instead of addressing defence market failures or protecting national security interests. This will ultimately damage the mutual trust of pMS in a level playing field in the EDEM and will impair the EDTIB performance.

8. Other activities such as foreign purchases, sales between governments and international cooperation programmes may depart from competitive conditions, owing to offset agreements and selection based

1 Cf. the definition of aid intensity in annex E.

2 Cf. the definition of externality in annex E.

on *juste retour* principles where **cost-efficient solutions may be considered secondary regarding other more relevant industrial or general economic policies**. These practices have been valued during the survey by the majority of stakeholders of the main pMS defence producers as the main concern over the achievement of a level playing field.

9. **A classification of distortive effects of these practices in the EDEM and the EDTIB efficiency shall consider in the first instance the economic size of the procurement, concentration, or aid**. The higher the transaction value, the greater the chance to distort competition with the loss of benefits usually associated with it. Yet, specific conditions of the operation are determinant on the real market distortion. Therefore, distortion can only be measured on a case-by-case basis that may require econometric and counterfactual analysis.

10. While there is a general agreement amongst pMS in the need to raise competition and efficiency in the EDEM, a large period of adaptation and a stepwise approach seems to be necessary to restructure the market. Whereas a set of common rules and incentives are required in order that pMS abandon national policies that are not coherent with the EDEM, **the Community principle of solidarity (Article 2 EC Treaty) should be taken into account and specific aids may be needed, to those facing difficulties, for a smooth transition**.

IDENTIFIED GAPS AND WAY AHEAD

It is thought that an overall complete picture has been captured during the study. Still, in some cases, the survey collected limited information to build a totally clear picture of the problem and identify and describe more accurately current policies and practices and all the reasons that lay behind their use.

The main identified information gap has been the lack of a quantitative measure of these policies and practices, in terms of frequency of use, economic value and boundary conditions. Such information will allow progress in the measurement of their real distorting effects on competition and on the development of sub-optimal industrial structures. This information will provide confidence to all pMS stakeholders that fair (and effective) competition is not substantially affected, while remedies can be found for those cases that show a true distorting effect, since the increase in the mutual trust of pMS is a requirement to progress towards an integrated EDEM.

Main key research areas to further explore, in order to shape new effective policies and practices that will lead to a level playing field, are:

- the role of competitive advantage, as expressed in relative production costs and technological capabilities, in shaping the optimal structure of the European defence industry,
- defence market failures that can only be solved through aids and public assistance,
- size of the industry for achieving the minimum efficiency scale,
- maximum number of efficient players that the market admits, or the minimum number required to achieve an adequate level of competition,
- trade-off analysis between confronting national and EDTIB industrial policies,
- cost savings of real and genuine competition in complex acquisitions (counterfactual analysis),
- public choice practices in non competitive defence acquisition processes.

1. INTRODUCTION

1.1. BACKGROUND

In the last years, the European Defence Agency (EDA) participating Member States (pMS) have shown an increasing willingness to progress in the consolidation of a true European Defence Equipment Market (EDEM) able to face the main challenges of their industry with success, namely:

- the cost effective improvement of the European armed forces material resources to achieve best capabilities to accomplish the tasks defined in the European Security and Defence Policy (ESDP),
- a high level of competitiveness in the increasingly global defence market.

It is widely thought that a single EDEM is a fundamental step to overcome these challenges, as in Europe national markets and national technological and industrial bases are becoming too small to produce high quality equipment at affordable prices. A well functioning EDEM ought to be characterised by openness, fair competition, transparency, and lack of artificial barriers, i.e. a level playing field providing equal (same set of) rules, clarity and legal certainty for all parties.

An integrated EDEM should enhance (cross-border) competition and thereby increase the opportunity companies have to win contracts in other pMS. The outcome should be a market where customers receive more and pay less, and an environment in which efficiency and innovation are properly rewarded, leading to the emergence of stronger companies, and the creation and preservation of high quality jobs. Through this process, the competitiveness of the overall European Defence Technical and Industrial Base (EDTIB) will be enforced.

As a consequence, all pMS agreed on May 14, 2007 to support the EDA initiative to increase transparency and promote competition and equity amongst those who operate in the EDEM. The high overall economic benefits, in the medium and long term, are acknowledged by pMS.

Currently, pMS follow different national policies and practices in relation to ownership and Public assistance / State aids in defence[3]. These practices may create unequal conditions to undertakings and compromise the ability of the players to compete fairly, in particular when European Union (EU) companies bid in other pMS. This is one of the reasons that may deter the consolidation of the EDEM, since the advantages gained by foreign companies through these practices may adversely impact on the current domestic defence industrial base of pMS.

The framing of the EDEM should ensure that some control is exercised on policies and practices, which may place some companies in a more advantageous position than others. Yet, there is poor knowledge of the nature and real use of these policies and practices. Therefore a complete identification and description is needed in order to understand them better, as well as an analysis of its potential effects and distortions on the market. Only then, effective measures may be derived and agreed upon to ensure a level playing field, a true common market and as such a solid ground for a stronger EDTIB, a fundamental underpinning of the ESDP and a valuable economic European asset.

[3] The broad term Public assistance (or aid) will be used along the document as any selective aid granted by the State to selective undertakings when the market in unable to achieve objectives of common interest. The standard name "*State aid*" will be reserved to those aids that fall under the provision of Article 87 (1) EC Treaty.

1.2. SCOPE OF THE STUDY

The European Defence Agency published a contract notice (ref 2007/ S 227-276288) on November 24, 2007 aimed at the study of the policies and practices of the EU and national pMS related to the level playing field concerning ownership and the control of foreign investment, mergers and acquisitions and Public aid. The study, according to the Technical Specification, was split into two phases.

The objective of phase I (with a duration of three months) was the development of three key outcomes required for the following phase, namely:

a) a survey methodology to carry out the study,

b) an overview and explanation of EC competition policy in relation to the defence sector,

c) an initial overview of the various types of national policies and practices developed by pMS in the defence sector concerning ownership and Public aids.

The objective of phase II (with a duration of six months) was the achievement of the following outputs:

a) a complete definition and identification of pMS national policies concerning ownership and Public aids (forms and nature) in the defence sector,

b) an analysis of the effects of these national policies and practices on industrial restructuring at EU level and fair competition in the defence sector,

c) a classification according to their potential distorting effects.

After the prequalification phase, the EDA issued an invitation to tender on January 28, 2008 to the consortium formed by Isdefe and Fraunhofer INT with the support of Martin Trybus, CEIS-Strat and SIPRI. The consortium was awarded with a contract signed April 17, 2008.

1.3. PHASE I RESULTS

The results of phase I where recorded in the final report delivered July 18, 2008. It contained:

a) a survey methodology that included the complete identification of the target audience, the description of each type of questionnaire, guides to perform interviews, methods to verify collected data and to perform the analysis, as well as the complete addressees datasets for distribution. Five lists were prepared:

   - National competition authorities.
   - National State aids authorities / contact points.
   - National contacts in the Ministry of Defence related to equipment procurement and defence aids.
   - National defence industrial associations (NDIA).
   - Defence companies of pMS.

b) The EC Treaty rules analysis that highlighted the EU competition law regimes on undertakings and State aids and regimes on export, in theory and in practice. The analysis focused on Articles 81-89 EC Treaty related to the anticompetitive conduct of undertakings and State aids, Articles 296-298 on EC Treaty exemptions related to the protection of essential security interests, and other related Articles. It also addressed the EU legislation and regimes derived from these Articles, and their

interpretation based on Court cases and available jurisprudence. World Trade Organisations (WTO) rules on foreign trade and associated subsidies were also considered.

c) An initial identification of EU and national policies and practices concerning ownership and State aids that was based upon an exhaustive search alongside the collection and detailed analysis on these topics: economic studies, complete dossiers of concentrations[4] and State aids, large on-line law and regulation databases, and Court case documents, mostly based on EU available Web pages, but also in direct contacts with EU Commission officers and academic papers.

1.4. PHASE II RESULTS

In phase II the survey was carried out via the distribution of questionnaires to the target audience and selected interviews with key stakeholders, mainly LoI-EDIR-FA pMS. Results were recorded and stored in a survey repository. The survey was not exempt of problems, and reluctance to answer the questionnaires and take part in interviews was apparent since the beginning. In spite of the project teams efforts to collect information, results were lower than initially expected in terms of number and quality of responses. Despite the difficulties relevant data was collected, in particular interviews were very useful to identify concerns on current practices. In addition, written information related to these policies and practices was collected. Main results were:

a) The identification and definition of pMS national policies and practices. This activity, initiated in phase I, was completed with the information from the survey. The information collected on questionnaires and interviews allowed progression in the identification and description of pMS policies and practices. It was completed with the analysis of written documents on defence industry and direct knowledge of the project team. The use of inference, stylised facts, and the analysis of agent's behaviour based on economic theory enabled the depiction of a more precise image.

b) The potential effects of the identified practices on the defence industrial restructuring at EU level and fair competition. This task concentrated on the analysis of practices deviating from internal market rules such as direct awards, based upon exemptions provided by national Member State laws within the field of application of Article 296 EC Treaty, since their effects are more likely to be detrimental with regards to a truly competitive EDEM.

c) A classification of the distorting capability of the different policies and practices that was carried out analysing their impact on the EDEM and the EDTIB performance in terms of workable competition, efficiency and appropriate resource allocation. The conditions that influence distortion were analysed for the principal policies and practices.

d) A set of final conclusions completes the results of this phase. It describes key questions to have in mind concerning a level playing field in the EU.

1.5. OUTLINE OF THE REPORT

This document is organised as follows:

Chapter 2 describes the main policies and practices related to ownership and Public aids of pMS identified during the whole study. It describes the aim, methods, regulations and applicable norms and regulations and when feasible examples. Other practices with relevant impact on the level playing field are also analysed.

[4] This term, coined by the EU Commission, in his legislation will be used as a synonym of Mergers and Acquisitions.

Chapter 3 evaluates the impact of these policies and practices on fair competition and in the EU restructuring of the defence industry. It also includes other relevant effects on the EDEM and the EDTIB.

Chapter 4 classifies these policies and practices according to their distortive effects on competition and EDEM performance, and its impact in the pursuance of an efficient EDTIB.

Chapter 5 concludes based upon the analysis made in the previous chapters.

Annex A resumes the analysis of the survey results based on questionnaires and interviews recorded information. Lectors wishing to know more about the position of the different stakeholders and their particular view on the issues analysed in this study should read this annex in detail.

Annex B summarises the organisations that voluntarily took part in the survey.

Annex C contains a list of identified pMS companies that have some degree of public ownership.

Annex D presents the full text of Articles 296 to 298 EC Treaty that is the main legal support of policies and practices that may have a relevant impact on the level playing field.

Annex E contains a list of acronyms and definitions of main concepts used alongside the study.

Annex F includes a reference list of the main documents and papers that have been consulted to perform the study.

1.6. THE PROJECT TEAM

CONSORTIUM MEMBER	EXPERT	PROJECT ROLE
Isdefe	Carlos Martí Sempere Sarah Marr Patricia Lopez Vicente Guillermo González Muñoz de Morales	Project Coordination, Spain survey Text edition support Project support and peer reviews Final edition review
Fraunhofer INT	Silke Römer Merle Missoweit Hans Martin Pastuska	Survey methodology Target audience information collection UE and Germany survey Survey analysis annex
Martin Trybus	Martin Trybus Lucca Rubini	EC legislation analysis in relation to Competition and derogations based on the protection of essential security interest UK survey
CEIS-Strat	Axel Dyevre	France and Belgium survey
Stockholm International Peace Research Institute (SIPRI)	Elisabeth Sköns Sam Perlo Freeman	Sweden survey Poland and Czech Republic survey

Tabla 1-1 Project Team

Valuable contributions have also been provided by: Juan José Burgaz Fernandez in the management and administrative support of the project; and María Más Rueda and Antonio Torres Díaz-Malaguilla from Isdefe Brussels office in the support to the interviews and general project coordination with EDA.

1.7. DISCLAIMER

This document expresses the view of the different project team members that have performed the study of the level playing field in the European defence industry. It does not necessarily reflect the official view of EDA.

2. IDENTIFICATION AND DESCRIPTION OF PMS NATIONAL POLICIES AND PRACTICES CONCERNING OWNERSHIP AND PUBLIC AIDS IN THE DEFENCE SECTOR

2.1. INTRODUCTION

In this chapter policies and practices of pMS and industry in the EDEM that are specific to, or used in the defence sector are identified and described. It focuses on policies and practices related to ownership, foreign investments, mergers and acquisitions[5] and Public assistance or State aids that may affect fair competition and trade conditions. The information sources used are:

a) information collected during phase I of the project,
b) responses collected from distributed questionnaires,
c) interviews performed to the different stakeholders (see annex B),
d) new documents consulted during phase II (see annex F).

This chapter fuses the information recorded along the project to provide a comprehensive view of these policies and practices. The description includes its aim, method, regulations and norms applicable, and when feasible examples. It also encloses an explanation of the main reasons that lay behind their use. Still, the limited information collected during the survey has compromised the full identification, description and verification of these practices, as in some cases only anecdotal evidence was recorded.

Many of the commented policies and practices are widely used by the different pMS with more or less frequency and nuances. When large divergences were found, detailed information is provided. Some policies and practices have been identified through different documents and their reference provided as a footnote. Others have been identified during the interviews, but sometimes additional supporting evidence could not be provided or found; a caveat is noted in such cases. Finally, some policies and practices identified are the result of direct knowledge and experience of the project team in the defence industry and market.

As it will be seen through the chapter, some of these policies and practices may conflict with a fair EDEM. Moreover, they may circumvent European internal market rules as defined in the EC Treaty by using the derogation of its Article 296 enabling pMS to take necessary measures to protect national essential security interests connected with the production of or trade in arms, munitions and war material. While this Article was invoked extensively in the past[6], the EU Commission has attempted to restrict its use over the last years to exceptional and true justified cases through the publication of an Interpretative Communication[7]. However, pMS still assume a wide margin of discretion to justify measures based on this Article. Moreover, some pMS interpret the provision as an automatic and categorical exclusion of armament from the regime of the EC Treaty contrary to this Interpretative Communication and the case law of the European Court of Justice.

[5] The main difference between a merger and an acquisition (takeover) is that a merger results in a new company name and a new branding. It is not uncommon to stock swap of shares instead of cash payment of the target.

[6] Cf. page 13 of bibliographical reference 6.

[7] Cf. bibliographical reference 14.

2.2. THE DEFENCE MARKET

Products and services in the defence market have a very different nature, but can be divided into two main groups. The first groups all the products and services that are non exclusive to the armed forces but necessary for their day to day life. It includes products such as food, clothing, fuel, and office equipment; and services such as catering, cleaning, training or legal advice. Many of these products and services have a large set of general suppliers, they are sold in reasonably competitive markets, they are usually off-the-shelf (no development costs), and are procured through tendering procedures where "*best value for money*" is the award criterion.

Conversely, the second group is composed of defence products that are not normally available in the market and have to be developed specifically to satisfy pure defence needs. These systems are crucial for the success of a military operation. They include, amongst others, advanced combat aircrafts, missiles, aircraft carriers, submarines, or satellite communication systems. They have a long development time and high cost due to their complexity and the advanced technologies used in their design, and are only applicable to defence needs. A level playing field is more difficult to achieve in this group than in the first one owing to the proper market imperfections where there is only a single buyer and very few (sometimes only one) supplier[8] with the technical and industrial capability to undertake and complete the supply programme.

The procedure to acquire these systems depends on the set of conditions associated with the purchase and the best available option. It may be worthwhile to develop and produce the system, or it may be more appropriate to acquire said system on the international market. A trade-off analysis is made that has to consider national capabilities and the cost of making or buying the system. If the equipment is not produced nationally, its cost is not too high, purchases will not be large, and similar equipment exists in the international (worldwide) market, the most appropriate solution would probably be to use an open international tendering process where the most economically advantageous proposal will be awarded with a contract.

However, if the product will generate considerable economic activity due to its high cost or large number of units to purchase, then involvement of national industry will be sought. If there are domestic industrial capabilities and the cost of development is affordable, a programme will be started to produce the new equipment tailor-made to customer demand, where the design, development and industrialisation of the equipment more often than not is fully financed. Should there be a shortfall in domestic capabilities or costs are thought to be unaffordable, some kind of collaborative procurement can be arranged with other countries where work is shared and savings can be achieved. If costs to participate are still unaffordable, an agreement can be reached to purchase the system outside, and recover part of the expenditure through some kind of agreed compensation to perform part of the production nationally or exchange the product bought with an alternative (defence) good domestically produced. In both cases a complex negotiation procedure is required to fix the agreement conditions. The political bargaining related to a balanced distribution of work in these collaborative procurements or the participation of the national industry in compensation agreements makes it very difficult to create a procurement environment characterised by open and fair competition.

2.3. GENERAL POLICIES

Most of the practices that will be commented on in this chapter are the consequence of six main policies that are still common across the pMS. They are:

[8] Europe is characterised by domestic monopolies, whilst the United States still has duopolies and oligopolies in major weapon systems.

a) The defence equipment demand is a powerful tool to support national industrial policies

b) The security of supply means that the production and maintenance of defence equipment shall be backed as substantially as possible by the national industry

c) When the supply of armed forces requires the purchase of foreign defence equipment, it should be better performed through compensation (offset) agreements

d) If the system is developed through an international programme or collaborative procurement the principle of *juste retour* (fair return) shall be respected

e) Defence expenditures shall bear to the maximum extent possible social welfare as creation of jobs, regional development, and other social objectives

f) Export of defence equipment shall be supported in order to keep or improve national industrial base capabilities and improve the export / import account of goods and services of the balance of payments.

Most of the practices related to ownership and Public aids, which will be described, shall be seen as a rational method to implement some of these general policies, which can be briefly summarised in a simple policy: "*buy national*". They are generally favourable to domestic industry and may easily conflict with the principle of fair competition and a level playing field within the EDEM. PMS, in order to better pursue these policies, will choose for each case a strategy that manages and shapes competition conditions (e.g. from a high degree of openness to direct award) to achieve the desired goals. Yet, the survey has identified differences among pMS. Higher reliance on competition and market self-regulation seems more pronounced in countries such as the United Kingdom and Sweden; while in other European countries practices tend to more directly intervene in the defence market through privileged relationships with national champions[9].

2.3.1. DEFENCE EQUIPMENT DEMAND AS AN INDUSTRIAL POLICY TOOL

The government buying power can be used to determine size, structure and performance of the national defence industrial base. Large Public aids and public procurement are powerful methods in developing national capabilities and competences in industrially advanced sectors. They can give incentives to companies to invest in knowledge, skills, specific manufacturing tools, new processes and innovation activities required for the development and production of new systems and equipments. They have special relevance in the area of defence, a technology-intensive sector, where new equipment always includes a relevant amount of enhancements in relation to previously supplied products, and where the non-recurring cost (i.e. non production costs) for developing a new system may be considerably high.

Public support in the defence field stems not only from achieving improved and more useful products for accomplishing defence missions, but from the spin-off that can be attained in advanced technologies such as microelectronics, new materials, sensors, communications, aerospace, robots and machine tools, computers, software, system engineering, leading edge design and lean manufacturing. The support is based on the assumption that these investments will boost industrial capabilities and leverage general economic growth. This can explain why development and production are often skewed in favour of dual-use technologies[10]. Yet, the power of this tool falls largely on available resources to invest in defence equipment, a quantity that has declined sharply since the end of the Cold war, when the defence industry ceased to be a source of mass employment and one of the main pillars of the economy.

[9] Cf. page 24 of bibliographical reference 25.

[10] I.e. civilian products that also have a defence use.

This policy is commonly implemented based upon large companies –sometimes publicly owned– that act as a development pole or anchor point to create industrial networks of Small and Medium Enterprises (SME) around them, and to develop and organise the complete supply chain of subcontractors and components providers for the different equipment produced.

This goal hardly fits with a purely competitive market where "*best value for money*" or "*the most economically advantageous tender*" proposal is the winner. Since award decisions made today will influence the desired industrial structure of tomorrow, nations willing to sustain or enlarge their industrial base will include specific conditions in their tendering processes to assure that a certain proportion of the defence budget will be awarded to their domestic industry.

2.3.2. SECURITY OF SUPPLY SHALL BE GUARANTEED AUTONOMOUSLY

"*Security of supply*" is a key requirement for all armies. Traditionally States have tried to be independent of foreign suppliers in the production of key defence material and, that not being feasible, to assure autonomous capacities in the production of critical consumables, the through-life maintenance, the mid-life equipment adaptation, or modification, including software and other related services such as training, test and evaluation. This is one of the reasons why national suppliers are usually preferred. This requirement may even force the creation of public companies if the private sector is unwilling or not considered reliable enough to provide the equipment or services demanded[11]. Security of supply is the most important aspect of derogation from the EC Treaty based on a justification for "*the protection of essential security interest*" in the sense of Article 296 EC Treaty.

Security of supply is a key condition in the acquisition process whose negotiation can be very complex. This requirement is translated in demonstrated capabilities of production, maintenance, personnel skills, or capacity to increase supplies in the case of emergency. Yet, also in evidence more closely related to strategic considerations such as the composition of shareholders, the location of technological assets, the value created on the national territory, intellectual property rights, created in-country know-how, export licenses, etc. All these conditions create high barriers to potential bidders, thereby decreasing their number, sometimes reducing them to a single one. While not automatically discriminating foreign companies, they may be detrimental to cross-border competition.

Security of supply could be one of the reasons of the low intra-Community trade of defence equipment (13% in 2005)[12]. While there are different alternative options to minimize supply disruptions in times of crisis through stockpiling, locating production facilities in friendly countries, the agreement of codes of conduct such as "*Framework Arrangement for Security of Supply Between Subscribing pMS (sMS) in Circumstance of Operational Urgency*" and other *ad hoc* agreements, the criterion of relying on domestic defence industrial capabilities is still strongly rooted in the defence culture of many European countries, since a loss of these capabilities is seen as an automatic reduction in national security.

Armed forces usually consider national champions[13] –whether public or private–, their preferred and trusted suppliers. If the champion has enough capabilities to develop and produce the equipment, the opportunity it has of becoming the main supplier will be higher. Otherwise, agreements are sought with an international provider to license production. The license, depending on domestic capabilities, may range

[11] Private provision tends to be cheaper but the quality can be less predictable. The private contractor's propensity to reduce costs may be excessive as it ignores the adverse impact on quality. If quality is considered important, as it often is in defence, the larger the adverse consequences of cost-cutting on product quality, the stronger the case of in-house provision by public ownership.

[12] Cf. page 26 of bibliographical reference 7.

[13] National champions refer to large leading defence companies in pMS.

from the manufacture of the entire equipment, or specific parts, to the final assembly and test. The pursued aim is to include within the supply chain national companies wherever feasible. In the last instance, should it not be possible to produce the equipment nationally, local facilities are sought to provide the system logistic support throughout its life. This is the reason why foreign companies have experienced local presence, through a subsidiary or a domestic partner, as a prerequisite for being competitive in the tendering process[14].

Security of supply also explains the use of Public aids to maintain strategic industries that are deemed key suppliers of goods and services to the armed forces in order to preserve the desired independence. If firm's business or structure is not economically viable in the long term to assure the adequate returns to renovate capacities and still be profitable, it may require periodic aids to keep up to date development and production capabilities and bear demand fluctuations and gaps[15]. If the company is not able to be reasonably efficient in producing an equipment at a good price / performance ratio, tailored (managed) competition rules, instead of open competition and the selection of the "*most economically advantageous tender*", will be implemented to assure the nurture of these key industrial capabilities.

2.3.3. FOREIGN PURCHASES SHOULD BE MADE THROUGH COMPENSATION AGREEMENTS

A common pMS policy when the development of equipment on a national basis cannot be afforded and it has to be purchased abroad, is to recover part of the investment through complex compensation (offset) agreements that may include a heavy participation in the value stream of the national industry, or switching the purchase (countertrade) with the sale of another kind of product whether military or civilian. This policy may simultaneously provide different benefits such as:

a) Save or compensation of imports needed for purchasing the equipment with the sale of other national goods and services

b) Transfer of technologies and know-how, through licensing agreements, for firms with low research and innovation chances

c) Development of industrial capabilities and growth in competitiveness

d) Maintenance or promotion of domestic employment of labour and capital

e) Reliable support in equipment operation and maintenance

f) A chance to access foreign markets and international supply chains that otherwise would be closed

g) A justification to public opinion of defence expenditures, as offset terms help to substantially extract available rents for the citizens.

Governments use this method to support their industrial policy and reinforce their national Defence Technical Industrial Base (DTIB). The process to reach an agreement tends to have a negotiated nature, where reasons of open and fair competition or efficiency may be overruled by the pursuance of more relevant economic or industrial goals. It may even occur that pMS feel more attracted to the proposed

[14] This is not only an EDEM problem, but a general problem in defence, as many companies have commented when exporting their defence products, even in countries like the USA.

[15] Here the problem is that the market fails to supply public goods for defence. If defence companies are not diversified for operating in other civilian areas, when defence demand falls, assistance will be needed. Conglomerate companies have better behaviour in such a case since their product diversity makes them more resilient.

offset than the performance or competiveness of the product to supply[16]. If there are large entry or start-up costs for fulfilling the agreed work share, such as new workshops or specific production tools, once again Public aids may be an unavoidable complementary measure.

2.3.4. International Programmes and Collaborative Procurements shall Respect the Principle of Juste Retour / Fair Return

International programmes and collaborative procurement are needed when one nation lacks sufficient economic, industrial or technical resources to develop and self-produce defence equipment. The international cooperation between pMS for the joint development and production has relevant advantages because risks and costs can be shared across them; and economies of scale, scope and learning[17] can be achieved by purchasing large quantities of a single design.

Here a similar phenomenon to compensation agreements appears where nations try to achieve industrial returns that are proportional to the amount of units they plan to acquire from the joint production. Therefore the distribution of work between producers is allocated on the basis of equity and political bargaining, creating constraints in the search of efficiency criteria and profitability. Each partner will demand a "*fair*" share of both development and production work including an involvement in all aspects of high technology irrespective of differences in industrial performance.

The selection process of participating companies is conditioned by technological capabilities that can filter the participants to a few, even a single one. Yet, it seems that governments usually have the final word in deciding which industries will take part in the programme based on industrial policy goals such as the support of strategic industries and national champions. If participating industries capabilities are less than appropriate, then some sort of Public aids may be needed to gather adequate resources and skills.

2.3.5. Defence Expenditures as a Support to Social Welfare

Other objectives of defence expenditure, apart from enhancing security, is to raise social welfare in the form of job creation, increase in labour skills, and regional industry and economy improvement. If planned investments are large, the desire to use these expenditures to achieve the aforementioned objectives may be high[18]. These large investments are usually approved by the Council of Ministers, where other Ministers may recommend the inclusion of further conditions to MoD price and performance granting conditions to consider these societal goals. Furthermore, procurement agencies are required to explain their choices to national Parliaments, who bring pressure to favour national industry.

The awarding of the defence contract to a domestic company, that may even be created *ad hoc*, is only understandable within the scope of achieving these societal goals. State aids may be used to facilitate this process in terms of capital and infrastructure supported by Article 87 (3) (c) EC Treaty.

Having in mind that government is the final decision maker in the award procedure and it will face re-election, the impact of defence expenditure in some constituencies may also be a relevant parameter in the decision process such as trade unions in industries in difficulties, or population in economically depressed regions. Once again, principles of open and fair competition in the EDEM may be unsuitable to attain other more pressing political or industrial strategies.

[16] Cf. page 9 of reference 21.

[17] For a definition of economies of scale, scope or learning cf. annex E.

[18] Cf. for example page 12 of bibliographical reference 40.

2.3.6. EXPORT OF DEFENCE EQUIPMENT AS A WAY TO REINFORCE THE TECHNICAL AND INDUSTRIAL BASE

The production of sophisticated defence equipment requires large investment whose return, in order to attain profitability, requires the manufacture and sale of a minimum quantity of units. If the production is smaller, subsidies may be needed or a higher price per unit should be charged to obtain profits. An alternative option to abate this burden is to enlarge the quantity of units through the export promotion of the product in international markets. Indirect offsets in the form of swap operations[19] can be seen as one of the ways to support this option.

This alternative option is used as far as possible by pMS who try to stimulate the export through different types of aid that will be analysed later on in detail. Export of defence equipment helps to: (a) maintain (autonomous) industrial base capabilities –often in high technology sectors–, too expensive to be sustained with only local sales, (b) lower the net social cost of acquiring defence equipment, and (c) contribute to a positive account of goods and services in the balance of payments.

2.4. PUBLIC OWNERSHIP

2.4.1. GENERAL

Whilst during the eighties the United Kingdom became the pioneer in the privatisation of the defence industry in the EU, it was only during the decade of the nineties when many European defence companies were privatised, following a similar trend of other deregulated markets such as telecommunications, rail transport, or postal services. Still, public ownership is a common practice in the EU as can be seen in Annex C of this document, where a list of the main companies with some type of public ownership in each pMS is noted. It has, however, completely disappeared in the following pMS: Austria, Sweden, and the Netherlands. No public ownership exists either in Cyprus, Ireland, Latvia, Lithuania, Luxemburg and Malta, but these countries do not have a defence industry as such.

During the same period Eastern European countries found themselves with a large number of defence companies inadequately prepared to face the new economic climate after the collapse of the Warsaw Pact, where a budget with a sufficient size to suitably nurture their defence industrial base was not available, and the international defence equipment market was stagnant. The industry of these countries suffered a process of restructuring and downsizing, not yet complete, where some companies closed, others abandoned the sector, and others were privatised and sold (e.g. Aero Vodochovy in the Czech Republic). The poor performance of some companies has prevented the progress in the privatization process and some of them still remain in State hands owing more to lack of buyers than any strategic reason. Yet, a clear strategy on privatisation in these countries is missing[20].

Public ownership is legally supported by different instruments such as the holding of common or special shares directly by the Treasury, or through a State Agency, Fund or Corporation. A special case is the already known Golden Share, used mainly in the United Kingdom, which reserves specific rights to the government, such as limiting the selling of shares to foreign investors, the composition of the management board, or changes in the company statute. Having no voting rights, this kind of share has minimal influence on the company's day-to-day operations. Golden shares are not exclusive to defence companies and are also used in civilian national champions.

[19] These operations are based on the exchange of a defence equipment that each nation produces in order to cancel (part of) the offset obligations.

[20] Cf. bibliographical reference 4.

The Special Share is held on behalf of the Secretary of State for Trade and Industry (the 'Special Shareholder') (now the Secretary of State for Business, Enterprise and Regulatory Reform). Certain provisions of the Company's Articles of Association cannot be amended without the consent of the Special Shareholder. These provisions include the requirement that no foreign person, or foreign persons acting in concert, can have more than a 15% voting interest in the Company, the requirement that the majority of the directors are British, the requirement that decisions of the directors at their meetings, in their committees or via resolution must be approved by a majority of British directors and the requirement that the chief executive and any executive chairman are British.

The holder of the Special Share is entitled to attend a general meeting, but the Special Share carries no right to vote or any other rights at any such meeting, other than to speak in relation to any business in respect of the Special Share. Subject to the relevant statutory provisions and the Company's Articles of Association, on a return of capital on a winding-up, the Special Share shall be entitled to repayment of the £1 capital paid up on the Special Share in priority to any repayment of capital to any other members.

The holder of the Special Share has the right to require the Company to redeem the Special Share at par or convert the Special Share into one ordinary share at any time.

Table 2-1 Rights and Obligations of the Special Share (BAE). Source: Company Web Page

Public ownership can be total or partial, with no specific patterns identified by pMS. If the main percentage of shares is publicly owned, the State enjoys full control over strategic decisions; otherwise it may not allow decisive influence on the company strategy[21]. Mixed ownership is more frequent in companies that show a good rate of return of capital in the long term, while full ownership is more common in less profitable industries. Public ownership may be combined with the free floating of shares in the stock market (Finmeccánica, Thales, and EADS). When ownership is mixed, public ownership focuses on achieving social goals –national security, industrial growth, etc– fostering for example enhanced development and production capabilities through infrastructure expansion and modernisation, while private ownership concentrates on achieving profits through enhanced efficiency and sound marketing decisions.

Public ownership allows the presence of representatives on the management board in order to directly influence and control the company's strategy. Independent advisors, civil servants coming from different Ministries or State agencies, or (retired) high ranking officers with (still) strong ties to MoDs, are usually appointed to these positions.

Public ownership is more frequent in companies considered key to safeguard essential security interests. They are usually large industries able to provide complete systems, prime contractors as well as suppliers of key subsystems (first tier) or services considered essential for security (e.g. nuclear research or production facilities, technical assistance companies, etc). It practically disappears in second, third and lower tiers of the supply chain. Public ownership is often exercised over the principal company of a holding. In such cases the State has the chance to extend its strategic influence to all the participated companies. It is unusual to find privately and publicly owned companies competing in the same relevant market in the same country [22].

Defence Research Agencies in many European countries are still government agencies with some exceptions such as the former UK DERA, which has been partially converted into the company QinetiQ. These agencies receive a basic budget from the State, but are allowed to participate in economic activities that may include bidding for some public procurement contracts or Public aids. Examples of these

[21] Vetoing rights are important for blocking some strategic decisions. These rights do not require to be the main shareholder, but simply to have a sufficient number of shares. They are defined in company statutory chart and may vary depending on each company.

[22] For a definition of relevant market cf. annex E.

organisations are TNO in Holland, VTT in Finland, FOI in Sweden, DSTL in the United Kingdom, CEA or ONERA in France, INTA in Spain, the Institute of Military Technology in Hungary, or the Air Force Institute of Technology in Poland. These organisations are non profit oriented and focus more on basic and applied research to solve in-house the problem of undersupply of the most risky and costly R&D[23].

Public ownership can be justified by the lack of private initiative in the supply of key defence products and the desire by pMS to better assure it, thus helping to preserve national sovereignty. Another argument used is the better preservation of the secrecy (security of information) associated with the design or performance of certain defence products.

The survey has found that pMS do not show plans of increasing public ownership in the future. Germany is the exception, and the MoD has plans to create mixed Public/Private companies for supporting activities outsourced from defence. The privatisation trend is still strong in Central and Eastern European countries such as Poland, Czech Republic, Slovenia. The main problem these pMS face is the difficulty to find a buyer, due to the obsolescence and low profitability of their industry.

2.4.2. *Influence of Public Ownership*

The guarantee that public ownership offers to reliably serve national strategies on security and other industrial policies gives publicly owned companies a relevant role in all the defence acquisition processes of products and services, being in many cases the preferred, yet often the only supplier. As a consequence, public ownership may have influence on fair competition and defence restructuring at EU level. These effects are analysed in detail in § 3.2 of the next chapter.

2.5. Foreign Investments, Mergers and Acquisitions

2.5.1. *Practices Related to the Control of Foreign Investments*

There is no EU law for controlling foreign investment in defence companies. This role is therefore in the hands of pMS, which have enacted laws to authorise investment in the defence field. Identified laws during the survey can be seen on the following table:

COUNTRY	TITLE	ARTICLES	ORGANISATION
BELGIUM	Act on the protection of economic competition coordinated on 15 September 2006	Article 8, §6 provides for the authorisation by the government for general interest reasons of concentrations that have been declared inadmissible by the Competition Council. This provision, that also figured in the previous legislation applicable since 1993 has never been used.	Government.
BULGARIA		No specific control law for defence industry related to investments, mergers and acquisitions.	
CZECH REP.	Law No. 77/1997, on the State owned company	Regulation of the role and of the legal status of the State owned company (source: MoD)[24].	

[23] Still in some Eastern European countries, armed forces establishments are in charge of manufacturing activities as is the case of *Wojskowe Zaklady Mechaniczne* in Poland, prime contractor of the licensed production of 690 AMV vehicles of the Finnish Patria company. Even in France the "*Direction des Constructions Navales*" was not transformed into a Public company until 2003.

[24] Bibliographical reference 4 page 12 reports that the Czech laws limit foreign investment to national defence companies to 50%, while in Poland this amount limit it to 15-20%. No further reference to these laws has been found.

COUNTRY	TITLE	ARTICLES	ORGANISATION
ESTONIA		No specific control law for defence industry related to investments, mergers and acquisitions (source: Competition Authorities).	
FINLAND	Act on the Monitoring of Foreigner's Corporate Actions in Finland (1612/1992)	A foreign owner obtaining one-third voting power involved by all shares or other dominant control in a defence company must obtain MoDs confirmation for the acquisition in question. If important national interests (as defined in the act) are jeopardized the State Council may refuse to confirm the acquisition.	MoD
FRANCE	Code Monétaire et Financier Loi n° 86-912 du 6 août 1986 relative aux modalités d'application des privatisations.	Article L 151–2 specifies that any "foreign exchange transactions, capital movements and settlements" and "[t]he establishment and disposal of foreign investments in France" are subject to "declaration, prior authorization or inspection" by the Minister for Economics, Finance and Industry to "defend the national interest". Article 10 of the law limits the control of capital by foreign investors for protecting national interests.	Minister for Economics, Finance and Industry
GERMANY	Foreign Trade Act and Foreign Trade Regulation.	Art. [§] 7 states: "Legal transactions and acts in foreign trade and payments may be restricted … in order to guarantee the vital security interests of the Federal Republic of Germany". An acquisition higher than 25% of a defence company by a foreign buyer / investor must be notified and may be disapproved to guarantee the vital security interest of the Federal Republic of Germany (§ 52 Beschränkung nach § 7 Abs. 1 und 2 Nr. 5).	Federal Ministry of Economics and Technology
HUNGARY		No specific control law for defence industry related to investments, mergers and acquisitions.	
ITALY		No specific Act regulating foreign investments and no declaration requirement. Indirect constraints however may be used for preventing unacceptable foreign investment such as administrative authorizations for the production of arms. Investments in Finmeccanica and Fincantieri are regulated by firm's statute.	
IRELAND		No specific control law for defence industry related to investments, mergers and acquisitions.	
LUXEMBURG		No specific control law related to investments, mergers and acquisitions.	
LITHUANIA	Law / 7 July 1999 No. VIII-1312	Law on Investment. Article 8.2 Foreign investments shall be prohibited in the activities guaranteeing State security and defence (except for investments by the economic entities meeting the criteria of European and Transatlantic integration which Lithuania has opted for, provided this is approved of by the State Defence Council.)	
PORTUGAL	Law No. 88-A/97, of 25th of July	This law regulates the access of private economic initiative (national or foreign) to certain economic activities. The law establishes that the access regime to the armament industry and the carrying out of the respective activity shall be defined through Decree-law, so as to safeguard the interests of the national defence and economy, the safety and tranquillity of the citizens and the State's international compromises. Those Decree-Laws are No. 396/98, 17 December, and No. 397/98, 17 December.	
SPAIN	R.D. 664/1999 of 23th of April about foreign investments.	Art. 11 suspends the general regime of foreign investments in Spain in activities related to national defence. Non-resident investment requires authorization if they are higher than the 5% of the capital, or being lower for being a member of the management board.	Council of Ministries based on report of the Ministry of Defence and the Council of Foreign Investment.
SLOVENIA		No specific control law for defence industry related to investments, mergers and acquisitions (source: MoD).	

COUNTRY	TITLE	ARTICLES	ORGANISATION
SWEDEN	The military equipment Act 1992	Section 13 (conditions, etc) of the military equipment Act states: "A permit granted under Section 3 or 4 to a Swedish joint stock company may include a requirement that only a certain proportion of shares may be held, directly or indirectly by foreign legal entities. A permit may also include requirements under which the managing director of the company, members of the board and their deputies must be Swedish citizens and resident in Sweden."[25]	
UNITED KINGDOM	Enterprise Act 2002	The Enterprise Act allows for government intervention where the public interest is affected. The Secretary of State (SoS) for Business Enterprise and Regulatory Reform (BERR) has the power to issue an intervention notice under section 42 ff of the Act if he or she believes that it is, or may be, that one or more public intervention considerations, predominantly the national security interest, is relevant to the consideration of the merger. Section 67 of the Act provides a mechanism for the Secretary of State to protect legitimate interests where the EC has sole jurisdiction of competition issues. That section enables the Secretary of State to serve a "European intervention notice" if he suspects that a relevant merger situation (as defined in section 23 of the Act) has been, or will be, created; the merger is a concentration with a Community dimension and he is considering whether to take appropriate measures to protect legitimate interests under ECMR Article 21(4). For a merger situation raising defined public interest issues, but which falls below the turnover and share of supply tests, the SoS may issue a special intervention notice allowing the relevant national authorities to consider security issues. Measures to protect the national security interest are usually given in the form of undertakings by the firm making the acquisition. Undertakings given under the Act are published on BERR's website http://www.berr.gov.uk/whatwedo/businesslaw/competition/mergers/public-interest/national-security/index.html. Wherever public interest interventions are made on national security grounds, only those issues are considered nationally, and the appropriate national or international regulator will consider competition aspects of the transaction concerned. The Ministry of Defence may also make private contractual arrangements to protect national security interests with overseas companies acquiring UK SMEs providing sensitive strategic defence capability (Source: Mod).	Office of Fair Trade

Table 2-2 Acts Regulating Foreign Investments in Defence

As can be seen, foreign investment in defence companies is normally subject to control by governments in order to protect industrial capabilities considered essential for security. This is understandable in cases such as private equity bidders whose acquisition is only intended for financial purposes, gaining profit by reselling or breaking up the company; as well as investments coming from a third country not considered a reliable ally.

Usually foreign investments shall be authorised and may include restrictions on the maximum number of shares held by a foreign investor and on the management board membership. It appears from the table that this kind of legislation is less developed in Eastern European pMS, or countries with a small defence industry. In addition, company statute may also involve restrictions on foreign investments in order to reinforce this control.

[25] This law was applied in the case of Hägglunds by Alvis and Bofors by BAe Systems.

No cases have been identified during the survey, where foreign investments in defence companies have been officially prohibited, probably because companies informally consult in advance and exercise self-restraint if they envisage that the operation would not be welcomed by the government and finally will not be approved on the basis of laws mentioned before[26]. The number of such failed applications is unknown. Yet, some evidence of this practice has been found, such as the attempt to buy the stake of Alcatel-Lucent in Thales by EADS that was finally sold to Dassault at a reduced price[27]. Another example is the acquisition in the stock market of the 5% of EADS in 2006 by the publicly owned Russian bank Vneshtorgbank (VTB) that aimed at reaching 10% in an attempt to get a seat in the management board. Having in mind EADS activities in the defence field (around 25%) the operation was seen with concern by main shareholders. The operation had no chance of success because the group's charter explicitly forbids any seat being taken on its board without the permission of its main stakeholders DaimlerChrysler, Lagardere, SEPI and SOGEADE. Finally the operation was amicably deterred during a meeting in Paris of the French, German and Russian governments. Conversely, the lack of intervention by the United Kingdom government to stop the BAE/GEC merge should be noted, notwithstanding its reservations to the deal.

If the investment share is high enough to permit direct control of the company, then national[28] or EU rules on concentrations apply and the operation shall be submitted to the relevant competition authorities.

2.5.1.1. FRENCH PRACTICES

As the aforementioned cases show and comments made in interviews with different stakeholders suggest that France is particularly cautious when investors' groups want to invest in industries which are considered strategic. The signature of a "*Convention sur la protection des interest stratégiques nationaux*" between the State and the industry sets conditions of State approval on changes of ownership and the sale of strategic assets.

2.5.1.2. GERMAN PRACTICES

The majority of the German defence industry is in private hands. Large companies like Rheinmetall, ThyssenKrupp AG operate in the stock market. German companies participate in some European joint ventures such as MBDA (through EADS). Whereas Germany also has laws to control foreign investment in its industry, the survey has not provided enough information to determine its degree of openness to foreign investors.

2.5.1.3. ITALIAN PRACTICES

The general policy in Italy is to accept foreign investment in defence as long as they maintain technological and industrial capabilities and submit strategic decisions to Italian authorities. In the case of Finmeccanica, company statute allows a maximum of 3% to be held by an individual or organisation. This group has foreign partners in some of the companies, but they are mainly associated with joint ventures (MBDA, NH-90 industries, Orizzonte frigate). Principal partners come from the USA, United Kingdom and France. Fincantieri is largely owned by the State. There are plans to increase corporate capital and offer it to private investors.

[26] A failed bid may negatively influence the offering company's reputation and therefore its market value.

[27] Cf. Financial Times November 18, 2008.

[28] Cf. a complete list of laws on table 3-3 of Phase I Final Report.

2.5.1.4. SPANISH PRACTICES

Spain has been generally open to foreign investment in its defence industry. In the last decade of the 20th century, Spain proceeded to privatise its defence industry allowing direct investments, mergers and acquisitions. CASA was integrated within EADS keeping a small percentage in State ownership. Santa Barbara Sistemas was completely sold to General Dynamics after a public tendering process. ITP has Rolls-Royce as a key shareholder (46,8%). Indra's shares float in the stock market and can be freely bought by any investor. Defence shipyards remain in public ownership up till now and no attempt related to foreign investments is known.

2.5.1.5. SWEDISH PRACTICES

Swedish policy shows a very open criterion for authorizing foreign investment in its defence industry as can be seen from current ownership. Moreover, foreign investment is encouraged by the government as a way to vitalise their companies and to increase their markets. For example, BAE systems owns 35% of SAAB AB, 50% of Gripen International and 100% of Land Systems Hagglunds AB. Howaldstswerke Deutsche Werft AG owns 100% of Kockums AB shipyards. United Defence owns 100% of Bofors Defence AB and Nammo A.S. (Norway) owns 100% of Nammo Sweden AB. As stated by the MoD, Sweden generally believes in a free market, including the free movement of capital. So far, the conditions laid down in the Military Equipment Act have provided acceptable guarantees regarding foreign ownership (see Sweden row in Table 1).

2.5.1.6. UNITED KINGDOM PRACTICES

As stated in the UK's Defence White Paper on Defence Industrial Strategy, published in December 2005, the UK welcomes overseas investment, especially from companies that create value, employment, technology or intellectual assets in the defence field, within the limits of the Enterprise Trading Act and specific conditions imposed by the golden share the State holds in some companies (the most important related to a 15% limit on individual foreign shareholding to prevent outright control by a single foreign individual or organisation). Moreover, organisations like UKTI DSO provide assistance to foreign companies wishing to invest in the British defence industries when they are searching for business opportunities in defence. Examples include the acquisition of RACAL by Thales; Alvis plc by General Dynamics Corporation; AgustaWestland N.V. by Finmeccanica S.p.A.; Insys Group Limited by Lockheed Martin UK Holdings Limited; or Smiths Aerospace by General Electric Company. Commitments requested from foreign investors for these acquisitions are generally lighter than conditions stated in golden shares.

2.5.2. PRACTICES RELATED TO MERGERS & ACQUISITIONS

Foreign direct investment usually takes the form of mergers and acquisitions[29]. In such a case, national competition authorities play the main role in authorising the operation, unless the concentration has a European dimension. In these cases, Articles 81 to 85 EC Treaty and EU and national derived legislation shall be observed[30]. Yet, their role only focuses on evaluating as to whether the concentration may create or strengthen a dominant position that may significantly impede effective competition in relevant markets.

[29] Cf. page 10 of bibliographical reference 32.

[30] Namely Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the EC Merger Regulation), and Directive 2004/24/EC on takeover bids.

Mergers and acquisitions may be authorised or prohibited by pMS based upon Article 296 EC Treaty, Article 21 (4) of the EC Merger Regulation, as well as nationally derived legislation for safeguarding their essential security interest. Government intervention may prevent the EU Commission from scrutinising the impact of a merger on competition, or ignore potential objections that may arise from national competition authorities. However, when the operation includes both civilian and defence activities, the Commission still has the right to scrutinise any potential concern that may arise in the relevant civilian markets. Yet, in practice, the use of this Article for supporting these operations has been minimal, as can be seen in the list of recorded concentrations since 1990 on annex B of Phase I Final Report[31]. The explicit use of the Article to prohibit this kind of operation could not be identified during the survey, possibly because the threat of its use is enough to deter any serious concentration attempt. On the number of failed attempts, it can only be said that they are unknown.

Unlike civil markets, cross border mergers and international takeovers in the European defence industry are a relative new phenomenon, emerging as a discernible trend in the late 1980s and accelerating from 1990 onwards following a similar trend initiated in the USA in 1993. If the list in the mentioned annex is seen, it can be inferred that these practices are quite common and generally there is a favourable attitude towards them. The list shows that pure horizontal mergers (GKN Westland and Agusta) are less frequent, predominating vertical (MBDA and Bayern Chemie) and conglomerate (Sagem and Snecma) mergers with some overlapping of products and services[32]. Most concentrations aim to merge complementary manufacturing capabilities in the product supply chain, lower costs, or access wider markets in terms of products portfolio or geographical area.

As national champions have consolidated, concentrations have become more transnational being particularly high in the aerospace (EADS), and ICT & electronic sectors (Thales, Finmeccanica). In these areas there has been an intense process of mergers and acquisitions reflecting the high dynamism of these economic sectors. In fact, private equity groups are discovering that some areas of the defence sector, in particular those related to high technology, are an attractive investment[33].

However, concentrations in other sectors, such as naval and land armament, has been more timid and less progress has been made, being maintaining within national borderlines, as the need to achieve economies of scale has more than likely been less pressing than in the aerospace and ICT sectors. Yet, overcapacities are slowly moving these sectors towards internationalization. Concentrations have also crossed the Atlantic in both directions and USA and Europe have invested respectively in the defence field as a way to increase firms' total turnover[34]. In some Central and Eastern European pMS a process of mergers of State owned companies has occurred giving way to larger companies such as Bumar Group in Poland, Sternberg in the Czech Republic, or DMD in Slovakia. No cross-border mergers have occurred in this region. Less is known in relation to trans-border concentrations of companies in the supply chain of second and third tier level, but based on the survey, it can be said that some activity at this level exists. However, the responses of the survey provide only anecdotal, and therefore inconclusive evidence.

Joint Ventures have been a popular form of industrial concentration in the EDTIB[35]. They are usually created for managing international programmes or for addressing specific market niches. They may be

[31] The best known case of invocation of Article 296 (1) (b) to avoid EU Commission scrutiny was the creation of MBDA joint venture.

[32] For a definition of the different types of mergers cf. annex E.

[33] Cf. page 35 of bibliographical reference 3.

[34] Acquisition of or mergers with US-based companies by foreign companies are reviewed by the US Committee on Foreign investment in the United States (SIPRI yearbook 2007, page 364). The most successful case is BAE Systems that currently employs 35,000 people in the USA. Cf. bibliographical reference 42.

[35] For a definition of Joint Ventures cf. annex E.

seen as an intermediate method of averting the loss of a national champion in the production of key defence equipment and benefitting from some integration to reduce the cost of programmes that are nationally unaffordable. The best known example is MBDA, the second world producer of guided missile systems.

Mergers and acquisitions have been favoured as a solution for companies in difficulties owing to protracted losses and technological backwardness. The entrance of new shareholders able to invest and bring new technological capabilities has been considered a good solution for some low-tech industries suffering difficulties to keep business or survive. In the case that a company was publicly owned, the operation has allowed the State to privatise and abandon a firm no longer deemed strategically important. In these cases, the sale agreement has included specific clauses to assure the level of employment, the maintenance of headquarters, and investments on local brand facilities of the acquired company.

As examples, companies such as *Bofors* to *United Technologies* (now *BAE systems*) or *Mowag* and *Santa Barbara Sistemas* to General Dynamics can be mentioned. This phenomenon has also occurred in Eastern European countries such as Poland or the Czech Republic as can be the case of the purchase of PZL Warsawa-Okecei by EADS (related to the sale of 8 C-295 aircrafts), the opening of Thales subsidiary Thales Hungaria Optikai Rendszerek, or the joint venture Nike-Fiocchi between the Hungarian Nitrokemia and the Italian Fiocchi Munizioni companies. However, generally, direct foreign investment from Western Europe in the defence industry of Central and Eastern Europe remains limited[36].

In specific cases, concentrations have been proactively supported by governments such as the framing of EADS encouraged by the French, German and Spanish governments. Sometimes the political support has been accompanied with economical support through the signature of supply contracts and Public aids, in particular when restructuring and rationalization were at stake. As an example the acquisition of Hellenic shipyards by HDW included the purchase of two submarines type 214 with an option for a third unit, mixed with other restructuring subsidies for early retirement, training, etc.

Hostile bids in the defence sector have not been identified during the survey. The most plausible reason is that the chance of success of these operations is very low, as pMS can use some of the powers mentioned before to prevent them. For example, if plans regarding the future of the company are unclear and fears exist that key defence industrial capabilities could be dismantled or lost, at a later stage.

Finally, investment or acquisition of foreign defence companies by national companies is usually welcomed by pMS due to its positive effects, and opposition to them may come up only when it may impair national security (no case identified during the survey). These acquisitions normally enlarge company markets and increase foreign sales, including technology sale, production licenses or technical assistance.

2.6. PUBLIC / STATE AIDS

Public or State aids are essential in defence since they are able to solve market failures that impede the achievement of objectives of common interests such as security; but at the same time they are a main concern on a level playing field because they provide advantages that may distort fair competition. This is the reason why EU pMS have agreed Articles 87 to 89 on this question in the EC Treaty that is derived in a common EU legislation that is also transposed into national laws on State aids.

The most relevant provision is Article 87 EC Treaty. The first paragraph establishes the general rule that State aid is prohibited if (a) it is granted selectively to "*certain undertakings or the production of certain*

[36] Cf. bibliographical reference 4.

goods", (b) it distorts competition or threatens to do so and (c) it affects trade between Member States. However, some aids of a social character and aid to make good damage caused by natural disasters are automatically exempt from this prohibition (Article 87 (2) EC). In addition, under Article 87(3) EC, the Commission has the power to grant derogations in respect of aid for the following purposes:

a) To promote the economic development of areas where the standard of living is abnormally low or where there is serious underemployment.

b) To promote the execution of an important project of common European interest or to remedy a serious disturbance in the economy of a Member State.

c) To facilitate the development of certain economic activities or of certain economic areas, "*where such aid does not adversely affect trading conditions to an extent contrary to the common interest*".

d) To promote culture and heritage conservation, where such aid does not affect trading conditions and competition in the Community to an extent that is contrary to the common interest.

Therefore State aids to the defence industry shall adhere to these rules, unless Article 296 EC Treaty is used to grant aids based on the protection of essential security interest[37]. Aids for defence are based mainly on point (c), and less common in point (a) since defence industry in these areas is less frequent. The first part of point (b) "*to promote the execution of an important project of common European interest*" that may fit in a relevant European defence collaborative programme has never been used.

Point (c) is the common way to provide State aids to the defence industry. They should help to raise social or regional cohesion or the efficiency of the economy –and therefore wealth and sustainable growth–, without affecting trading conditions to an extent contrary to the common interest. EU legislation has established rules for the more important kind of aids that are compatible with the internal market. The types of aid ruled are:

a) Research, development and innovation,
b) Employment,
c) Training,
d) Small and Medium-sized Enterprise (SME),
e) Risk capital,
f) Regional aids,
g) Rescue and restructuring,
h) Export,
i) Environment protection.

The following financial instruments are used to award these aids[38]:

a) Tax exemption, relief, deferral or cancellation,
b) Grants,
c) Advances repayable in the event of success,
d) Low interest rate or soft loans,
e) Guarantees,
f) Capital injection,
g) Non-monetary aids,

[37] Cf. Commission decision 763 of 17 March 1999 on the measures, implemented and proposed, by the Federal State of Bremen, Germany, in favour of Lürssen Maritime Beteiligungen GmbH & Co. KG.

[38] A detailed explanation of the different financial instruments can be found in Phase I Final Report.

h) Provision of goods and services in preferential terms,
i) Accelerated depreciation allowances.

Sources of aid and funds may come from different places –whether European, national, regional or local governments–, different Ministries (Labour, Industry, Science and Technology, Environment) or Public banks, foundations or agencies. This explains that MoDs are not always aware of all the State aids that the defence industry receives. For large aids more than one Ministry may be involved in the award procedure.

Article 296 (1) (b) EC Treaty enables pMS to award aids without observing EU internal market and competition rules in order to safeguard essential security interests. The derogation limits the EU Commission scrutiny capabilities which exist outside its field of application. However, if aid is devoted to dual use activities, it is still possible for the Commission to challenge the award and, this being the case, recover the corresponding part of the aid considered unlawful, following the last lines of the Article that states: "*shall not adversely affect the conditions of competition in the common market regarding products which are not intended for specifically military purposes*". In such a case, undertakings have to show evidence that the aid has no effect on trade conditions in other markets.

2.6.1. AIDS FOR R&D AND INNOVATION

Research and Development (R&D) is a fundamental activity in the defence field, where innovation is essential to maintain superiority on the operations field. Aids for R&D and innovation are required having in mind that defence is a Public good and the market may fail to provide enough incentives to break industry and private investors reluctance (beyond that needed to draft a credible proposal for the MoD customer) to develop the required defence equipment. This reticence is due to the risk that the research and development does not end with success, or the new equipment does not fulfil customer expectations. If the equipment is not saleable in other markets the production phase will never start, and returns will not be generated to recover sunken costs[39]. Public aids may solve this market failure (underproduction of defence goods), in particular when resources required for performing this activity are large, making the activity appear profitable to the beneficiary.

Defence R&D aids focus on the development of military equipment. Aids for new or improved processes, as opposed to the civilian sector, are very rare in defence, if they exist at all. The development is based on advanced technologies, whose research has been carried out before, but whose results are synergistically integrated and exploited in a new deployable system. Therefore large development and rehearsal timescales are needed until the equipment is accredited as ready for production. This complex process makes defence R&D a relative expensive activity.

R&D support for defence can be awarded using general R&D&I rules established by the Community Framework for State aid for Research, Development and Innovation (2006 / C 323 / 01). These aids are usually based on open selection tendering procedures characterised by transparent, objective and non-discriminatory criteria, where the most advantageous R&D proposal will be awarded with a contract (§ 7.3.4 and 7.4.1). These aids are seldom awarded for pure defence products due to the high uncertainty of the final product acceptance by the MoD, but they may include the research and development of products with dual use. This case may be common in the area of aerospace and information systems and companies operating in the defence and civilian markets. The aid intensity rarely covers the overall cost of

[39] For a definition of sunken costs cf. annex E.

the project. This kind of aid is normally awarded by Ministries of Industry, Science or Technology and related State agencies[40].

When MoDs need an enhanced military capability, the normal way to proceed, as inferred from the survey, is to specify the equipment required and initiate a specific R&D project assuming the associated financial risk, but preserving ownership of results[41]. This activity is generally outsourced to the industry and is fully financed by the MoD[42], sometimes with the support of other Ministries such as Industry. Public procurement law is the legal instrument used to award the contract of the Engineering and Manufacturing Development phase for achieving a prototype of the future equipment.

The financing of this R&D service is not legally considered State aid for the EU Commission and as a consequence is not subject to EU rules on this matter. This way of proceeding is a specific feature of defence that does not occur in the civilian industry, where the research and development of a new product is financed by the industry, sometimes with R&D&I State aids. However, the kind of R&D performed in both cases does not show any appreciable difference. Defence R&D financing is able to solve a market failure, but also provides the grantee with relevant advantages over competitors for winning the production phase. Therefore, this financing will be considered as a type of Public assistance or aid, yet some stakeholders may considered this classification controversial. The largest amount of R&D aid in defence is awarded through this procedure.

A distribution of R&D aids based upon company size has been attempted without success. Yet, it seems that aids follow a similar pattern to company size (the larger the aid, the bigger the company). SMEs are benefitted directly through small but specific niche R&D projects, and indirectly being subcontracted within a large project.

2.6.1.1. AIDS FOR DEVELOPING EQUIPMENT FOR NON-NATIONAL ARMED FORCES

The standard way to export a product is first to develop the equipment for one's own national forces. Once the product has shown its suitability and has been purchased by the domestic MoD, the process of international sales begins, where potential customers may request some specific tailoring. This requires often significant redesign and retooling of some parts of the national system that will need some additional development. Yet, the costs and risks are comparatively smaller than the initial development ones. Aids can be a mean to finance these adaptations. These aids can be awarded under the provision of the Community Framework for State aid for R&D&I, considering they contribute to objectives of common interest such as raising industry efficiency and higher national wealth owing to larger exports. Anyhow the aid scheme used for this case would require the scrutiny of the EU Commission to determine its compatibility with Article 87 (3) (c) EC Treaty. No case has been identified during the survey.

The most common method in providing this kind of aid is within the development of equipment for national forces financed by the MoD that include some extra funds to finance the development of a version for international sale in addition to the domestic one. Having in mind that in the early stage of a new programme the potential export sale of the equipment is analysed, it would not be rare that additional aid

[40] Only a single State aid scheme for R&D in defence approved by EU Commission, without invocation of the derogation of Article 296 EC Treaty, has been identified during the survey: the case of the Czech Republic (N 543/07). This case may be deemed as exceptional.

[41] It has been calculated that the United Kingdom MoD investment in R&T is ten times bigger than that of the private sector (cf. § 50 of reference 37), this number probably being higher in other pMS.

[42] Full funding is needed for assuring the government's freedom to exploit the technology on other projects, which would be vehemently opposed when a company has contributed with its own funds to the technology acquisition. Yet property rights could be more theoretical than real since the capability to exploit the research results without the support of industry may be unaffordable.

is considered to support this goal. Evidence of this kind of practice has been found during the survey in France. No explicit evidence has been found in other countries, but the fact that some of them, having proprietary rights over the development, demand the reimbursement of part of the aid in the form of a fee or levy when the product is sold in foreign countries, may indicate that aids are provided as a form of repayable advances to back the product export in the long term[43]. A similar case may occur, unnoticed for the body awarding the aid if the destination is hard to trace back and the monitoring is lax enough to allow a cross subsidisation. This last condition, while not impossible, may not be easily accomplished.

The protection of security interests (Article 296 EC Treaty) could justify this kind of aid where the sale of the equipment serves strategic objectives. Yet, this may be a controversial argument not easy to sustain. Once again, no evidence has been found of this practice.

2.6.1.2. OTHER AIDS FOR SUPPORTING EQUIPMENT DEVELOPMENT

The development of a new and sophisticated defence system or equipment requires the execution of different phases before the production can be initiated. They can be grouped in the following way:

- System concept definition,
- Technology development,
- System development and demonstration.

These phases may be quite complex and require large resources that may stem from public organisations as well as from industry. In particular, the third phase may include an extensive period of integration, test and evaluation to transform a prototype into a system that may be mass produced. It may require the integration of some outcomes from government research agencies as well as specific support in terms of testing facilities, manoeuvre fields, military operators, etc. The cost of these intermediate products and services may be high and a big part of the total development costs, but may be provided for free or at a low cost and benefit to the industry, potentially being considered State aid.

2.6.2. AIDS FOR THE RECOVERING OF INDUSTRIES IN SPECIFIC SITUATIONS

A company in difficulty is a company which is not able, whether through its own resources or with the funds it is able to obtain from its owner / shareholders or creditors, to stem losses which without outside intervention by public authorities, will almost certainly condemn it to exit business in the short or medium term.

Some defence industries require large infrastructures to develop and produce defence equipment; they may even need extra capacity to support crisis and emergencies[44]. These infrastructures can represent a heavy burden in times when the demand is low due to MoDs buying cycles. When the industry is large and has a relevant influence in the local economy and employs a large number of people, and there are many small suppliers, the general policy applied is to provide aid for recovery as a way to avert social unrest. These aids can be complemented, if necessary, with government purchasing orders and R&D and

[43] In practice, it is rare that governments reimburse the full investment. On the contrary, it is more common that they renounce a fee with the aim of raising firms' competitiveness in the international defence equipment market. Cf. page 21 of bibliographical reference 21 and page 32 of bibliographical reference 24.

[44] The growing complexity of military equipment and the presence of nuclear weapons seem to make notions of a "*surge*" in production impractical or redundant. Even if these systems could be produced in significant large numbers, training the manpower to operate them and integrate them in the armed forces would be a lengthy process. On the other hand, the presence of nuclear weapons makes the notion of an unlimited war unlikely.

other innovation aids to avoid obsolescence, diversify, and return to profits. These aids are usually backed by local politicians and trade unions who have a strong presence in publicly owned companies.

These aids are regulated by Community Guidelines on State aid for Rescue and Restructuring firms in difficulties (2004/C 244/02) and related national legislation. There are two types of aid: rescue or restructuring. The first is used as a temporary measure to keep the company operating, while the second tries to solve the structural problems. This kind of aid is severely scrutinized by the EU Commission and should follow a set of strict rules. Aid awarded in breach of these rules could be recovered. PMS have invoked Article 296 EC Treaty to legally support these aids and avoid a sanction when they are found non compatible with the internal market rules. These aids are mainly awarded by Ministries of Industry, Trade or Commerce.

Paradigmatic cases of recovery aid are the shipyard industries, where competition from non-European countries such as Korea or China is especially strong. Countries that have benefited from this kind of aid include Greece (Hellenic shipyards), Germany (Kvaerner Warnow Werft) and Spain (old Izar)[45]. Eastern European countries have enacted laws on this issue such as the law of October 7, 1999 on Restructuring Support for the Defence Sector and Technical Modernisation of the Polish armed forces and law of October 30, 2002, on Public aid for Companies of Special Importance for the Labour Market. Rescue and restructuring aids for SMEs have not been identified during the survey. This could provide evidence that these aids are more common in large and publicly owned defence companies for the reasons mentioned above.

2.6.2.1. RESCUE AIDS

Rescue aid is a temporary and reversible assistance. It should make it possible to keep a company in difficulty afloat for the time needed to work out a restructuring or liquidation plan and/or for the length of time needed by the Commission or the competent national authorities to reach a decision on that plan. EU conditions for rescue aid have to meet the following criteria:

- A firm must qualify as a firm in difficulty.
- Consists of reversible liquidity help in the form of loan guarantees or loans bearing normal commercial interest rates (and at least comparable to the reference rates adopted by the Commission).
- Restricted to the amount needed to keep the firm in business.
- Only for the time needed (maximum 6 months) to devise the recovery plan.
- Be warranted on the grounds of social difficulties and have no adverse effects on the industrial situation in other Member States.
- Be accompanied, on notification, by an undertaking by the Member State to communicate to the Commission a restructuring or liquidation plan or proof that the loans have been reimbursed or guarantee terminated, not later than within 6 months after granting the aid.
- Should be a one-off operation (the "*one time, last time*" principle).

[45] Cf. EU document IP/04/1260 "*State aid: Commission adopts decision on German, Spanish and Greek shipyards*" of October 20, 2004, and Commission Decision of 12 May 2004 on the State aid implemented by Spain for further restructuring aid to the public Spanish shipyards State aid case C 40/00 (ex NN 61/00).

2.6.2.2. RESTRUCTURING AIDS

Restructuring aid is based on a feasible, coherent and far-reaching plan to restore a firm's long-term viability. EU conditions for granting recovery aids shall meet the following criteria:

- A firm must qualify as a firm in difficulty.
- A restructuring/recovery programme is submitted to the Commission to restore viability in a reasonable time period.
- Compensatory measures are taken to avoid undue distortions of competition (e.g. appropriate reduction of capacity where excesses exists).
- Aid is limited to the minimum needed for the implementation of the restructuring measures. Beneficiaries have to make a significant own contribution, free of aid.
- The company has to implement the restructuring plan in full and observe all attached conditions.
- Restructuring aid can only be granted once ("*one time, last time*" principle).
- Strict monitoring and annual reporting is required.
- SMEs and firms in assisted regions: the capacity reduction / own contribution criteria can be applied with a greater degree of flexibility.
- The Commission takes a favourable view of State aid to cover the social costs of restructuring.

Restructuring usually involves one or more of the following elements: the reorganisation and rationalisation of firm's activities to a more efficient basis, typically involving the withdrawal from loss making activities[46], the restructuring of those existing activities that can be made competitive again and, possible, diversification in the direction of new and viable activities. Financial restructuring (capital injections, debt write off) usually has to accompany the physical restructuring, but is not limited to it. Restructuring must enable the firm to progress towards a new structure that offers it prospects for long term viability and enables it to stand on its own feet and compete in the marketplace on its own merits. For large firms, individual notification of each award of rescue and restructuring aid is required. These aids cannot be used to subsidise operating losses.

To limit the distortive effect, the amount of the aid or the form in which it is granted must be such as to avoid providing the company with surplus cash which could be used for aggressive, market-distorting activities not tied to the restructuring process. None of the aid should go to finance new investment that is not essential for restoring the firm's viability.

In addition to early retirement of redundant employees, aid is commonly provided in connection with a particular restructuring scheme for: training, counselling and practical help with finding alternative employment, assistance with relocation, and professional training and assistance to employees wishing to start new businesses.

[46] This creates the problem in the defence industry, when non-profitable activities cannot be abandoned, since they are key for the protection of security interests.

2.6.3. SUPPORT TO FOREIGN SALES

Export support is a general policy of all pMS due to the positive effects of the foreign sale of defence equipment over the economy and the industry. It materialises in different practices that tend to increase the sale success and are described in the next sections. It is essential for the sale of large and complex weapon systems, where diplomatic and political support to achieve mutual confidence between States is a must. Yet, arms export forms part of wider pMS security and foreign policies and therefore it is conditioned by these policies.

The objectives of common interest in this context are the increase in wealth and the reinforcement of the defence technical and industrial capabilities that exports will bring. Its economic relevance may be better understood taking into account that around 17% of the European defence production is exported[47]. However, the export capability differs largely between pMS[48] and companies turnover, being an extremely important component of some major companies such as BAe systems or Thales. Export support is a common practice of pMS for all economic sectors, and is not restricted to the defence industry.

2.6.3.1. EXPORT POLICY

The general policy is to support the foreign sale of defence products within the limits of the law. This means that the Code of Conduct for arms exports, the Community regime for the control of exports of dual use (Council Regulation (EC) 1334/9200 amended by 2432/2001) and Joint Action 401/2000 under the Common Foreign and Security Policy (CFSP) concerning the control of technical assistance related to certain military end-users, shall be observed.

Foreign sales support shall also observe internal market rules as defined in the EC Treaty. That means: (a) export aids are prohibited for intra-community trade whatever its nature, (b) they shall be compatible with Articles 87 to 89 and 132 EC Treaty and derived legislation, (c) they shall be in line with Common Trade Policy and WTO rules, and namely the Agreement on Subsidies and Countervailing Measures[49].

Article 132 EC Treaty states. "…*Member States shall progressively harmonise the systems whereby they grant aid for exports to third countries, to the extent necessary to ensure that competition between undertakings of the Community is not distorted*." Still, this harmonisation has only been achieved by Member States with regards to guarantees for export credits.

Most of the Public assistance that is described below is granted in the form of services awarded to the industry. It should be legally deemed State aid, if services provided are not paid or compensated by the exporter or the buying country under market conditions. Policies for charging services provided have not been unveiled during the survey preventing a deeper analysis on this issue. If the economic value of the aid is low, *de minimis* rule[50] will legally cover it. Only large aids should be notified to the EU Commission. Once again, Article 296 EC Treaty could be invoked to circumvent this requirement, yet the use of this derogation to support foreign sales might be controversial.

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47 Cf. bibliographical reference 38.

48 According to SIPRI top 10 arms exporters 2003-2007, the biggest selling countries in Europe for defence equipment worldwide are Germany (10%), France (9%), United Kingdom (4%), Netherlands (4%) and Italy (2%).

49 Having in mind that the Code of Conduct is not binding and WTO export rules includes exemptions that are applicable to armament sales, it can be said that few restraints are applicable on export policies. Cf. § 2.7 of Phase I Final Report.

50 This rule is regulated by Commission Regulation (EC) 1998/2006 and covers small amounts of State aid which do not constitute State aid in the sense of Article 87 (1) EC Treaty and which are therefore not subject to the notification requirement.

2.6.3.2. EXPORT PRACTICES

Actually, there is no general agreement on a harmonised export aid scheme between pMS of the EU, and a level playing field on this issue is still a pending question. As mentioned above, Community legislation on export aids only exists for export credit insurance. Therefore, while these practices are quite general in all pMS, they may differ mainly in intensity with a potential effect on trade conditions in the EDEM. The lack of this level playing field may give pace to export aid races, where the aid level may represent the difference between success and failure[51].

Export support results in the creation of specialised public organisations in some countries[52]. Their main role is the analysis of the international market to grasp opportunities for their defence industries, and to provide technical assistance about procurement processes and financing mechanisms to companies wishing to sell their products abroad. These organisations are supported by the network of commercial and military attaches of embassies that surveys potential modernisation plans of the armed forces of friendly nations that may offer opportunities for the domestic industry. While they concentrate on supporting companies with high export potential, SMEs and new-to-export companies also benefit from their services.

ORGANISATION	COUNTRY
None existing. Answer MoD	Belgium
Omnipol, a.s.	Czech Republic
Directorate for International Development (DDI) of the General Delegation Ordnance (DGA) Defence Conseil International (DCI)	France
Non existing (MoD answer)	Germany
FTE CENZIN Co. Ltd.	Poland
DEFEX, S.A. Isdefe, Dirección de Cooperación industrial	Spain
A department of FMV	Sweden
UK Trade and Investment Defence and Security Organisation (UKTI DSO) [53]	United Kingdom

Table 2-3 Organisations Supporting Foreign Sales

The above table identifies organisations of pMS acting as trusted intermediaries in the export of defence equipment to third countries. Sometimes they are also in charge of selling surplus defence material. In other European countries with a smaller industry, National Armaments Directorates usually have an office desk for supporting this kind of activity.

2.6.3.2.1. MARKETING ASSISTANCE

These organisations coordinate the participation of the industry in foreign defence and security exhibitions such as Eurosatory, Euronaval or Le Bourget; and support marketing and exporting campaigns for promoting the national defence industry such as the edition of catalogues listing domestic companies with

[51] All other things being equal, i.e. similar equipment performance and price.

[52] These organisations are not specific for defence, but common also in other markets. Their legal nature differs. They may be part of the Public Administration, State agencies, Public bodies, Public companies or even a mixed public-private company.

[53] This organisation is the successor of the Defence Export Service Organisation (DESO) that has moved to the United Kingdom Trade and Investment Ministry since April 2008.

a brief factual description of products. The expenses of this kind of assistance are normally supported by the State with some contribution from the industry. This type of aid does not normally constitute export aids[54]. German State aid contact point commented during the survey that this kind of assistance is not provided in its country.

2.6.3.2.2. PUBLIC RELATIONS

Building relationships with overseas governments, the core customer for pMS defence products and services, is a key element to maximise country prospects in the international defence equipment markets. It aims to provide overseas customers –who have within their objectives the modernization of their armed forces by new means–, and defence companies with access to MoD, armed forces and wider government specialist support. This activity provides a conduit through which pMS advice and expertise can be offered to the overseas customer on the national defence industries. It may also include the support to company-led marketing campaigns. Organisations like DDI in France or UKTI DSO offer this kind of support[55].

To succeed this support is required throughout the complete export process. Particularly when the equipment capability and performance is exhibited and demonstrated by national high ranking officers to foreign officers with the power to take a buying decision. The government support to the industry is essential to create a climate of mutual trust and confidence where an agreement can be reached.

These relations are built with the extensive support of embassies commercial or military attaches that act as contact points to promote the national defence industry within third countries. When the opportunity of an important sale materialises, it is not uncommon for the embassy to organise specific visits of commercial delegations to persuade the buyer to purchase the equipment and close the deal, which may include high ranking government officials such as the Minister of Defence or even the Prime Minister[56].

2.6.3.2.3. DISPLAY AND OPERATION BY THE ARMED FORCES OF IN-SERVICE MATERIALS

A demonstration of the product performance, through a relevant exercise, is often crucial to convince foreign customers of the worthiness of the equipment intended to be sold, since export defence equipments are imperfect substitutes of each other. These demonstrations may require the deployment of complete military units to exhibit the products. This kind of show can be carried out during public international fairs and exhibitions, or may be implemented specifically for an on-site demonstration to a specific customer. In this case, the transportation of the whole equipment to the potential buyer country may be required. High level logistical support is often required and may result in large expenses that will need some kind of financing that may be provided by MoDs. As an example, the following providers of this type of support can be mentioned: the "*Export Support Team*" of UKTI DSO, the "*Defence Industry Days*" held on board Royal Navy ships, and the Royal Aerobatic Team "*Red Arrows*".

[54] Cf. recital 8 of Commission Regulation (EC) No 800/2008 declaring certain categories of aid compatible with the common market in application of Articles 87 and 88 of the Treaty (General block exemption Regulation).

[55] Cf. http://www.deso.mod.uk and http://www.defense.gouv.fr/dga/content/download/119840/1049156/file/Fiche DDI VA.pdf

[56] In the case of Germany, due to the sensitivity of defence exports, this promotion has been generally avoided. Cf. bibliographical reference 21.

2.6.3.2.4. TRAINING OF CUSTOMER'S OPERATORS AND LOAN OF PERSONNEL

The successful sale of defence equipment may encompass the delivery of the additional logistical support without which the system cannot operate. This requires training of operators that sometimes cannot be carried out exclusively with the training team of the selling company, since the armed forces support is essential to instruct in the operational use of the system. This may include the loan of own military personnel for teaching, training and system rehearsal until final users are able to operate it autonomously. A typical case is the training of a ship crew. This support may extend over a long period and have high costs for financing the training team stance in the foreign purchasing country. Organisations like DDI (France) are in charge of providing this kind of support.

2.6.3.2.5. EXPORT CREDIT INSURANCE

When the export of defence products amounts to a large economic value some kind of export financing, provided or backed by the government, is required. This support is normally awarded through State aids for the guarantee or insurance of the export credit required for the sale.

These aids are justified to support the foreign trade in particular with developing countries in the world. Due to the high risk of sales that includes not only marketable risks, but also non marketable risks such as catastrophe risk, and commercial and political risks on non-OECD countries, State aids are required for guaranteeing the loan and potential losses, since there is no sufficient coverage in the private market, at an affordable price, to solve this need. Here, the amount of aid would be calculated as the difference between the premium market price that the exporter would pay, and the price he actually pays to the export credit agency that provides these guarantees.

Examples of this kind of agency are British ECGD, French COFACE, German Euler Hermes Kreditversicherungs AG, Belgian DUCROIRE, Dutch Atradius DSB, Spanish CESCE, or Swedish EKN. Policies and value and conditions of credits insured by these organisations are not always disclosed.

Export credit insurance aids shall follow EU rules and are not block exempt from *ex ante* notification. Therefore they should be reported to the EU Commission, unless "*de minimis*" rule applies. The Council Directive 98/29/EC establishes the set of rules and common principles for export credit insurance that include premium, cover policy, and transparency[57]. This Directive is of general use for the export of all kinds of goods and services. The Directive supports Article 132 EC Treaty. It is thought that further efforts are necessary to achieve a higher level of harmonisation.

2.6.3.2.6. ASSISTANCE TO PROCUREMENT (PROJECT MANAGEMENT AND TECHNICAL SUPPORT SERVICES)

Other export support may include, for less developed countries, the granting of assistance to the procurement process in terms of acquisition management and the provision of technical support such as the tailoring of the system configuration, the accounting of project expenditures, the equipment test and evaluation support, or the management of countertrade compensations. These aids are granted to the purchasing country programme office.

An example is that of a company such as *Defence Conseil International* (DCI) in France, a public-private joint venture, who specialises in this kind of consultancy, helping buying countries to define their operational needs, weapon requirements and specifications.

[57] Cf. table 3.5 of Phase I Final Report.

2.6.3.2.7. RESCHEDULING OF DELIVERIES TO NATIONAL ARMED FORCES

In certain cases, to fulfil commitments of export sales, when the production line is overflowed by different customer requests, a delay in the supply of products for national armed forces may occur until all items destined for export are finished and delivered. In theory, should it be that penalties and sanctions from national MoDs and the foreign purchaser are not applied, these economic values should be considered State aid.

No cases have been identified during the survey, yet this practice may be used when the delivery schedule surpasses current production capabilities, but its temporal nature causes their enlargement to be unprofitable.

2.6.3.2.8. PURCHASE OF AN UNDESIRED SYSTEM BY THE ARMED FORCES TO BETTER SUPPORT A FOREIGN SALE

While rare in practice, cases have been found where the armed forces have purchased a system that was deemed inappropriate to fulfil their mission in order to maintain the export prospects of the system[58]. Once again, theoretically though debateable, the value of the total purchase could be considered Public aid.

2.6.3.2.9. TIED AIDS

Often the Official Development Assistance use the practice of tying aids, in the form of grants or loans, to goods and services procured by the donor country. These aids are sometimes awarded for supplying defence equipment. The use of these aids may help to cross-finance the sale of the equipment in a form similar to indirect offsets, that otherwise would have reduced chances of being sold. These aids foster the commercial penetration of firms in foreign countries. When the price of the services or products donated is higher than market prices, the companies that sell these products could be deemed as having been awarded with State aids. Evidence of aid notification to the EU Commission has not being found during the survey.

2.6.4. OTHER EU RULED STATE AIDS

2.6.4.1. EMPLOYMENT AIDS

These aids are regulated by Commission Regulation (EC) 800 / 2008 declaring certain categories of aid compatible with the common market in application of Articles 87 and 88 of the Treaty (General block exemption Regulation or GBER) and related national legislation. It only covers aid granted for the following purposes:

a) The recruitment of disadvantaged workers in the form of wage subsidies.
b) The employment of disabled people in the form of wage subsidies.
c) To cover the additional cost of employing disabled people.

[58] "*The selling government may buy unsuitable equipment for itself to promote export sales. This was the case with the 1995 UK choice of EH101 helicopters for army transport, which was driven by the need to maintain its export prospects. Ministers had to order the Chief of Defence Procurement to override his duty to buy the US helicopter which represented best value for money. The French armed services have also regularly objected to having to accept equipment designed for export markets rather than their needs.*" Extracted from page 346 of bibliographical reference 28.

The aim of this kind of aid is to provide incentives to modify the behaviour of undertakings when they need to increase their labour force, the final goal being to improve social cohesion and welfare. These aids are block exempt of *ex ante* notification to the EU Commission, if they fulfil conditions set out in the aid scheme. They are normally provided by the Ministry of Labour. Since it is a horizontal aid, it can be requested by the defence industries that fulfil the conditions to become the beneficiary. The EU spent the 7% of total State aids on employment during 2005.

2.6.4.2. TRAINING AIDS

These aids are regulated by Commission Regulation (EC) 800 / 2008 declaring certain categories of aid compatible with the common market in application of Articles 87 and 88 of the Treaty (General block exemption Regulation) and related national legislation. They cover all public support for training which favours one or more companies or sectors of industry by reducing costs they would normally have to bear when they wish for their employees to acquire new skills, leaving them to exploit more efficient methods or technologies to develop, produce, test or maintain defence equipment. For example, these aids may be required to improve industrial capabilities in offset agreements. The regulation applies to training aid whether provided by companies themselves or by public or private training centres.

These aids are open to any kind of company that develops training plans for its employees. The intensity varies between 25% and 60% of the whole project, but can be raised for SME, specific sectors and disadvantaged or disabled workers. Aid measures satisfying the conditions laid down in the regulation are exempt from the *ex ante* notification requirement to the EU Commission. These aids are also normally provided by Ministries of Labour. Since it is a horizontal aid, it can be requested by the defence industries fulfilling the conditions for becoming beneficiaries. The EU spent the 2% of overall State aids on training during 2005.

2.6.4.3. AIDS FOR SMALL AND MEDIUM-SIZED ENTERPRISES (SMES)

These aids are regulated by Commission Regulation (EC) 800 / 2008 declaring certain categories of aid compatible with the common market in application of Articles 87 and 88 of the Treaty (General block exemption Regulation or GBER) and related national legislation. These aids are used to correct capital market imperfections that create bottlenecks in funding SMEs, in particular when they face R&D projects and are outside the main financial centres. These aids are fundamental to support start-up companies in their early stages, when risks are high and limited guarantees can be offered. They help to develop a richer industrial grid or network that supports the value stream of the defence industry. Aids of this kind cover measures such as:

a) Tangible investments such as buildings, or plant/machinery.

b) Intangible investments such as expenditures entailed by technology transfer.

c) Soft aid such as the cost of services provided by external consultants or the cost of the first participation of an enterprise in a particular fair or exhibition.

Aid measures satisfying the conditions laid down in the regulation are exempt from the *ex ante* notification requirement, unless the project size is larger than a threshold value. These aids are usually awarded by Ministries of Industry, Trade or Commerce. Since it is a horizontal aid, it can be requested by the defence industries that fulfil the conditions to be the beneficiary. The EU spent the 8% of total State aids on SMEs during 2005.

2.6.4.4. AIDS FOR RISK CAPITAL INVESTMENTS IN SMES

These aids are regulated by Community Guidelines on State aid to promote risk capital investments in SMEs (2006/C 194/02) and related national legislation. The scope of this kind of aid is the application to risk capital schemes targeting only SMEs. Risk capital, also known as venture capital, may be defined as funds made available to start-up firms and small businesses with exceptional growth potential. The demand of risk capital comes from companies that do not have sufficient access to capital markets, while the offer of risk capital comes from investors ready to take high risks in exchange for potentially above average returns from the equity investment. The market failure to provide enough risk capital that negatively affects European SMEs justifies this kind of aid.

It comprises measures designed to provide or promote *risk equity* and/or *quasi-equity investment instruments* for financing enterprises in their start-up and expansion phases. Managerial and technical expertise is often jointly provided to develop a business strategy able to motivate risk capital investors. These aids are also usually awarded by Ministries of Industry, Trade or Commerce directly or through investment funds. Being a horizontal aid, it can be requested by defence SMEs that fulfil the conditions to become the beneficiary. The EU spent 0,34% of total State aids on risk capital during 2005. Its role in the defence industry, therefore, can be very limited.

2.6.4.5. REGIONAL AIDS

These aids are regulated by the Guidelines on National Regulation Aid for 2007-2013 (2006/C 54/08) and the application of GBER to regional investment and employment aid and aid to newly created enterprises as well as related national legislation. They are aimed at tackling regional problems and are used to promote the development of less favoured EU regions or those suffering disadvantages (insularity, outermost regions, depopulation, etc). Their aim is to promote the economic, social and territorial cohesion of Member States and the Community as a whole through the expansion, rationalisation, modernisation and diversification of economic activities of undertakings located in these regions, in particular by encouraging firms to set up new establishments there. They mainly operate by supporting initial investment and in exceptional cases, by providing operating aid.

Article 87 (3) (a) EC Treaty applies to State aid to promote the development of "*areas where the standard of living is abnormally low or where there is serious underemployment*". This is why Article 87(3) (a) status is granted on the basis of an EU criterion.

Article 87 (3) (c) EC Treaty covers aid to other types of (national) problem regions "*aid to facilitate the development of … certain economic areas*". This Article gives Member States the option to assist regions which are disadvantaged compared to the national average. The list of regions qualifying for this exemption is also decided by the Commission, following a proposal by Member States. They can use national criteria to justify their proposal. The designation of a region eligible under this Article often allows for a higher intensity of State aid funded by one of the horizontal actions. This Article has been used in the past as the only means of funding large companies.

These aids are exempt of the *ex ante* notification requirement to the EU Commission when they observe the conditions established in the GBER. The aid is usually co-financed by more than one entity such as the EU[59], national, regional, or local organisations[60]. Defence companies have benefited from these aids

[59] Through Structural and Cohesion Funds. Structural Funds are composed of the European Fund for Regional Development and the European Social Fund.

[60] This is usually given in the form of a land or building lease at a symbolic value for a long period.

when allocating new facilities in these regions, for example the creation of Eurocopter España, S.A. in the region of Castilla-La Mancha. The EU spent 16% of total State aids in regions during 2005.

2.6.4.6. CLIMATE CHANGE AND OTHER ENVIRONMENTAL PROTECTION AIDS

These aids are regulated by the Community guidelines on State aid for environmental protection (2008 / C 82 / 01) and related national legislation. They are designed to prevent or remedy industrial damage to our physical surroundings or natural resources helping in its preservation, or encouraging its efficient use. Its aim is to increase the investment in all kinds of means to curtail pollution and emissions of noxious fumes to the atmosphere, sewage, and other types of dangerous refuse; as well as to lower the energy consumption.

These aids may be important in highly pollutant companies such as gunpowder, explosives and propellants manufacturers in order to observe environmental regulations. Other defence industries related to the production and maintenance of platforms (ships, aircrafts or land vehicles) may also require plants for waste treatment (oil, lubricants, etc). These aids may be essential in the reconversion of the defence industry in Central and Eastern European countries[61]. They are usually awarded by Ministries for the Environment. Since it is a horizontal aid, the defence industries that fulfil the conditions to become beneficiary can request it. The EU spent a large amount (21% of total State aids) on environmental protection aid during 2005.

2.6.5. PRACTICES RELATED TO PUBLIC ASSISTANCE AND STATE AIDS

2.6.5.1. AWARDING METHODS

Regulations for awarding State aids of EU Member States shall be compatible with the rules stated in the EC Treaty and derived legislation. Therefore, unless a specific *ad hoc* cases that has to be approved by the EU Commission, awarding methods are usually based on open selection characterised by transparent, objective and non-discriminatory criteria. A selection process is needed when funds available are limited, there are many aid project proposals, and only the most advantageous proposal will be awarded with a contract. The most important kind of aid, namely R&D, is awarded through this kind of tendering process.

However, laws offer exemptions where the protection of essential security interests needs to be taken into account. In these cases, restrictions can be applied to the abovementioned conditions. This may permit direct award practices[62], where aid terms are agreed between the State and a single potential beneficiary. For example, if pMS perform defence R&D through public procurement procedures, provisions implementing Articles 10 and 14 of the Public Procurement Directive (2004/18/EC) into national public procurement legislation may be used for this purpose[63].

Even the practice of using the aforementioned provisions may not be required to artificially shrink the number of tenderers. Restricted procedures may be used to set out specific prequalification conditions that may impede the tendering of valuable technical proposals. Administrative or technical requirements may be tailored for a preferred company (e.g. functional or performance features of the equipment to

[61] Cf. bibliographical reference 24.

[62] I.e. the use of a negotiated procedure with a single candidate without publication of a contract notice and award.

[63] This practice can be confirmed since only 13% in value terms of defence procurement was published in the OJEU during the period 2000-04. Cf. page 13 of bibliographical reference 7. It also has to be mentioned that the new Defence and Security Procurement directive of January 2009, still allows direct R&D contract awards based on negotiated procedures without publication of a contract notice.

purchase), easily being satisfied by the desired beneficiary and very unlikely by other competitors. Yet, discrimination may be difficult to prove. The most undesirable practice is when the tendering process becomes only a façade to ensure formal compliance with official requirements, while tacitly protecting the domestic defence industry.

Apart from this problem, the R&D award procedure may emphasize aspects of the tender, such as capability to manage commercial and technological risk[64], the optimization of the defence equipment through-life costs, the system reliability and maintainability, the achievement of innovative designs, or disruptive technological advances. These conditions may carry enough weight to make the cheapest bid not the "*best value for money*" in an open selection tendering process, allowing considerable discretion in interpreting value for money and providing *ex post* justification for any awarding decision.

The preference of direct awarding for defence R&D can be explained as it reduces the transaction cost of the award procedure, avoiding the cost of preparing detailed specifications, examining proposals and choosing from a large number of manufacturers[65]. Therefore, as long as laws allow this practice, the relevant contracting authorities will have an incentive to use it, when an open tendering process is considered unnecessary to get the desired outcome, because the provider will be unique, or it is deemed reliable enough and the price offered is estimated close enough to market value.

R&D awards may be based on a fixed price contract, a target cost fee incentive contract, or a cost plus contract. The first and second case implies a tough budget constraint since the company will have to pay from its own funds the extra cost of the project, while the last one, implies a soft budget constraint since the company will be paid whatever the project costs. The contract type will have influence in the incentives the company will have to perform the R&D.

The use of direct awarding and negotiated procedures is a common practice in R&D procurement contracts as the survey has shown. Moreover, the answers show that companies do face considerable barriers to access these available aids in other pMS. Only if they have a domestic subsidiary or partner can an attempt be made with some chance of success. One of the most relevant barriers is the tendering procedure that is structured differently in each country. Differences are relevant enough to require a local agent to formalise a bid.

A quantitative measurement per pMS of the frequency of use of these practices has been unfeasible. The EDA Code of Conduct excludes R&T and collaborative projects from the publishing of contract notices when Article 296 EC Treaty may apply. Therefore this type of Public assistance may not benefit from a high level of publicity and transparency only national R&D projects may profit from this publicity.

2.6.5.2. PUBLIC ASSISTANCE POTENTIALLY CONSIDERED STATE AID

The EU Commission considers as State aids those cases where the transaction between the Public Administration and an undertaking is clearly performed outside market conditions, as it can hide a direct subsidy. Common examples are:

a) Products and services purchased in the industry above market value (over-compensation),

b) Services, products, land, buildings or other assets provided by the Public Administration to the industry in preferential terms, i.e. below market value or even for free.

[64] For example, through technology demonstrators and incremental development.

[65] The legitimate use of prequalification procedures can be explained as a way to reduce this transaction cost.

The first case may occur in public procurement of defence goods and services, whether finished or requiring some kind of development. The second case may occur in some of the previous commented practices (R&D, regional, export). The size of the aid is measured as the difference between the agreed price and its market value or when the market is absent, the cost plus a reasonable profit[66]. In the defence field market values of similar products and services that serve as a reference are not easy to find. Therefore, deciding if an aid exists and measuring its real size can be a complex exercise since calculating the costs involves the analysis of accounting information and pricing methodology that will require, in addition, available benchmark information and analytical resources[67]. This is one of the reasons that may explain the low number of Court complaints on these aids, unless the value difference is large and clear.

These aids should be reported to the EU Commission unless they are block exempt or they have a value below the threshold of the "*de minimis*" rule. They may even be investigated, unless justified by Article 296 EC Treaty. These aids are hard to detect, if they are not notified, and being of high value they may influence trade conditions in the EDEM.

Since this is a key issue, the question of the second type of aid has been asked during the interviews. However, answers are inconclusive. The few collected answers indicate that public support provided in this form is lower than expected and, while this support may be qualitatively essential for business success, in practice, its economic value may be low, because services or products provided by the State are nearly always paid or otherwise compensated in some way by the industry. While some support can be given at a price lower than the market (e.g. fixed costs not charged), the global economic value of the aid may be small.

2.6.5.3. MONITORING OF AID APPLICATION

Aids require monitoring in order to verify that they are effective in achieving the desired goal, and in order to avert abuses. EU and national regulations include provisions, which may include the use of sanctions to avert lenient attitudes of beneficiaries and granters.

Misuse may occur if aid conditions are not respected. Yet monitoring is not an easy task. Aid contracts are costly to draft and enforce and are likely to be somewhat incomplete, i.e. to omit some contingencies that may occur in practice, for example in the field of R&D where uncertainty is high. This may give room to underperform relative to expectations where ill-specified clauses are difficult to enforce; or attempts to capture rents owing to the opportunism of companies when unexpected situations arise. In addition the monitoring requires resources that Public Administration may find scarce thus limiting this capacity.

Here appears a variation of a classic economic problem (moral hazard) called the principal-agent problem, where one party, called the agent (industry), acts on behalf of another party, called the principal (Public Administration). The agent usually has more (private) information about his or her actions or intentions than the principal does, because the principal usually cannot perfectly monitor the agent. In such a case, the agent may have an incentive to act inappropriately (from the viewpoint of the principal) if the interests of both parties are not in line[68]. This may open the door to aids whose resources and effort may be

[66] This profit is meant to reimburse organisation for the cost of capital, the cost of risk bearing and other economic costs. Cf. §2.1 third paragraph of the Community framework for State aid for research, development and innovation.

[67] On the difficulty to determine the cost of defence equipment, cf. bibliographical reference 36.

[68] Whereas MoD audits can verify that costs are recorded according to standard accounting procedures and that no major improprieties have been committed by the firm, they usually cannot disentangle its various components, and therefore most dimensions of moral hazard do not show up in accounting statements. For example, contractors may be allocating indirect costs from overhead pools to sole source, instead to many. Cf. Introduction of bibliographical reference 27.

detracted from its main purpose and deviated to other ends not directly related to the objective pursued, for example R&D aids used to support production or marketing[69].

The poor performance on some Public aids awarded and their recurrent use may indicate that the monitoring process of aid application is impaired to some extent with this problem; a problem that may also affect the defence industry (see reference 17).

2.6.6. THE SIZE OF STATE AIDS IN THE DEFENCE SECTOR

An attempt has been made in the survey to obtain information about the size of Public or State aids in the defence sector. The magnitude of these aids has been requested from different stakeholders, but the data received has not been sufficiently complete and consistent to aggregate numbers and obtain a measure, not even a rough value. This lack of information may be explained by the following reasons:

a) National statistics do not demerge data of aids for the defence industry due to the complexity of this work.

b) Ministries consider this information sensitive for their security interests and are unwilling to disclose it.

c) MoD outsourced R&D contracts with industry are not demerged easily from R&D total outlays.

d) Companies consider this information business confidential.

Yet, government R&D outlays in defence may suggest that the largest amount of aid is awarded in the R&D field. The value of which could be close to € 11 billion in 2005 according to EDA and Eurostat figures considering that this activity is mostly outsourced to industry. This quantity largely surpasses the R&D&I State aids in the EU, whose value is around € 7 billion for the same year[70].

2.7. GOVERNMENT TO GOVERNMENT SALES, PROCUREMENT THROUGH INTERNATIONAL ORGANIZATIONS OR COLLABORATIVE PROCUREMENTS[71]

Government to government sales usually follow an international tendering process for the selection of defence equipment that a country needs, but does not have enough resources and capabilities for its development. They often include compensations (offsets) offered by the seller to the buyer to abate the amount of foreign exchange needed to buy defence equipment, or some means of creating revenues to pay it back[72]. Compensations result in: (a) licensed production, coproduction, or subcontractor production at different stages of the supply chain; (b) delivery of services, or (c) purchases that allow the exchange of mutual obligations (countertrade). They may be accompanied with some form of foreign investment or technology transfer. These agreements are usually made for large acquisitions of already developed systems, in particular when considerable subcontracting is required to produce the final equipment components. Government to government sales do not follow national procurement rules. Conditions are negotiated between both States (Ministries of Defence or of Economy) with industry support, either before

[69] Aids that do not fit with Frascati or Oslo Manual classification rules may be understood as aids for supporting common operation activities. Cf. § 1.3.6 and § 5.1.1 of the Community Framework for State aid for Research and Development and Innovation, and bibliographical references 33 and 34.

[70] Cf. bibliographical reference 35.

[71] Extracted from reference 8.

[72] There are cases in which offsets only involve government and a defence company.

or after the contract is awarded. The offset deal is either included in the main contract, or forms a separate agreement which comes into force simultaneously with the procurement contract.

Germany and France do not accept offsets as a matter of policy, but other European countries use this practice for large foreign acquisitions. Italy, the Netherlands, Sweden and United Kingdom use indirect defence offsets, i.e. an agreement to exchange military equipment. This kind of offset is feasible when the seller needs an equipment that the buyer produces. Other countries with less developed industries like Finland, Greece, Poland, and Portugal use direct offsets as a way to boost their defence industry with the importation of defence equipment. Offset arrangements have been economically crucial for the Visegrad States defence industries. Many companies have been able to stay afloat due solely to the manufacturing contracts received through such agreements (e.g. Poland with the F-16 aircraft and AMV Patria purchase, or Hungary and Czech Republic with the JAS-39 *Gripen* purchase)[73].

Offsets are regulated in binding laws in the form of acts of Parliament (Poland, Lithuania), Presidential or Royal Decrees (Greece and Belgium respectively) or ministerial regulations in: Hungary, the Czech Republic, Sweden, Slovakia, Slovenia, Portugal, Italy and Finland. Other countries do not have legally binding laws and practices on this matter are unwritten.

International procurement refers to the different kinds of collaborative defence procurement performed by more than one State in its pursuance of new defence equipment. This kind of practice has grown within the EU since 1990, in particular in the area of aviation and missiles. While the Warsaw Pact developed a cooperation mechanism for defence equipment production in Eastern European countries, industrial cooperation between them remains limited after its disruption with the exception of Slovak and Czech companies, which have maintained their historical ties[74]. The management of these programmes is partially delegated to a transnational organisation that is in charge until final delivery, or sometimes until the system's disposal. Examples of these organisations are NETMA or OCCAR[75].

Here two important practices which impact on the level playing field can be identified:

- Use of the principle of *juste retour.*
- Selection of participation of companies through non competitive practices.

2.7.1. THE USE OF THE PRINCIPLE OF JUSTE RETOUR / FAIR RETURN

This principle establishes that the price of the equipment bought in a foreign or government to government sale shall be returned, to the maximum extent, in other products or services provided by the buyer. In the case of collaborative procurement, it means that the participation of the national industries shall be equivalent to the value of the final product that each country will acquire, i.e. the programme work share shall be equal to the purchase cost share. The idea is that for each State, costs spent on the programme should flow back to national industries or, in other words, that cost distribution is geographically balanced.

The distribution of work in these projects therefore is of a non competitive nature because it is based on political decisions where equity rules, industrial policies[76] and other considerations play a role as relevant

[73] These countries are Poland, Czech Republic, Hungary, Poland and Slovakia. Cf. bibliographical reference 4.

[74] Cf. bibliographical reference 4.

[75] Yet power is not complete and disagreement between partners has to be solved at a higher level until consensus is reached. This can be a source of programme delays with a potential impact in its performance and efficiency.

[76] Offsets multipliers may be used to provide incentives to foreign companies to offer specific commitments related to industrial policy.

as other criteria such as equipment performance and price. This practice is problematic in the public procurement context.

Development or production projects managed in NAMSA, NETMA or the ETAP programme follow *juste retour* rules. The case of OCCAR is somewhat different, because this organisation places more emphasis on competition and the replacement of rigid work share quotas by the more flexible concept of a "*global balance*" across a range of programmes. Yet, the practical implementation of this rule is not exempt of problems, and the question of the balanced distribution of work within programmes, while not formally stated, is a figure of merit in the final selection of the organisation (consortium) participating in the supply chain as has been mentioned by defence companies during the survey.

Another case to mention is that of the international F-35 (former FSX) Lightning Programme led by the USA, in which some European countries including the UK, Italy and the Netherlands participate. This programme sets out different partner levels, based on the number of aircrafts purchased, that determines, to a certain extent, the amount of technology transfer to these countries and the number of contracts they are allowed to bid for. However, national companies have to compete for contracts on a best value basis, as opposed to offset or costshare-whorkshare arrangements. Only companies of countries that participate in this programme are invited to bid. Being classified as a "*qualified supplier*" of primes is a bonus to be granted with a contract. This way of proceeding may be a reference for future international collaborative programmes in Europe[77].

2.7.2. THE PARTICIPATING COMPANIES SELECTION PROCESS

The selection process of potential offset beneficiaries is usually not made through public tendering procedures where openness and transparency allows a close monitoring. Instead less-formally ruled practices are used in the award procedure, making it difficult to ascertain the more common ones. The question has been put to different stakeholders during the survey, but the different responses received only permits an outline of the process. It is described in the following text.

The foreign equipment supplier seems to play a relevant role in finding and determining which companies are among those able to perform some production activities and which are the more efficient, yet this selection process depends on foreign internal company practices that may be based on negotiation or some kind of tendering process. In this selection process, the purchasing government uses its domestic knowledge of the technological capabilities of the industry to provide an assessment. However, government influence may be more direct, based upon industrial policy designs, showing interest that some preferred (publicly owned) companies or national champions participate in the programme. This selection may be motivated by the desire to include in the offset agreement other domestic companies of smaller size, the large firms playing a relevant coordination role in their integration into the supply chain. Government interest in the selection process decays as far as the company size decreases or its defence production capabilities are not deemed essential.

During the selection process, it may not be uncommon that only a single company has sufficient proficiency or technical capabilities to perform some of the tasks of the offset agreement. In such a case, the direct award is the result of a lack of competition rather than non competitive selection practices.

The signing of a code of conduct on offsets by all pMS, which in relation to the selection process says:

> "*The sMS will allow foreign suppliers providing offsets to select the most cost effective business opportunities within the purchasing country for the offset fulfilment, enabling fair and open*

[77] Cf. bibliographical reference 41

competition within supply chains where it is efficient, practical and economically or technically viable"

shows a new and positive attitude in achieving a more competitive market, yet the real impact is something that can only be evaluated in the coming years.

A similar process may occur in collaborative programmes for the selection of participating. National champions who will be selected in the early programme stages and distribution and responsibilities between them will be decided according to industrial capabilities, but always equating work share to the number of units that each country will purchase. Here, cases of competition between two industries in the same country, while possible in principle, are rather uncommon. For the selection of first tier suppliers, tendering processes will be opened to international consortia of the pMS by the prime contractor responsible for the equipment. Whereas technical performance and price will be relevant, considerations about a balanced distribution of work will also influence the granting decision. The international programme office will reserve the right to final selection (through an equipment selection panel) and if needed will change the recommended award to grant options that pMS consider more suitable based upon criteria not related uniquely to competition on a price / performance ratio.

2.8. INDUSTRY PRACTICES

2.8.1. LOBBYING[78]

Lobbying is a common practice of the defence industry. Its aim is to influence MoDs and other administration decision authorities for the creation or continuation rather than the cancellation of projects, in an attempt to obtain rents (*rent-seeking*) and benefits from public procurement (e.g. offsets) and Public aids awards. This practice, sometimes exerted in opaque ways, is common in all pMS; however, it is not subject to regulation in all of them.

The lobbying process implies a close relation with MoD authorities something affordable only to large or publicly owned companies, or national champions able to hire retired administrators. It may allow access to privileged information such as medium and long term plans for future acquisitions. Methods to influence government, shaping the demand curve for their own interests to a considerable degree, are many and varied. They may employ subcontractors, trade unions (normally strong in publicly owned companies), local or regional governments and public development corporations, particularly in areas where the defence industries are important to the local economy. Common arguments are based upon job and plant creation or preservation in high unemployment areas; innovative products; the need to develop or produce the equipment domestically to better safeguard essential security interests, the need to retain key technologies, the export potential of the new equipment programme, or even national prestige.

2.8.2. COLLUSION

Collusive practices, i.e. agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the common market, are prohibited by Article 81 (1) of EC Treaty.

[78] The expression "*lobby*" is used here and throughout the study, not in a pejorative sense but in the normal sense of political science, to describe an interest group with a distinctive set of attitudes.

Therefore these practices performed by industry are not compatible with internal market rules and may be challenged by EU and national competition laws and regulations. Still, the provision of Article 81 (1) is inapplicable in the case of an agreement of undertakings which contributes to improving the production or distribution of goods, or to promoting technical and economical progress (Article 81 (3)). This means that restrictive agreements are allowed when they have beneficial effects, such as increased efficiency, and if a fair share of those benefits will be passed on to consumers. Under this provision, the Commission has permitted agreements of rival firms to specialise in the production of different varieties of a product (a concept applicable to the creation of centres of excellence in defence), to set up joint marketing arrangements, or to cooperate in the R&D. However, the application of the Article should not:

a) impose on the undertakings concerned restrictions which are not indispensable to the attainment of these objectives.

b) afford such undertakings the possibility of eliminating competition in respect of a substantial part of the products in question.

The exemption allowed by the provision of Article 81 (3) EC Treaty is therefore subject to the evaluation of the efficiency effects that improve market performance and the anticompetitive effects that worsen the market performance. The Commission's view is that if the combined market share of cooperating firms is relatively small (less than 20% for specialization agreements, and less than 25% for R&D cooperation), beneficial effects of cooperation are likely to outweigh anticompetitive effects. In such cases, the cooperation qualifies for an automatic block exemption. Otherwise, the Commission may grant exemptions on a case by case basis. Common practices used to analyse these cases have been published including the application of this Article to horizontal and vertical cooperation agreements[79].

This means that cooperation agreements between defence undertakings are also subject to competition rules if they affect trade conditions. This case may be particularly true when consortia are formed to bid for an acquisition programme. If the agreement includes some kind of exclusiveness and a dominant position may be created, a case that can be very common in defence, it should be investigated to verify its compatibility with internal market rules.

Two examples of this practice were identified during the survey. The first is the UK Bowman project (radio and communications system) where two firms were awarded contracts to build competing prototypes. The rising costs of private venture development and the prospect of only one winner led both firms to merge to form one bidder for the contract. The second case, very similar to the first, occurred in the Galileo satellite system. The two initial competing consortia finally reached an agreement to merge into a single one. It seems that, in both cases, efficiency considerations won over potential detrimental effects on market competition.

Tacit collusion is a practice that may be considered uncommon in the field of defence due to reasons mentioned further on in § 3.3.2.1 of this document.

2.8.3. COMPETITION WITHIN THE SUPPLY CHAIN

Defence prime contractors usually outsource a significant proportion of the work and need a large supply chain to develop and produce the final defence equipment. This may include a large set of subsystems,

[79] Most relevant applicable rules include: Commission Regulation (EC) No 2658/2000 of 29 November 2000 on the application of Article 81(3) of the Treaty to categories of specialisation agreements; Commission Regulation (EC) No 2659/2000 of 29 November 2000 on the application of Article 81(3) of the Treaty to categories of research and development agreements; Guidelines on the applicability of Article 81 of the EC Treaty to horizontal cooperation agreements (2001/C 3/02); Guidelines on Vertical Restraints (2000/C 291/01); and Commission Regulation (EC) No 772/2004 of 27 April 2004 on the application of Article 81(3) of the Treaty to categories of technology transfer agreements

components (e.g. power engines, antennas) and services. The quality and technological edge that suppliers of such elements can deliver at competitive prices are essential for primes to compete with success in the defence equipment market. Everyday this forces the supply chain to become more international, even in the defence sector, in the search for world class suppliers capable of harnessing new technologies. The ability to efficiently manage the value stream is one of the comparative advantages of prime contractors.

Suppliers are selected by the prime contractor through different methods such as open tendering procedures; restricted procedures based on supplier qualification, or even direct awards where a preferred supplier or a (exclusive) strategic partnership exists. The first and second option are more open, transparent and competitive, but they may not be efficient, practical, and economically or technologically appropriate owing for example to higher transaction costs and lower stability of mutual expectations and performance[80]. Thus, the third option is sometimes the best alternative.

Practices for promoting competition within the supply chain are not ruled by the EU Public Procurement Directive. Yet, governments often include specific clauses within the contracts to reserve the right to demand a competitive tendering process during the contract implementation and actively participate in the final selection.

In relation to this issue, it shall be mentioned that the practice of not publishing the contract award notice followed by some pMS, can be detrimental to competition down the supply chain, since companies wishing to supply their intermediate products may not be aware of existing contract opportunities.

EDA pMS recently agreed a Code of Best Practices within the Supply Chain (CoBPSC). This code aims at quickly identifying subcontracting opportunities for prospective suppliers, and the evaluation and selection of suppliers on a fair and equitable basis. The code includes an electronic bulletin board where industries of pMS may publish their invitations to tender for granting supply contracts. While still not used extensively, the number of companies that have adhered to this code shows a growing trend.

2.8.4. Price Discrimination when Exporting Defence Products in the EDEM

During the survey, this practice commonly known as "*dumping*", has been reported in the field of ammunition within the EDEM. This practice uses a different price when the product is sold nationally that when the company bids in other pMS. It attempts to sell a defence product at a lower cost that can even be lower than internal production costs. Its final aim may be to exclude other competitors from the market and raise the market share in the long-term.

2.8.5. Other Practices

Bribery has been mentioned during the survey as a recurring problem in exporting products to foreign countries, in particular for the sale of spare parts. Other unfair practices such as espionage, harassing competitors through protracted patent and other litigations with predatory intent have not been identified during the survey.

[80] Defence equipment primes may be reluctant to accept subcontractors, which do not offer enough guarantees, as quality problems in components broken out for competitive tendering could degrade overall equipment performance, in turn damaging their reputation and impairing their ability to win future contracts.

2.9. Other Policies and Practices which Impact on the Level Playing Field

2.9.1. Barriers to Intra-Community Sales

In all EU Member States, the export of defence related products (including comprehensive military equipments as well as sub-systems, components, spare parts, technologies …) is subject to national licensing schemes. The European defence market is consequently fragmented into 27 national licensing regimes which diverge widely in terms of procedure, scope and required delays, despite coordinating efforts between a limited number of Member States.

This patchwork of licensing schemes not only imposes a significant administrative burden on companies, but also induces significant lead times – up to several months. These burdens nowadays clearly appear to be out of proportion with actual control needs: license applications for intra-Community transfers are hardly ever rejected.

Furthermore, defence industries and EU governments cannot fully rely on their supply chains because of the legal uncertainty resulting from the need for individual authorisation of transfers.

These divergences constitute a major impediment to industrial competitiveness, and a considerable obstacle to the emergence of the EDEM as well as the functioning of the internal market.

An attempt to solve this problem has been made by the EU Commission developing a Directive on this issue. The Directive proposal has been approved by the European Parliament December, 16, 2008[81].

2.9.2. Framework Agreements and Long Term Contracts

The use of framework agreements and long term contracts with a single company is a common practice in the defence field of different pMS as the survey has shown. These agreements are common in major armaments programmes that include the development, supply and maintenance of defence equipment; as well as the long term supply of certain products (ammunition), or the long term delivery of a service. The duration of these agreements can be longer than five years. Framework agreements are a flexible tool to allow an ongoing negotiation and modification of activities in response to circumstances as they arise. These agreements are regulated by the EU Public Procurement Directive.

2.9.3. Tax and Social Security Policies and Practices

Finally, it has to be said that different business tax policies and social security systems between the EU pMS may impact on a level playing field since taxes in some countries are lower than others, since the concept of tax neutrality has not altogether been achieved.

Because these differences are common for the whole internal market and are not specific to the defence level playing field, they will not be analysed in this study.

[81] For more details cf. reference 17.

3. ANALYSIS OF THE EFFECTS OF NATIONAL POLICIES AND PRACTICES ON OWNERSHIP AND PUBLIC AIDS ON INDUSTRIAL RESTRUCTURING AT EU LEVEL AND FAIR COMPETITION IN THE DEFENCE SECTOR

3.1. INTRODUCTION

In this chapter the effects of the policies and practices of pMS and industry described in chapter 2, with regard to industrial restructuring at EU level and fair competition in the EDEM will be analysed. These two effects are fundamental for two reasons:

a) The restructuring of the European defence industry across borders is seen as a key requirement to rationalise and concentrate industries to raise their efficiency. Therefore, practices that impede or restrict such restructuring, unless they damage competition or result in lower efficiencies or diseconomies of scale (e.g. very large plants), shall be seen as a hurdle to strengthen the EDTIB.

b) If fair competition and market rules are compromised frequently by current practices[82] the most important effect is a **lack of mutual confidence** between pMS that would not facilitate the full opening of their defence markets to the EDEM. This is because they may fear that the advantages that companies enjoy in other pMS[83] may be detrimental to their own domestic industry displacing it out of the defence market, damaging the industrial framework, creating unemployment, and losing one of the most innovative sectors of their economy. Therefore, if these practices preclude a level playing field, they will maintain a **fragmented** EDEM, where supply chains are kept as national as possible, impeding or delaying a true consolidation. In addition, an unconsolidated EDEM will curtail the incentives of restructuring the EDTIB because concentrations will be less able to exploit the advantages that a wider market offers.

When policies and practices do observe internal market rules, where open competition is the basic rule, benefits are accrued for the defence industry helping to raise its efficiency and better supply the armed forces. However, their effect may be negative when they do not follow these rules, restrict the free movement of capital, or create discriminations. Yet, the protection of essential security interests or other national objectives may require restrictions on the principle of competition. That being the case, it may prevent a competitive EDEM that optimises the EDTIB performance hampering the achievement of:

- A larger market with effective competition where prices are close to marginal cost[84].
- Lower barriers to market access for newcomers or foreign companies.
- Lower expenditures for purchasing or maintaining defence equipment.
- Higher industrial efficiency and better resource allocation.
- More innovate products with higher quality, performance or customer satisfaction.

[82] Cf. abstract of MEMO/07/547 Brussels, 5 December 2007.

[83] In the survey the main concern expressed by some National Defence Industries Associations is the large differences in defence budget between the pMS that exist for historical reasons. This has resulted in strong turnover differences of defence companies. This size advantage of the companies of more industrialised countries gives them a strong position in the EDEM that pMS with a medium or small defence industry, cf. with particular concern.

[84] For a definition of marginal cost cf. annex E.

- A more rational market with less duplication and unrequired overcapacities, through restructuring of the industry across national boundaries.
- Higher specialization that can give pace to better defence products and excellence.
- More capability to successfully compete in international defence markets.

The most common practice is the explicit or implicit invocation of Article 296 EC Treaty. This provision is often understood to allow for a wide margin of discretion regarding the award of Public aids and public procurement contracts to national industries. This is because the award process is perceived as not being subject to the EC Treaty, Directive 2004/18/EC, and other relevant derived legislation and can be protected by secrecy. Therefore, two of the key principles of the internal market: publicity and transparency are compromised, limiting the possibility to objectively verify the real level of competition, make complaints or even appeal the case in the relevant courts and review bodies. Moreover, the principles of openness and non discrimination are undermined if these practices are used, most importantly direct awards. While these practices may be necessary in some cases, it seems that in others they are simply used to circumvent internal market rules and serve other domestic objectives loosely related to the protection of essential security interests, such as the protection of declining or unfeasible defence industries.

The use of Article 296 EC Treaty had more meaning in the Cold War period, when the second and third pillar of the Union were absent, and defence was considered a Member State concern of a highly sensitive nature. However, with the introduction of the ESDP since the late 1990s, the use of the provision has not diminished giving the impression that it is often still regarded as "*a general and automatic exemption of hard defence material from the application of the Treaty*" rather than a derogation to be used exceptionally. The Interpretative Communication issued by the EU Commission on the use of this Article is an attempt to restrict its application to only justified cases. It is expected that, based on this Communication and the judgments of the European Court of Justice it is based on, pMS refrain from its abuse, thus depriving the level playing field of one of its main obstacles. With regards to public procurement, the introduction of the new Defence and Security Procurement Directive passed by the European Parliament in January 2009 may help to reduce the number of cases in which Article 296 EC Treaty is used in practice.

3.2. PUBLIC OWNERSHIP

Public ownership practices should not have a relevant effect on the market. If pMS respect the principle of neutrality of undertakings (Article 295 EC Treaty), there should not be any harm caused to fair competition.

Public ownership warrants a key operational requirement in the defence field, namely the security of supply of critical equipment, in particular if private investors do not find enough incentives to invest in an economic area where internal and external uncertainties with a strong influence in company profits prevail such as a demand too small and infrequent. Internal uncertainties are related to the large investment and timeframe required to develop advanced and sophisticated weapons, and the technological unknowns of the design process. External uncertainties are related to the State power as market regulator and principal –sometimes only– customer able to unilaterally set up market conditions such as quality, price, and amount of product required and, that being the case, prohibit or authorise foreign sales.

The State power in the management board warrants that sufficient resources and infrastructures are developed and kept within the organisation to assure the supply and logistical support of key defence capabilities during the planned period with the adequate quality and performance. The State power here

helps to abate the risk associated with incomplete supply or service contracts or its inadequate fulfilment that can endanger the performance of the armed forces.

However, the business of providing these products and services should be profitable in the long-term. This requires, in addition to other conditions, good management practices[85] that may include adequate incentives to motivate personnel such as appropriate pay or threat of redundancy. That not being the case, some sort of aids may be needed to keep the company alive that can only be justified since it protects essential security interests.

One of the advantages of privately owned companies over public ones is that the market is an excellent system to test company performance and management decisions. Share price in the stock market is a system to measure the soundness of business decisions made by the company (other conditions being equal such as absence of an economic crisis, etc). This fact explains the preference of pMS to keep a mixed ownership, preserving a certain percentage of shares for public ownership, but leaving the remaining to freely float on the stock market.

3.2.1. EFFECTS ON INDUSTRIAL RESTRUCTURING

If publicly owned companies are considered strategic, because they carry out key defence capabilities in research, development, production, or logistic support of defence equipment (e.g. nuclear weapons), and decisions over its future are considered a matter of sovereignty, the possibilities to permit foreign investments, mergers or acquisitions of the company by other European companies can be limited. Rules and regulations based on security needs, such as the ones commented in chapter 2, may deter these kinds of operations. A case often cited is the shipyard industry in some pMS, whose navies seem to prefer their strategic independence in order to be supplied by a national prime contractor.

If restructuring of companies has sense in economic terms because higher efficiencies or streamlining of European production capabilities can be achieved, then there is an opportunity cost associated with the failed restructuring operation that has to be borne by European citizens. This value, while real, may be hard to measure in economic terms.

3.2.2. EFFECTS ON FAIR COMPETITION

Having created an infrastructure of publicly owned companies[86] to supply the armed forces (these companies being considered as providers of services of general economic interest), it is understandable that States prefer, even when private or foreign competitors exists, that publicly owned companies benefit from their main acquisition programmes. The trust gained by these companies through years of service to the MoD is one of the reasons for this preference, but the opportunity cost of maintaining large idle capital and labour resources is another powerful argument to nurture them regularly with enough contracts to get a reasonable level of business and profits and avoid losses in lean periods[87], when the company's order book is empty and the threat of dismissing employees and closing facilities may appear over the horizon. In short, the State assures a stable demand to Public companies that guarantees firms "*reasonable*" profit margins in return to faithfully serve the specific government needs.

[85] Political interference may be a source of mismanagement. For example, the industry may be overstaffed in order to reduce unemployment, or it may be forced to conduct operations in certain areas to win local votes. The final outcome may be a misallocation of labour and capital for performing activities that are merely a source of losses.

[86] Policies related to national (private) champions can sometimes be assimilated to public ownership policies.

[87] The cyclical nature of defence products acquisition is an obstacle to assure this regular nurturing process and to design profitable business plans. A consolidated EDEM with a large and steadier demand would help to reduce this problem.

If the company is sufficiently competitive, open tendering is the natural way to nurture the company with development or supply contracts. Should this not be the case due to various reasons, tailored award procedures based on law, where competition does not play a real role, will be used to support the company. The more common solutions include:

a) R&D contracts awarded to support the development of a product that will nurture the production facilities in the next years, even when similar equipment already exists in the market.

b) A direct awarding of the production phase, after successful R&D, when the company has achieved sufficient capabilities and know-how to develop the product[88],

c) When national companies and in particular the publicly owned company does not have full capability to develop the product, achieve agreements with foreign companies to provide the essential technologies needed to manufacture the equipment, the main aim being to maximise work share, instead of choosing the equipment with the best performance / price ratio.

d) Provision of Public aids whether based on Article 87 (3) (c) EC Treaty such as rescue and restructuring or when not compatible with these rules, using the exceptions allowed by law related that may include the protection of essential security interest.

These practices have a negative effect on fair and open competition, because they tend to exclude private or foreign bidders and give advantages to publicly owned companies. However, the real effect will depend on the market structure and the number of competitors.

The close ties between MoDs and publicly owned companies, where members of the management board are active or retired high ranking officers of the defence logistic organisations, facilitates this negotiation process[89]. The result is a tendering process where competition is replaced by negotiation, cooperation practices and fluent exchange of information to agree product performance, supply calendar, price and other conditions such as the provision of spare parts. However, the lack of competition may enable the negotiation in adverse conditions for the purchaser due to asymmetric information[90] and the potential lack of alignment of the company objectives with the purchasing organisation that may give way to a non optimal solution. Yet, in economic terms the cost of maintaining large production capabilities without orders or the risk of contract failure with a private or foreign company can be comparatively much higher than the benefits of awarding an offer with an improved price or performance.

The fact that publicly owned companies share a relevant part of government expenditures in the procurement of defence products and services as well as the Public aid budget may indicate that this kind of practices is frequent.

While governments may impose conditions on product performance, costs and level of innovativeness, the efficient achievement of these conditions will depend on the available technical capabilities of the publicly owned company. If they are not high, the chance to procure the desired equipment at a minimum cost will be low, and further investments may be needed. Another subtle effect is that publicly owned companies, lacking innovativeness owing to a strong market position, may not be able to develop state of the art

[88] If the government has invested large sums to get a national supplier, it is very unlikely that an open tender will be organised for the production phase, even when other foreign companies are able to offer a better product. The UK seems to be the only exception. Cf. bibliographical reference 22 page 48.

[89] National defence champions and defence industry in general also use the practice of hiring retired military officers to reinforce their ties with MoDs.

[90] Information asymmetry deals with the study of decisions in transactions where one party has more or better information than the other.

capabilities and equipment for the armed forces, or may even influence the research path in less favourable alternatives to the customer. In such a case, the acquisition process may be biased towards material (e.g. old fashioned Cold War equipment) whose operational effectiveness may be low (e.g. the supply of equipment and platforms which lack Network Enabled Capability features).

3.3. FOREIGN INVESTMENTS, MERGERS AND ACQUISITIONS

The effects of policies and practices concerning foreign investments, mergers and acquisitions are important, because these kinds of operations are fundamental to the process of restructuring the EDTIB[91]. These operations facilitate the process of rationalisation, reorganisation and reconversion of the industry in order to increase its efficiency and competitiveness. They are needed to face the growing complexity of technology, the increased scale of processes and specialization of scientific work. They are also a cost efficient route to corporate growth and sales expansion. A more concentrated industry will favour the high capital investment required for the successful research, development, production and logistical support of technologically advanced defence equipment, even if parts of the work are vertically disintegrated through subcontracting. In some defence areas, a higher level of concentration and efficiency today in Europe is only achievable through transnational concentrations, due to the existence in most areas of a single national champion on each pMS.

Having in mind that the United States is the sales leader in the international defence equipment market and the degree of concentration reached by its industry in comparison to this side of the Atlantic, it seems that Europe should progress in this area if it wants to obtain the scale and learning economies available to their US rivals, and develop competitive products to maintain or increase its market share.

3.3.1. EFFECTS ON INDUSTRIAL RESTRUCTURING

3.3.1.1. AUTHORISED INVESTMENTS

The authorisation of investments that can reach a value enough high to merge or directly control a company is one of the most common ways to allocate capital efficiently in the internal market. Successful and profitable companies will be rewarded with a demand share increase and higher market value, while ill-managed companies without profits will tend to lose value, be taken over or even disappear completely from the market. Restrictions on these investments may prevent better industrial solutions. Yet, conditions may be required to implement remedies, such as divestiture commitments, if the resulting concentration creates a dominant position that may significantly impede effective competition.

[91] Namely, large European defence champions are the result of a continuous process of M&As.

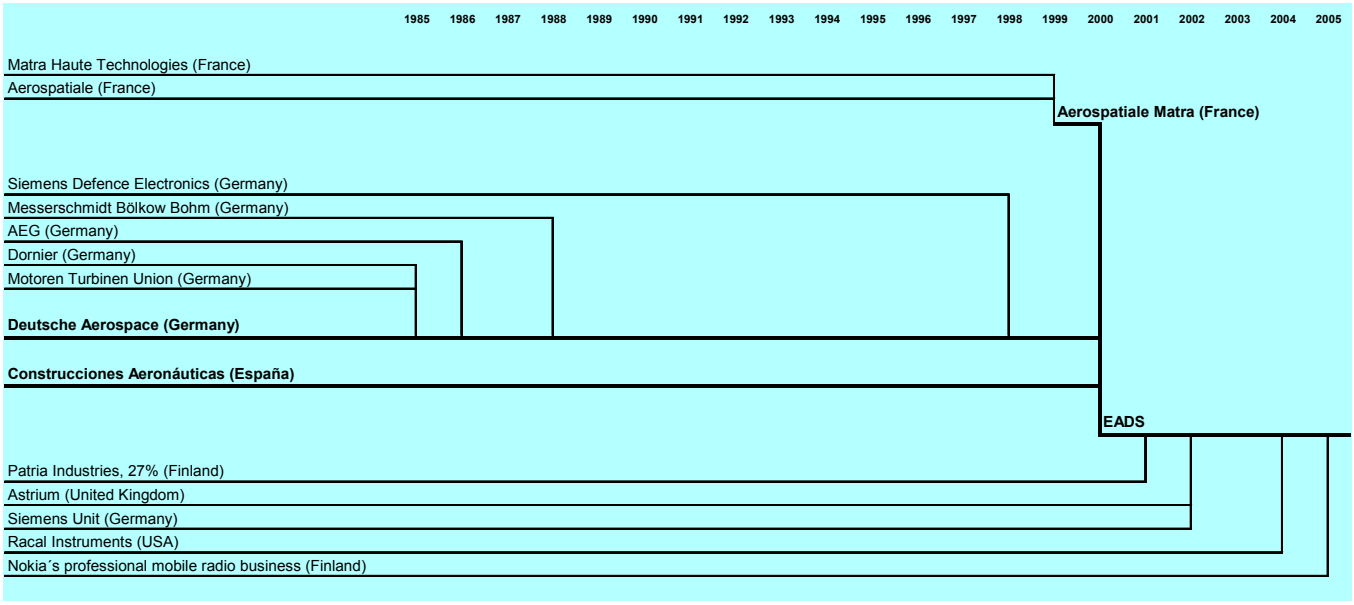

Figure 3-1 The Consolidation Process of EADS. Source: Sipri Yearbook 2006

The freedom to carry out mergers and acquisitions, subject to EU market rules, is a useful way to improve the performance of the industry and to profit from larger markets as can be the case in a consolidated EDEM or the international defence equipment market, where the joining of sufficient resources and capabilities is key to create competitive products which can be sold worldwide. It can also be very helpful in the restructuring processes of the industry across Europe in areas where overcapacity exists and streamlining is needed to achieve profits once again. Main advantages that these operations can attain are[92]:

- Rationalisation of production.
- Economies of scale and scope.
- Plant specialisation.
- Savings in procurement and capital cost.
- Tax saving.
- Rationalisation in workforce.
- Combining of complementary assets, knowledge and skills.
- Better coordination of joint operations.
- Expanded number of customers.
- Increased R&D activities.

Moreover, most of these advantages, in terms of production and distribution improvement, technical or economical progress, cost reduction, higher efficiency, and other synergies are passed to the customers (armed forces) in terms of lower prices, better value for money, higher innovation, improved quality and performance, wider product portfolio, or quicker delivery time that will have in the last instance a positive effect on the security of the citizens.

The general agreement on the advantages of mergers and acquisitions, particularly in the defence field, explains that no concentrations of European dimension have ever been opposed by the EU Commission[93]

[92] A complete explanation of them can be found in annex 1 of bibliographical reference 31.

[93] Cf. annex B of Phase I Final Report.

and Article 296 EC Treaty has rarely been needed to support them. Only in very few cases additional commitments have been requested to approve the concentration.

Joint Ventures are a kind of concentration that may produce an appreciable restriction on competition between undertakings that remain independent. Therefore they also require an investigation into the potential achievement of a dominant position. These concentrations may also help to achieve economies of scale, but its impact on obtaining higher synergies and efficiency is smaller, since the true integration of business activities of participating companies and the creation of strong managerial structures does not occur.

3.3.1.2. NON APPROVED INVESTMENTS

Foreign investments in the defence industry may not be approved for security reasons, since there are concerns that key capabilities, that shall remain domestic, will be impaired. This denial may have negative effects owing to the loss of some of the benefits mentioned before, which they may bring with them. The outcome will be the migration of capital to invest in other countries or economic sectors and a less efficient industrial structure, that may involve an opportunity cost for the whole European society.

Furthermore, the company may find more difficulties in gathering the economic resources needed to operate. For example, it can turn to the debt / bond market, if local investors are not found, raising the financial costs of the company.

3.3.2. EFFECTS ON FAIR COMPETITION

3.3.2.1. AUTHORISED INVESTMENTS

If the investment is approved, the main risk of initially approved concentrations of defence companies is the chance that it can create or strengthen a dominant position that may significantly impede effective competition. A feeble competition may bring negative effects in the form of increased market prices or lower innovation. For some types of products and services when an oligopoly may exist, a careful scrutiny is needed to avoid the suppression of important competitive constraints that the merging parties have exerted upon each other, or the reduction of competitive pressure on the remaining competitors that may give way to practices such as tacit collusion. However, these effects can be small bearing in mind that:

- The concentration is investigated by pMS or EU competition authorities allowing the identification of a dominant position, and as a consequence restrictions and commitments may be demanded to avert a significant impact on effective competition in the relevant markets related to the operation. A dominant position may be easily achieved in horizontal concentrations where the number of suppliers of a similar product is reduced. Of particular concern are mergers where only two competitors in a product market propose to merge leading to a monopoly, or the two most efficient companies propose to merge. However, most defence concentrations are non horizontal, and manufacturing complementary products –where the price increase of one of them, as opposed to similar products, will reduce the demand in the others– the chance of raising it is reduced. Yet, adverse effects on competition can appear in the form of market foreclosure of intermediate products (upstream or downstream the supply chain) or higher barriers to entry for new companies in the market. Thus investigation is also required for this kind of concentration.

- MoD assessment shows a positive view of the operation, because it considers that there is sufficient competition due to a true auction type character of tenders, or that they have sufficient bargaining power when a negotiated procedure with a single supplier is selected. Defence customers may have

a good knowledge of the technologies and the costs involved, and when they do not directly have such knowledge –for instance, when they purchase a system for the first time– they can rely on specialised consultants in the procurement process. The attempt by the supplier to abuse its market power may be countervailed, therefore, due to the MoD capability to know with sufficient accuracy the equipment price based on system requirements during the negotiation procedure[94]. The MoD power can also be exerted in non horizontal concentrations to avoid foreclosure of intermediate products when it reserves the right capability to choose subcontractors and subsystem suppliers.

- Tacit collusion can be very difficult in practice, even with few suppliers, because the opportunities to compete in acquisitions of high value and duration are few. Conversely, this kind of tendering will provide companies with incentives to make competitive bids and assure their income for the next years. The fact that defence companies produce heterogeneous, complex and changing products with different costs and technical positions is also a hurdle to arrange any form of collusive agreement in defence.

The only risk is that the pMS, whose companies merge, invoke Article 296 EC Treaty and EU or national competition authorities have no chance to scrutinise whether or not a true dominant position in a relevant market can be formed as result of the concentration. However, the number of cases identified during the survey has been few, and in some cases enough confidential data was provided to the EU Commission in the defence business to analyse the operation in detail.

3.3.2.2. NON APPROVED INVESTMENTS

Unauthorised investments in defence impose a limit to the free movement of capital (Article 56 (1) EC Treaty), which can only be superseded by Article 296 EC Treaty. The main effect of this limit is to add a barrier that may impede a better allocation of capital resources in the EDTIB.

3.3.3. OTHER RELEVANT EFFECTS

3.3.3.1. ON SECURITY OF SUPPLY

One of the potential effects of the authorisation of transnational investments, mergers and acquisitions is that national ownership may be reduced and the company management board may become more international and less tied to national defence objectives. Therefore these operations are creating defence industrial firms whose global reach is outpacing the ability or willingness of their home governments to shape the defence industrial base for either national security or economic purpose.

For example, in the creation of EADS the government share of the company capital was reduced for Germany, France and Spain in relation to their pre-merger share in the relevant national companies. In the case of the privatization of the United Kingdom DERA Agency in 2000, the activities in the nuclear field were not transferred to private hands, because they were considered strategic by the government.

In order to achieve synergies, the restructuring of the merged company may be likely to create new dependencies between company units, plant specialisation and the potential off-shore production of key system components. This may be considered by governments detrimental to the preservation of a wide autonomy in the supply of defence equipments and domestic industrial capacities. For example, the

[94] The cost of achieving a good knowledge of development and production prices of equipment may be high, and therefore this capability may only be reserved to large acquisition programs.

acquired company may be downgraded and lose its independence as a profit centre and become a subcontractor of other leading company departments.

Finally, companies operating in the international defence equipment market may have fewer incentives to sell products to a pMS, if they foresee more profits abroad. This may be a concern in the case of strategic equipment, because the bargaining power of a Member State is weakened in a market where it is no longer a monopsony and companies have a larger number of buyers.

3.3.3.2. ON EMPLOYMENT AND LOCAL ECONOMY

Concentrations sometimes generate adjustments that may include sales of certain redundant or non strategic assets (production plants, research centres, etc) or the loss of a certain number of jobs when there are development or production overcapacities.

These adjustments may have a social cost measured as a loss of quality of life of the workers due to lower pay when relocated, early retirement, or unemployment. If workers have only very specific skills not demanded in other economic sectors, or are already too old, they may find great difficulties to find alternative employment, a situation that may require Public support such as retraining, self-employment, etc.

Plant or centre downsizing or closures can also have a relevant indirect effect on the local economy, when the plant is sizeable and has a large number of employees and SMEs suppliers in the neighbourhood. This may create a social problem whose magnitude will depend on the number of companies and jobs impinged. To solve these problems different restructuring aids may also be required, as was the case of the Konver Programme at the end of the Cold War.

The risk of loss of employment or plant closure is one of the reasons that mergers or acquisition agreements often include clauses assuring a transition period where personnel lay offs or plant dismantling is prohibited. The effect of these clauses is that efficiency gains of the concentration may be smaller than expected.

3.4. PUBLIC / STATE AIDS

The general effect of Public aids is positive in the defence industry since they help to change companies' behaviour and solve market failures that impede the supply of the armed forces with the high quality and performance equipment they need to safeguard national security interests. They materialise in more skilled personnel, development and production asset investments, funding to boost innovation, etc. However, according to EU rules, aids should not affect trade conditions in order to avoid a negative influence on competition that may be contrary to the common interest. Besides, to be effective aids, shall fulfil the following set of conditions:

a) Aimed at a well-defined objective of common interest.
b) Adequate to solve the identified market failure.
c) Appropriate as a policy instrument.
d) Create adequate incentives to change the undertakings' behaviour.
e) Proportionate in time and scope.
f) Distort to the least extent intra-Community competition and trade.
g) Overall balance is positive[95].

[95] Cf. § 1.3.1 of Community Framework for State aid for Research and Development and Innovation.

As long as an aid follows the abovementioned set of conditions, it should be welcomed due to its general benefits for the EDTIB. While this is uncontroversial as a matter of general principle, its application in concrete cases may not be straightforward.

3.4.1. AIDS FOR R&D AND INNOVATION

R&D aids are required to solve the market supply failure for the development of new defence equipment due to the high risk, complexity and uncertainty associated to this activity, helping to allocate the adequate resources. These aids have other benefits such as knowledge spill-over that may be used in other areas not related to defence, increasing growth and prosperity for society as a whole. Yet, some intrinsic features of development work are virtually routine and involve no appreciable element of novelty, so it may be misleading to regard all R&D expenditures as enhancing the nation's technological base.

3.4.1.1. EFFECTS ON INDUSTRIAL RESTRUCTURING

R&D and innovation aids do not have a primary effect on industrial restructuring. However, in the process of industrial restructuring they may be needed to support the development of new and competitive products or the transformation of business processes that help the industry to increase profits sooner.

R&D aids however, if uncoordinated, within the EDEM may prevent the achievement of synergies and higher efficiency in the research and development activities that will have a negative impact on the EDTIB. Moreover, the reduced national budget aimed at this activity may result in the development of unsophisticated technologies to be successfully competitive internationally. Besides, unfettered subsidy races[96] between pMS may not assure efficient outcomes. The second effect is that this uncoordinated activity may give way to the development and production of similar equipment in more than one pMS, this having far reaching detrimental consequences to the EDTIB. This is because they are the seed for the duplication of production capabilities within the EDTIB that, when the number of units required by pMS or exports is small, may create unnecessary and wasteful overcapacities. This could only help to extend the life of inefficient companies in the sector, thus maintaining and EDTIB with low performance. The fact that Europe only spends 14% of its R&T budget on collaborative projects[97] indicates that there is still room for further improvements in this area.

3.4.1.2. EFFECTS ON FAIR COMPETITION

The selectivity of R&D aids may have a considerable effect on fair competition, because the beneficiary will achieve fundamental advantages in the development of defence equipment over his competitors that will affect trade conditions in the EDEM. This is particularly true in the European defence industry where, owing to budget limitations, only a single supplier will normally be financed for the product development and competition does not exist during the R&D phase. Furthermore, if open selection is not encouraged in the R&D award procedure, then a relevant market may be closed to other competitors wishing to bid.

The company which has been awarded the contract for the design and development of a defence equipment, provided this phase is successfully completed, is likely to become the undisputed leader and will be in the position of being the only provider of the product[98], pushing competitors out of the market

[96] Cf. page 42 of reference 15.

[97] Cf. bibliographical reference 10.

[98] It may be argued that because the development is fully paid by the government, reserving the design rights of the product, these advantages could also be available to other companies. However, in practice, transferring the production capability to

due to the sharp difference between the revenue prospects of the successful company and its competitors. After the aid award, the probability of success of rivals will be significantly reduced, or even disappear if the R&D costs are too high to be privately financed. Unsuccessful companies will no longer consider it profitable to participate in the innovation race and will try to grasp opportunities in other markets.

The newly developed product will be viewed uniformly as more attractive when it includes radical advances in performance. If development costs and the duration of the phase are high, they will prevent followers from entering the product market profitably. Furthermore, being the first producer, economies of learning by doing, with help to improve production processes and acquire efficiency earlier than competitors preserving the initial advantage. When defence R&D&I activity is very close to a market product, the resulting asymmetry between the awarded company and their unsuccessful rivals is likely to have a foreseeable impact on competition in the (future) market[99].

Finally when R&D is fully financed by the government, then the firm will receive internal benefits at no cost, such as know-how that may provide advantages for future activities in related defence products, exports, or civilian markets. This effect may be considered detrimental from a fair competition point of view, however so far it is inherent to Public aids for defence R&D. Still, the extent of the advantages achieved at no cost may depend on each case and no general rule can be stated.

3.4.1.2.1. AIDS FOR EQUIPMENT FOR NON-NATIONAL ARMED FORCES

R&D aids awarded for the development of defence equipment for export[100] or diverted for that purpose may provide advantages to the benefited industries in comparison to competitors in other countries, thereby creating adverse effects in trade conditions. Therefore fair competition in the EDEM is impaired when this kind of support differs greatly between them in type, size and value.

These aids may be very helpful for achieving success in foreign sales. They indirectly support the reinforcement of the EDTIB as long as additional incomes will help the company to sustain or expand development and production capabilities. Yet, if the revenues are diverted to other ends (e.g. higher share profits) the aid impact has to be deemed in some sense detrimental.

3.4.1.2.2. OTHER AIDS FOR SUPPORTING THE DEVELOPMENT OF THE PRODUCT

In addition to granting aids for the development of a product, extra aids can be granted in the form of products and services of the administration provided in preferential terms, free or at a value lower than the actually incurred cost plus a reasonable margin. Bearing in mind that the development is usually fully paid by the administration, it is indifferent that these extra costs are included within the whole R&D contract price, enabling the company to pay for these services provided by the administration, or the contract price excludes these costs and they are provided for free to the company.

Advantages would only appear if the company plans to sell the product abroad or receives this help when developing a defence product for export sale with its own funds. Only in this case, it could be argued that State aids are awarded. In such a case, if the costs of the services provided are paid and the difference

other companies is neither easy nor cheap, due to the difficulty of communicating all the implicit knowledge associated to the design. Furthermore, companies are seldom favourably disposed towards helping out other firms which have just beaten them out of a contract. No case has been found during the survey.

[99] See, for example, the case of the F-35 (JSF) Fighter Aircraft as substitute of the AV-8 Harrier.

[100] The study will only consider exports outside the EU, since these aids are forbidden inside the EU.

between that and the market price is low, the advantages gained and effects on trade conditions can be deemed marginal. Therefore no general rule can be stated and competitive advantages achieved will depend on the real size of the aid. However, effects on fair competition are certainly possible.

3.4.1.3. OTHER EFFECTS

Defence R&D aids may prevent or delay, in classified programmes, one of the main externalities they provide: namely the diffusion of innovation and know-how to the whole society. Yet, sometimes, these restrictions may be overcome by special MoD property right allowances to exploit the research results in civilian projects and to publish scientific and technical papers where classified information has been filtered out. This may be important in the case of defence R&D financed under EU rules since they prohibit this restriction[101].

3.4.2. AIDS FOR THE RECOVERING OF INDUSTRIES IN SPECIFIC SITUATIONS

These aids are provided for the rescue and restructuring of industries in specific situations where profits are negative due for example to mismanagement or a shrinking or stagnant demand. These aids can be very effective to address the structural problems industry is facing. Yet, the exit of inefficient companies is a normal part of the operation of the market and it cannot be accepted as the norm that all companies in difficulties are rescued by the State. Therefore, it must be justified by objectives of common interest such as social or regional policy considerations (e.g. employment problems created by the firm's going out of business, exacerbated with the effects on their suppliers), the desirability of maintaining a competitive market structure, or the protection of security interests.

3.4.2.1. EFFECTS ON INDUSTRIAL RESTRUCTURING

If the reduction of the European demand of certain defence products may suggest its downsizing and perhaps potential divestures and agreements with new partners to create a more streamline production structure, then the use of rescue and restructurings aids can be adequate in solving the underlying problem, softening the hardship of the restructuring process. The final result may be more sustainable industries, modernised, and with their structural problems solved, which will clearly have a positive impact on the EDTIB.

Aids to industrial restructuring are severely limited by the EU Commission for their potentially high distorting effects, and can only be provided under very strict conditions. These include: the one time / last time condition and other specific conditions attached to the authorisation of aid such as refraining from granting other types of aids to the recipient company during the restructuring period. Only based on the exception of Article 296 EC Treaty those conditions may be overcome.

The problem is that these aids, when only subject to national control, could not be effective to solve the structural problems of the company and delay the application of more radical but necessary measures such as downsizing and innovation to solve problems such as declining markets or technological obsolescence and enable the return to sustained profits once the aid ends. These aids can be detrimental, if they are given recurrently and mainly address the support of normal operations, since conditions for long term viability will never be met, while other necessary measures are not applied (e.g. such as merger of industrial assets not allowed for strategic reasons). The most undesirable scenario will be an aid that merely maintains the *statu quo*, postpones the inevitable and in the meantime shifts economic and social

[101] Cf. § 2.1 of the Community Framework for State aid for research and development and innovation (2006/C 323/01).

problems on to others, more efficient producers, or other pMS. Yet, without accruing any positive benefit to the EDTIB as a whole.

3.4.2.2. EFFECTS ON FAIR COMPETITION

Aids for rescue and recovery have relevant effects on fair competition, in particular if they are not awarded to solve a punctual situation, but are provided to an industry that is not able to achieve profits. The advantages received may discourage more efficient competitors (e.g. production aids that allow a lower market price) that may feel discriminated against and in the worst case may exit the market. Furthermore, aids may act as a disincentive to potential newcomers, thus providing an increased market power to the company having received the aid.

3.4.3. SUPPORT TO FOREIGN SALES

The main effect of the State support for foreign sales is a higher prospective to sell defence equipment in third countries. This will have a positive impact on the national defence industry and in the account of goods and services in the balance of payments. This support materialises in different practices that increase the sale success, but whose real efficiency and economic value is hard to measure due to the limited information available over this type of transactions.

Foreign sales are essential in the defence field, in particular for large and complex weapons systems. The economies of scale, scope and learning of large productions, where the unitary cost of the final product can be dramatically curtailed, are fundamental to maintain competitiveness and to recover the high non recurring costs associated with the research and development of new equipment or systems.

The general effects on fair competition are twofold: (a) the support can be a source of hidden or opaque Public aids if services provided by pMS are not paid for by the export companies according to the market value or (b) the amount of the Public aid may be highly unbalanced between pMS wanting to sell a similar product. The main problem here is not that pMS circumvent rules, but the current lack of rules to avert large distortions on competition and subsidy races in the export of defence products. For example, there is not a general agreement on maximum aid awarded (aid ceiling). The undesired effect is that companies use these aids to simply predate against competitors.

3.4.3.1. MARKETING ASSISTANCE

Marketing financial support includes assistance in defence exhibitions and marketing campaigns for promoting the national defence industry. While total aid for the whole industry can be considerable and differences between pMS may exist, the amount of the aid that each individual company may receive is small and therefore its effects on fair competition may be deemed limited.

The availability of cheap methods to announce company capabilities and products and the capability to access this information today from anywhere in the world today, means that this kind of aid does not provide substantial advantages, which may be deemed insurmountable to potential rivals and competitors.

3.4.3.2. PUBLIC RELATIONS

Public relations cover an essential role to gain access to high ranking and key public officers responsible for purchasing and contract awarding, to convince them of the benefits of buying certain equipment. While

the quality of the aid can be fundamental for achieving success and some nations may be better organised to provide this support effectively, the effect on fair competition can be considered limited, taking into account the overall economic cost of providing these aids.

3.4.3.3. Display and Operation by the Armed Forces of In-Service Materials

Another key step to successful exports is the display of the full capabilities of the product to be sold. While for certain equipments this step can be small and require only a limited number of resources, it can be considerable when the marketable product is a large system such as a C4ISR system, or a big platform such as an aircraft carrier, a fighter aircraft, or a tank. This may be particularly true if the demonstration requires the "*on-site*" showing of complex operational capabilities and battlefield proficiency such as gun firing. If aids for supporting this kind of demonstrations are high and very unbalanced between the different pMS whose industry bids for the supply contract, fair competition can be undermined.

3.4.3.4. Training of Customers Operators and Loan of Personnel

A mandatory requirement, when sophisticated systems are sold, is to provide training to customer operators and to loan military personnel to help the customer fluently manage the system. This support may take long periods of teaching, training and rehearsing with the delivered equipment such as the training of a ship crew. While companies have their own training teams, sometimes the right operational use of the system can only be demonstrated by the armed forces of the company's pMS.

The costs associated with this kind of support can be high. Given for free or at low costs these aids can provide advantages to the exporting company that receives this assistance in relation to other competitors, helping to offer a more attractive proposal in terms of cost and services provided by the customer. Once again fair competition can be undermined by this practice.

3.4.3.5. Export Credit Insurance

Export credit insurance is a widely used instrument for the export of any kind of goods and services, including defence products. It is used, because foreign trade may involve transactions of high value, which are usually financed through an export credit. The credit allows the seller to be paid as soon as the products are delivered and accepted, and the buyer is able to defer and distribute the payment in time through this instrument. For assuring that the buyer will not incur any delay or bankruptcy, the credit is insured. Due to the high risk associated with the operation, the premium to insure the credit is usually high and aids are granted by States in order to stimulate trade and commerce.

Export credit insurance has a very positive effect for the trade of defence products. It can be indispensable when the size of the sale is large and the buyer is a developing country, or where the risk of the operation may be high and the credit insurance can reach a high value. The impact on fair competition based on the abovementioned comments can be deemed small, if the existing level playing field on export credit insurance is respected by all pMS, the credit awarded does not largely differ (interest rate, loan duration), and the sale is fundamentally conditioned by a price / performance or price / quality ratio of the products and services offered.

3.4.3.6. Assistance to Procurement (Project Management and Technical Support Services)

For countries with a developing defence administration, other services may include the provision of assistance to the procurement process in terms of management of the acquisition and technical support. This may include the accounting of project expenditures, or the support to the test and evaluation phase.

The cost of this assistance varies depending on the type of sale. If there is a finished product which is well tested and requires few changes for the end customer, this assistance may be very limited. Otherwise, if the acquisition involves the delivery of sophisticated equipment and associated logistical support, or complex countertrade operations requiring extensive management, it can reach a relevant economic value. If these services, provided by the State, are awarded for free or at a very low cost, the playing field will be tilted in favour of the most aided exporter.

3.4.3.7. Rescheduling of Deliveries to National Armed Forces

The rescheduling of deliveries to national armed forces in order to give priority to other export commitments has two main effects:

- A positive effect since the delivery time is shorter and the delivery clauses of the export contract are observed, which may block the application of penalty clauses by the foreign purchasing country.
- A negative effect on the national armed forces that will suffer a delay in the product delivery, which may or may not be penalised, but may affect its performance. In time of peace, the effect can be small –for example, a smaller level of preparedness with the new system–, but in times of crisis or armed conflict, the system being critical, the success of the military operation can be jeopardised.

The effects of fair competition of this practice can be considered negligible having in mind that: (a) the aid amount, in terms of sanctions and penalties for not observing contract clauses, may be too low to have a tangible impact on trade conditions, (b) the influence on the award procedure is very small in most of the cases, unless conditions of urgency are determinant, in times of peace this is an unusual situation considering the traditional long term defence planning acquisition process.

3.4.3.8. Purchase of an Undesired System by the Armed Forces to Better Support a Foreign Sale

This case clearly breaks the principle of competition and "*best value for money*" and may impair the operational effectiveness of armed forces.

3.4.3.9. Tied Aids

In the case of defence products supplied using Official Development Assistance, where the aid is tied to the supply of defence products the main concern regarding open competition is that the companies that supply the product are chosen between domestic companies using non competitive practices. If product price can easily be raised due to the absence of a competitive bidding process and since the products are purchased by the State, a concealed State aid may exist providing further advantages to the awarded company.

3.4.3.10. EFFECTS ON INTERNATIONAL PROGRAMMES

The lack of a European unified perspective on export policies and procedures hampers the potential collaboration in European development projects. This is because pMS may feel insecure regarding the possibility of sales of the developed system to third countries in the future, due to sales restrictions or arms embargoes, the reason for which may be found in the different pMS Foreign Affairs policies.

3.4.4. OTHER EU RULED STATE AIDS

3.4.4.1. AIDS FOR EMPLOYMENT

The effects of these aids are mainly an increase in social cohesion and welfare. In practical terms, they have no effect on fair competition and the restructuring of the EDTIB. The fact that they are block exempt from notification indicates that the effects on trade conditions are deemed irrelevant.

3.4.4.2. TRAINING AIDS

The effects of these aids are the improvement of labour skills that may result in a rise in productivity and efficiency of defence companies helping to reinforce the EDTIB. However, while it provides advantages, the size of this kind of aid with respect to other types of aid and their availability to all kinds of undertakings, may result in a limited effect on fair competition. The fact that they are block exempt from notification indicates that their effects on trade conditions are generally deemed to be non significant.

3.4.4.3. AIDS FOR SMES

The effects of these aids are aimed at SMEs. They can be deemed positive to reinforce the EDTIB as they break barriers to create new businesses and technical and industrial capability networks. These aids are crucial to overcome initial pitfalls such as temporary cash constraints, difficulties to cover operating expenses or to launch the business venture.

Due to the small value of these aids, the small size of the potential target beneficiary company and its use bound to the early stages of the company life, their effects are likely to be fairly limited. The fact that they are block exempt of notification indicates that the effects on trade conditions are considered small and should not impair fair competition.

3.4.4.4. AIDS FOR RISK CAPITAL

The effects of these aids are highly relevant for start-up companies. They can be deemed positive in reinforcing the EDTIB and the creation of innovative companies with exceptional growth potential. Due to the small economic relevance of this type of aid, the size of the potential target beneficiary, and its use only authorised in the early stages, they should not have any relevant impact on fair competition when they follow the criteria set out in the Community guidelines for this kind of aid.

3.4.4.5. REGIONAL AIDS

The main effect of regional aids is the increase in social cohesion and welfare in selected European regions that have a standard of living below average European value. They are aimed at supporting initial investment of companies in these regions. Aid effects are generally positive in both private and social terms.

The only negative effect that may arise is not related to the aid itself, but with its use to create new facilities for supplying defence markets where a current overcapacity exists in Europe. If the industry is not able to obtain a market share, it may ultimately result in an non-profitable industry. This may create in the long term a further problem that may require complementary aids or non competitive acquisition procedures to nurture these facilities.

3.4.4.6. CLIMATE CHANGE AND OTHER ENVIRONMENTAL PROTECTION AIDS

The relevance of the public interest objective of these aids (the preservation of a clean environment), the horizontal nature of the aid, the similar environmental protection rules in the EU and the small direct impact on trade conditions or the production of defence equipment means that the direct effects on fair competition can be considered minimal. The GBER confirms this, exempting some categories of environmental aid from notification requirements.

3.4.5. EFFECTS OF SOME PRACTICES RELATED TO PUBLIC AIDS

3.4.5.1. AWARDING METHODS

3.4.5.1.1. STATE AIDS

Aids awarded on the basis of Community rules tend to have only a limited effect on fair competition, because they follow aid schemes approved by the EU Commission that are deemed compatible with internal market rules. Most EU aid schemes are horizontal or cross-industry, i.e. aids are open to the whole industry even defence. Apart from that, when aids exceed some threshold value or do not follow previously approved schemes, they are scrutinised by the Commission to verify their compatibility. Since the Commission takes a more positive stance on open selection, where transparency, objective and non-discriminatory criteria are used to grant aids, this kind of schemes is conducive to the selection of the best project to receive the aid. The main positive effect of this practice is that it permits an improved adjustment of the aid amount helping to better observe the principle of proportionality and avoid an excessive level of aid.

The same reasoning can be applied when defence R&D is granted through public procurement and standard rules on open and fair competition are followed and exemptions to the abovementioned principles are not invoked.

3.4.5.1.2. PUBLIC ASSISTANCE SUPPORTED BY ARTICLE 296 EC TREATY

Public assistance or aids awarded based on the lawful invocation of the derogation of Article 296 EC Treaty are only subject to national laws and specific rules and exemptions allowed for the protection of essential security interests. Therefore, they are not subject to the investigation power of the EU Commission.

This kind of assistance may be justified due to conditions requiring secrecy (no publication). Security of information can be ensured by inserting certain safeguards into the award procedure and the criteria to select candidates. Even a negotiated or direct award procedure may be used if necessary. Therefore the principles of openness, transparency and equal treatment, i.e. fair competition, may be compromised. These conditions may artificially limit the number of candidates and impede the tendering of valuable project proposals. Therefore, advantages of open competition are lost and may only be replaced by a successful negotiated procedure.

If the negotiation process occurs in a situation of bilateral monopoly, the bargaining power of the contracting authority to achieve "*best value for money*" can be considerably reduced. The adverse environment where the information that both sides manage is unbalanced may result in the granting of a disproportionate aid. Furthermore, the assistance may be granted through a "*mutual consent*" negotiation where budgets are more an expression of accounting, *ex post* indicators of project expenses, rather than determinants of the award. If the pricing is based in a cost-plus benefit method, it may reflect an effort by government to encourage the achievement of quality in R&D work, given that the end product is ill-defined and affording greater operating flexibility, especially for the introduction of design changes. Yet, the incentive of the beneficiary to search for efficiency may be compromised and the project may easily become derailed into a limbo of never quite completed objectives and cost overruns[102].

The lack of any ceiling on aid size or intensity may facilitate large distortions within the EDEM as far as the lack of aid proportion will give advantages to the beneficiary who receives the largest aid.

3.4.5.2. PUBLIC ASSISTANCE POTENTIALLY CONSIDERED STATE AID

State aids may also be granted in the form of preferential terms (lower cost or free). This may include, *inter alia*, the authorised use of certain State infrastructures as ports, bases or training fields for defence equipment test and evaluation, or the provision of export aids. Here the principle of market price should prevail for fixing the compensation value for the services provided and when market is absent the cost plus a reasonable profit. Otherwise, they should be considered State aids and may affect trade conditions and fair competition when practices between pMS largely differ in economic value. Unless they are required for protecting essential security interests, they shall be deemed detrimental to a fair and competitive EDEM.

3.4.5.3. MONITORING OF AID APPLICATION

If aid application is properly monitored there will be a greater chance in achieving the addressed objective of common interest. However, if the monitoring process is not properly carried out due to some of the reasons mentioned in chapter 2, aids may not be applied correctly. Furthermore, they may be wasted in the pursuit of other ends not directly related to the main objectives.

This may result in the loss of aid effectiveness and the potential need to provide further aids to achieve the desired objectives. For example, effects may result in protracted research and development periods not directly related to the scientific or technical uncertainty inherent to these activities, or recurrent restructuring aids to industries in constant difficulties. Careful monitoring is needed when the traceability of the aid cannot be guaranteed, in particular when the existence of a market failure is doubtful and there is suspicion that aid awarded is excessive and may be used to gain advantages in defence or other markets,

[102] Conversely, fixed cost contracts leave producers to bear the risk of failing to cover costs. This will encourage contractors to take action to reduce costs. For example, locking on to initial requirements, or making undesirable quality sacrifices, either by choosing unduly conservative technical approaches or by resisting product improvements which delay the start of production and neglecting possibilities which ultimately prove to have much greater military value.

and pursue anti-competitive goals, such as the (inefficient) production support in a market where demand is steadily shrinking.

3.5. GOVERNMENT TO GOVERNMENT SALES, PROCUREMENT THROUGH INTERNATIONAL ORGANIZATIONS OR COLLABORATIVE PROCUREMENTS

Government to government sales are usually complex agreements that try to meet several goals simultaneously in a reasonable and consistent way without running afoul of various constraints. Such goals may include the acquisition of new equipment for the armed forces; the participation of domestic industry in the equipment supply chain; the exchange of products supporting the export of (defence) equipment that would otherwise not be sold[103]; the transfer of technology, or new investments in advanced production capabilities. These agreements may be useful to counter foreign monopoly pricing through broad negotiations over some of the goals mentioned before. The offset award provides benefits to the national industry such as an opportunity to open or expand a production line, which may be accompanied by some research, development and innovation and the creation of new jobs. It can be useful to raise production load in industries that are experiencing a low demand period in their product markets. Should this opportunity be well spent strategically, it may enable the company to take a firm position in an existing or emerging market niche. If the production capability becomes successful and diversifies to offer other new defence products in the market when the offset deal or the collaborative programme ends, the EDTIB will be strengthened.

International collaborative procurement is a method to acquire sophisticated defence products such as advanced platforms and weapons, or Command and Control systems when national economic resources and industrial capabilities do not suffice to develop and produce new defence equipment on a national basis. Collaborative procurements allow resource savings and diminish the inefficient duplication of development and production capabilities for similar products, thus contributing to reinforcing the EDTIB. The main positive effects are:

- Improved equipment performance.
- Sharing of development costs.
- Economies of scale, scope and learning during the development, production and maintenance due to the higher quantities requested.
- Achievement of the critical mass for development based on funds and industrial capability.
- Higher interoperability and increased standardisation facilitating collaboration in international missions, thus favouring common foreign policy goals.
- Higher programme development stability due to peer pressure not to alter orders or withdraw.
- Technology transfer and share of work.

Still these positive effects may be abated when the collaborative programme does not develop a single design and national versions are allowed[104].

[103] A potential negative effect may occur if the seller country armed forces do not consider that the equipment received, as consequence of the offset deal, would increase their operational capabilities. Yet, this case seems difficult to occur in practice, having in mind that product evaluations are made during the negotiation phase.

[104] Yet these programmes are usually more expensive and slower than uni-national programmes of comparable scale and complexity as coordination problems soar. For example, the parliamentary approval process for programme budgets.

3.5.1. THE USE OF THE PRINCIPLE OF JUSTE RETOUR / FAIR RETURN

This principle, while benefitting pMS DTIB base in terms of supply contracts, technology transfer, etc, has adverse effects on fair and open competition in the EDEM, since the distribution of work is based on non-competitive practices. This principle may force the award of contracts to companies that may not be the most economically or technically competent supplier in their area from a European point of view in order to adhere to the agreed work share. The outcome may impair the efficiency of the development and supply chain in terms of cost[105], quality and delivery time.

However, these effects shall not be deemed general, since they heavily depend on the skills, structure, and labour and capital production costs of the selected company, which might not necessarily be worse. It may even occur that the prime contractor preferences are based on protected and inefficient domestic subcontractors, offsets exposing prime contractors to the abilities of higher-quality and more efficient foreign suppliers. In this context beneficial or detrimental effects of offsets become an empirical issue.

This principle may also imply the need to provide complementary subsidies to assure the availability of development or production capabilities that did not exist initially. Here the main risk is twofold. The first one is that the offset arrangement focuses on maintaining non competitive facilities and industrial structures rather than fostering modernization. The second is the creation of new facilities that create additional, but unnecessary, capacities in the EDTIB. If investments made are not amortised during programme life and these infrastructures do not have prospects of a profitable future, the long term effect could be negative working against a more rational EDTIB structure. This case may be more frequent than expected since infrastructures are usually specific for a programme and are not easily reusable for the development or production of any other kind of equipment. In such a case, additional support in the form of Public aids may be needed to transform or diversify the industry.

3.5.2. THE PARTICIPATING COMPANIES SELECTION PROCESS

3.5.2.1. EFFECTS ON INDUSTRIAL RESTRUCTURING

If direct compensations are agreed in foreign or government to government sales, some duplication of production capabilities at a lower tier of the supply chain is created. Should the demand of the defence product in question be soaring, then the overall effect will be positive. However, if the demand is stagnant or diminishing, as is generally the case in some European defence sectors, the agreement may create or preserve an undesired overcapacity for the EDTIB which, once the offset deal ends, would not help to enhance it.

Collaborative procurements can also give rise to some capability duplication in the process of distributing the work when a certain task is assigned to the industry of one pMS, when more efficient developers or suppliers exist in other, but the procurement procedure is based upon a geographically balanced distribution of work.

Reaching a certain threshold, these delays may threaten the continuity of the program alongside efficiency and international competitiveness. Cf. page 58 of bibliographical reference 22.

[105] It may hide some sort of subsidy to support the preference over imported goods.

3.5.2.2. EFFECTS ON FAIR COMPETITION

If as part of a compensation agreement between governments' sales, a company of the buyer's country is directly awarded a contract without competitive tendering, discrimination may appear. This is because, on the one hand, original supply chain providers are excluded[106]. And, on the other, because the domestic provider may also be selected on a non-competitive basis based on government or foreign supplier preferences, potentially discriminating other national suppliers. This may occur because the selection is normally made by the foreign company that is not subject to public procurement procedures, only government approval. Thus the chance that the principles of publicity and transparency and fair competition are not respected may be higher and the potential benefits of the open competition may be lost.

Similarly collaborative procurement may also have a negative effect on fair and open competition, when the partner selection is based on a contracting procedure, where EDEM companies belonging to countries not participating in the collaborative procurement are excluded and second-best solutions are chosen in order to preserve agreed quotas between participant countries.

3.6. INDUSTRY PRACTICES

3.6.1. EFFECTS OF LOBBYING

Lobbying practices may involve large expenses in time and resources. Yet, they have varying degrees of success in increasing rents coming from the administration. Here, the main objective of companies is to increase subsidies and maximise costs to raise the funds they receive from the government, instead of reducing costs and being more competitive[107]. These practices have more chance of success in non competitive markets.

As only one firm is rewarded, the resources spent by other firms are wasted. These resources could have been used to develop and produce goods that are valued by customers, thus creating a net social loss. These practices have a negative effect, being successful, on market efficiency and fair competition if their influence replaces rigorous trade-off analysis and return of investment calculations, leading to the approval of unnecessary projects for the armed forces and contract awards not based on rational and objective criteria. This case is known as *government failure* and may be favoured if the government decision capability is hindered by asymmetric information.

3.6.2. EFFECTS OF COLLUSION

The main effect of collusion practices is an increase in market power due to the elimination of competition that may help undertakings to limit technical development ,raise prices and therefore increase benefits. Effects of industrial collusion practices are therefore very similar to the effects of mergers and acquisitions when they create or increase a dominant position.

[106] This discrimination largely comes at the expense of lower-tier subcontractors rather than prime contractors. Politicians from regions suffering loss of employment view offsets as bestowing unfair advantage to foreign competitors, because they may be a source of job losses, erosion of the national DTIB, excessive technology transfer and resource waste.

[107] Cf. page 423 of reference 37.

3.6.3. Effects on Fair Competition in the Supply Chain

Fair competition in the supply chain can bring in theory benefits to the end user in terms of a better product with improved performance and lower costs. However, implementing open competition may have a cost related to the tendering and contracting process that may not be negligible. It may also increase risk and require tighter control if the awarded company is not a strategic allied partner of the prime contractor. Therefore, it may not offer the most efficient solution when these costs surpass the potential economic gains of a competitive tendering process.

Here the main issue is the market power that prime contractors enjoy and the potential closure of the market to qualified SMEs within the supply chain able to offer competitive and innovative solutions, such as for example establishing proprietorship interface standards. The use of EDA's CoBPSC or the pressure of the MoD to force competitive tendering to acquire main subsystems can avoid this negative effect. Yet, passing benefits to the end user will depend on conditions signed with the prime contractor (fixed price contract, cost reimbursement, etc).

3.6.4. Price Discrimination when Exporting Defence Products in the EDEM

Price discrimination, also popularly known as dumping, i.e. selling in foreign markets at a price below that practiced in domestic markets, can be deemed as an unfair practice when the price difference is not related to differences in production or distribution costs, and price is set deliberately below cost with the aim of predation against other foreign companies. Namely, the World Trade Organisation (WTO) condemns dumping practices (but does not prohibit). The Council Regulation 384/96 governs anti-dumping actions in exports. Within the internal market, Article 82 (a) EC Treaty prohibits this practice. It, may however be difficult to prove.

This practice is more easily achieved when the industry has some kind of domestic market power to agree a price higher than the marginal production cost, or when Public aids finance internal fixed costs of the research, development and the initial production of the system. When the product is sold in international markets these costs have been amortised and learning economies have been obtained. This allows for the reduction of equipment price and competition in international markets while price is still over the marginal production value. Yet, the limited profit will impede the reimbursement of part of the aids granted as repayable advances for producing the equipment.

As long as Public aids may nurture these exclusionary practices, it can be said that they affect trade conditions within the EU and therefore impair fair competition in the EDEM without pursuing any objective of common interest for the EDEM.

3.7. Other Policies and Practices which Impact on the Level Playing Field

3.7.1. Barriers to Intra-Community Sales

Barriers to intra-community sales of defence products tend to increase the national supply chain and limit the participation of foreign companies. These barriers are a hurdle to the consolidation of the EDEM and the formation of optimal supply chains within the EU.

If the perceived costs of getting the license are considered high due to delays, bureaucratic expenditures and uncertainty, negative effects on competition are likely since buyers would prefer, given the chance, to

acquire subsystems and components nationally whenever feasible, instead of opening up the tendering process to the most cost effective product available in the EDEM.

3.7.2. FRAMEWORK AGREEMENTS AND LONG TERM CONTRACTS

Framework agreements and long term contracts may favour the achievement of some economies such as lower transaction costs, a more flexible planning, and a more stable and a less risky operating environment, offering advantages to both the Public Administration and the contracted firm. The chance to achieve a global multiyear order for the supply of an equipment or service with an immediate and irreversible assurance of a certain number of units or workload, along with the regular flow of financing associated to it, assures the State a reduction of the global funding burden owing to a price reduction caused by a higher quantity of orders, productivity gains and improved flexibility.

Whereas these advantages are unquestionable, this practice tends to have negative effects on effective competition, create a more imperfect market and raise barriers to market access for rivals and competitors. If the next bidding cycle, where there is a chance of competition will take years to come, it may give an incentive to rivals and competitors to exit the market and seek earlier opportunities in neighbouring markets, thus increasing the market power of the awarded firm. The final outcome may be the crowding out of the market with firms able to offer competitive solutions.

On the other hand, once a long-term contract is granted, it will convert the signing firm into an effective monopoly supplier, due to the high cost of cancelling the agreement and finding a new supplier. Thus firms will seek to exploit their power and earn monopoly rents. As a result, contractors have incentives to economize and default on those contract parts, which are difficult (costly) to specify and enforce; and to profit from any contract change to renegotiate prices as other way to increase rents.

4. A CLASSIFICATION ACCORDING TO THE POTENTIAL DISTORTING EFFECTS

4.1. INTRODUCTION

This chapter classifies the distorting effects of the set of policies and practices of the pMS identified in the field of public ownership; foreign investment mergers and acquisitions, and Public / State aids in the defence industry, which have been described in chapter 2.

Distorting effects appear with the weakening or absence of a reasonable and workable competition that provides incentives to the industry to be efficient and to correctly allocate their resources. When competition is present, undertakings that behave likewise will be rewarded with a high market share and profits, whilst improved products and services will be delivered to the customers at the lowest possible price. Conversely, a low level or a lack of competition may drive firms towards complacency and inefficiency where resources are wasted, costs are not minimized and innovation and quality deteriorate. If prices can be easily rised, the payment of excessive wages and the absorption of a considerable outright waste may occur, while earnings appear to be a reasonable profit. The most undesirable scenario would be the formation of artificial markets, where undertakings survive or become wealthier because they are able to: (a) increase prices above market value due to market power, (b) be easily granted with a set of recurrent subsidies, or (c) waste Public aids to finance activities in areas that do not contribute to a real improvement of the EDTIB. Such a market will prevent an efficient allocation of resources and can push out more efficient rivals. The final outcome may be a market where:

- Prices of defence equipments are above marginal cost.
- Entry barriers to newcomers or foreign companies are higher.
- Higher budgets are required to finance acquisitions and support the industry.
- Industrial efficiency is lower and resources are improperly allocated.
- Products lack the desired level of innovation, quality, or performance.
- Market restructuring is prevented or delayed.
- The capability to compete in international defence markets is eroded.

It must be said that distortions in the defence field are inevitable when competition rules are compromised by the safeguarding of essential security interests of a pMS. This not being the case, generally, competitive or contestable markets[108] are the most dependable way to maintain industry vigour[109]; since they expose the suppliers to price and quality comparisons with competitors, thus allowing the elicitation of price concessions and improved industry performance, which ultimately benefits the EU society[110]. These markets may especially be needed in an era of expensive equipment, rising weapon costs and frozen or slowly growing defence budgets.

[108] Public tendering is not exempt from failures. Proposals may easily understate risk or cost to win the initial contract, resulting in the selection of overoptimistic solutions in performance, cost and time that, during the development or production phase demonstrate unfeasibility. Firms will make up the losses, arguing that specification changes, extras and technological risks are the source of the problem. The renegotiation process may allow a costs increase in an environment where options are reduced and may be non optimal.

[109] The promise of profits fortified by the ever present risk of loss is an outstanding incentive to keep vigour. Competition can encourage innovation, efficiency and favourable allocation of talent; stimulate people to greater effort; and increase the probability of technical success in the face of uncertainty. Moreover it can reduce cost to efficiency measures or by asking for less profit.

[110] Contestable markets in Europe require competition from abroad when there is a single national champion. If competition is not a credible threat, it will not impede complacency and proposals whose price does not approach marginal cost, if it is thought that the only aim is to make domestic suppliers more efficient, rather than to replace them. If foreign bidders are not awarded when their proposal is competitive, the attractiveness of local market to overseas suppliers will vanish.

However, if the protection of essential security interest exception is raised frequently, competition benefits will be lost as a result of the permitted restrictions on open selection. In such a case competition is replaced by negotiation. Here the asymmetry of information between the buyer and the seller can make the identification of the product price extremely difficult. At the time of contract signing, the firm is often better informed than the government about the likely costs of performing the work. The power of competitive tendering is that MoDs can conduct some type of auction to extract more rents (a better price) from the suppliers. If the winner takes all, a more competitive behaviour is induced.

4.1.1. THE PROBLEM OF CLASSIFYING DISTORTING EFFECTS

A rigid classification of distorting effects on market efficiency is not feasible. Distortion in the market is generally proportional to the magnitude of the transaction or operation, and is also influenced by the surrounding conditions that may differ largely and may dampen or multiply the distortive effect. For example, a large procurement contract where prices are set above market value will be more distortive than a small procurement where prices are only slightly higher, *ceteris paribus*, i.e. all other thinks being equal. Another example could be a small State aid for the recovery of a large industry in difficulty whose distortive effect may be unclear in comparison to a large aid awarded to an SME. Only an analysis on a case-by-case basis, may allow the determination of the true distortive effects of these policies and practices.

In public procurement, the distortion is proportional to the difference between the product or service contracted value and its market value, because the awarded company will benefit from higher rents without a real increase in the performance / price relationship of the equipment in question. In Public / State aids, the distortion will be higher when excessive aid is awarded since the same objective could have been achieved with a smaller aid. Otherwise awarded companies will benefit from additional rents through the part of the aid not spent in the project. In concentrations, distortion may appear as a consequence of the higher market share due to a fewer number of competitors and the facilitating of monopolistic or collusive practices of the undertakings that may help to raise the product price above its marginal cost and once again obtain higher rents without any substantial benefit to the customer.

One confirmation of the abovementioned argument can be seen in EU Commission rules to survey public procurement, concentrations and State aids. The procedures become increasingly complex and detailed in the same degree as the amount of the transaction and the size of market share of companies increases. Conversely, when the transaction value is low, the procedure simplifies or is even exempt as the "*de minimis*" rule for State aids.

Yet, to get a measure of the level of distortion of these practices in terms of loss of market efficiency – where prices are close to the marginal costs– solid information is required to examine the degree of competitiveness of the public procurement award procedures, and when competition is little or absent, the use of economic analysis to determine to what extent the tendering price exceeds market value. In the case of Public aids, an analysis is required to verify that they are proportional, do not provide undue advantages, and are aimed at solving a market failure. When aids are awarded based upon open selection procedures, the verification of the degree of openness, transparency and objective criteria of the awarding procedure should be performed to assure is kept to a minimum.

This problem is easier said than solved in practice, because it requires on the one hand transparency criteria for all pMS to report this kind of economic operations, that are likely lost if Article 296 EC Treaty is invoked. On the other hand, market values or a fair price cannot easily be determined for defence equipment due to its heterogeneity. Besides, cost analysis and calculations may be too expensive and time consuming, in many cases, to deserve the effort.

4.1.2. PRICES OF DEFENCE PRODUCTS ABOVE MARGINAL COST

The negative effects of reduced or lack of competition of some of the policies and practices identified in chapter 2 where suppliers can benefit from a dominant position, may be a price increase, in particular when the product to be supplied cannot easily be substituted as defence products are.

The negotiation of the price, when there is no competition, is influenced by the informational disadvantage of the contracting authority since firms are experts with private information on their technological and production possibilities, risks and costs. Transforming this adverse selection environment into a more favourable one is not easy –this situation is known in economic terms as adverse selection–. It requires that: (a) the company opens their accounting books and gives full access to the pricing methodology, (b) the gathering of benchmark information, too often unreliable and frequently non-existing, (c) technical assistance if Public Administration lacks enough expert resources to perform this work and (d) the capability to *ex-post* audit costs and profits of the awarded contract to verify that facts and assumptions regarding price estimates were correct. Apart from this, firms may still be in advantage since they know the amount of effort that they will devote to the work –this situation is known as moral hazard and refers to endogenous variables that are not always observed by the contracting authority–.

Bilateral monopoly bargaining between the monopsony government buyer and monopoly seller substitutes competition. It involves two '*sticking points*' namely the buyer's maximum price or willingness to pay and the firm's supply minimum supply price below which it will not undertake the work. Negotiation occurs when the maximum price exceeds the minimum supply price. Generally, in such negotiations, adverse selection enables the firm –even if its bargaining power is limited– to extract rents from the government buyer, and moral hazard allows the firm to take discretionary actions affecting its costs or the quality of its products. It such a case it is reasonable to expect some form of monopolistic behaviour in the form of higher prices, loss of cost discipline or general business complacency.

4.1.3. HIGHER ENTRY BARRIERS FOR NEWCOMERS OR FOREIGN COMPANIES

If Public / State aids or public procurement contracts are awarded recurrently to the same domestic or publicly owned companies, then newcomers and foreign companies can consider that there are insurmountable barriers to entry in the defence market, as it may be believed that these existing suppliers are preferred and therefore the costs to break this practice can be disproportionate to expected returns. The result will be the preservation of monopolistic and oligopolistic structures and a *de facto* fragmentation of the EDEM that will not consolidate. Such a scenario will influence strategic plans of companies that may prefer to expand business into other markets where entry seems easier.

4.1.4. EXTRA COST TO FINANCE ACQUISITIONS AND SUPPORT THE DEFENCE INDUSTRY

Extra cost, that may require higher taxes, can be the result of two combined effects:

- The price increase of defence products and services owing to feeble competition that results in industry inefficiencies and improper resource allocation, which forces an increase in the defence equipment acquisition budget that may ultimately be paid by society.
- The shadow costs required to finance Public aids in the defence sector in particular if they are excessive to the desired purpose or do not contribute to objectives of common interest and are wasted on activities that do not reinforce EDTIB capabilities.

As long as these higher expenditures have a better opportunity cost, i.e. can be used to support other more relevant societal objectives or may increase individual wealth, the result will be a decrease in general welfare.

4.1.5. IMPROPER ALLOCATION OF RESOURCES AND LOWER INDUSTRY EFFICIENCY

Lower industry efficiency may have two main causes. The first is that current practices may not offer sufficient incentives to adequately allocate resources as long as competitive pressure is low or non-existent and changes for optimising the development and production of defence equipment are not be perceived as peremptory. In such a case, companies may not exercise due diligence in controlling their costs and waste resources. Besides, if access to aids is not too difficult, inertia may reign[111].

Therefore, a healthy dose of competition in the EDEM would help to rationalise development and production capabilities and prevent the misallocation of resources. This may be reinforced by policies favouring defence industry concentrations as long as they do not create a dominant position that may significantly impede effective competition.

The second effect is that in an unconsolidated EDEM the production of specific equipment will be smaller and will impede the industry to reach the Minimum Efficiency Scale (MES) where production plants are able to minimize their long run average costs due to economies of scale, scope and learning that will allow the reduction of the unitary cost. This problem can be especially relevant for the production of large and complex products such as advanced platforms or C2-systems. A large and levelled playing field in the EDEM may helpfully raise efficiency when production can be enlarged to supply more than one pMS. This will allow a catch up to the superior performance of the US companies.

4.1.6. LACK OF EQUIPMENT INNOVATION, QUALITY, OR PERFORMANCE

When an undertaking has a dominant position in a market where providers of substitutive products are few or do not exist at all, the incentive to innovate, to raise product performance or to lower production cost, may be small. As a result product quality, performance or customer satisfaction may fall behind expectations. For example, if a company is the only one awarded with R&D aids, the incentives to innovate may be fewer knowing that there are no other competitors that can offer a product with a better design.

Lack of competition generally slows technological progress since companies will delay innovation as long as possible and advances will be driven by imitation of successful innovations achieved by up starting companies that may threaten the dominant position. Here the problem is that incentives to innovate are mainly originated by armed forces pressure (military arms race). In such a context additional enhancements may probably increase the equipment price as companies have to react in the short term and are less able to minimise costs.

[111] When prices are raised easily due to market power, aids are awarded easily, and discipline imposed by capital market relaxes, resources may be wasted. Examples of resource waste are: manager's allocation of perks (e.g. larger offices, hiring personnel to lighten their workloads, better expense accounts, etc.), indulgence in activities that privilege their career potential over efficiency, delay in distasteful actions (e.g. layoffs during periods of low activity, difficult or unpleasant cost reductions), purchase of materials and equipment at high prices, and hoarding of engineers or machines not required under current contracts but useful for commercial profits or for winning future contracts. Cf. Introduction of bibliographical reference 27.

4.1.7. PREVENTED OR DELAYED MARKET RESTRUCTURING

Market restructuring is a never ending activity where all stakeholders adapt their structures to optimise their performance. This may include investments and divestitures on development and production assets including a change of company ownership as well as mergers. If these operations are prevented based on the safeguarding of essential security interest and they have economic interest because of rationalization and some economies can be achieved, the outcome will be a less efficient industry whose products will likely be more expensive and with a lower quality or performance. Here, the protection of essential security interest will result in a higher cost to be paid by society.

If the EDEM does not consolidate and as a consequence the demand does not broaden, industrial restructuring will be discouraged, because there will not be sufficient incentives to concentrate through the buying, selling or merging of companies, due to a fragmented market where demand is too small to exploit potential economies.

4.1.8. LESS CAPABILITY TO COMPETE IN INTERNATIONAL DEFENCE MARKETS

The final outcome of the abovementioned distorting effects on the functioning of the EDEM, would be a decrease of the EDTIB performance, whose products and services will become less competitive in international markets reducing its export capability and the income received from other countries. Furthermore, the lack of specialisation and the duplication of similar capabilities may increase the dependence on non-European sources for key defence technologies and raise the need to import advanced defence products and components from abroad.

4.2. PUBLIC OWNERSHIP

Public ownership should not have any distortive effect on competition if the principle of neutrality (Article 295 EC Treaty) is fully respected. Publicly owned companies will prosper in the defence market as long as they are able to offer adequate solutions and competitive prices to the armed forces.

If publicly owned defence industry is adequately structured, well managed, profitable in the long term and the demand portfolio is sufficiently big, there is no need to intervene. Conversely, intervention is required when some of these conditions are not met and companies begin to obtain negative results. If the industry is considered strategic and their capabilities are to be preserved the common trend will be to protect the company. Solutions may involve direct awards of R&D, supplying contracts and, if needed, rescue and restructuring aids. If these practices are recurrent, the distortion would result in a market where potential competitors are crowded out, since they foresee the barriers to entry and success as too high[112]. This may result in the loss of potentially more innovative solutions with higher performance and the ability to improve the operational efficiency of the armed forces. On the other hand, the lack of competition will weaken the pressure to innovate and reduce costs since prices and conditions are negotiated in favourable conditions for the company, and they may result in a price higher than the marginal cost or excessive subsidies (see § 4.4 for a more detailed description). The distortive effect will manifest itself in higher rents for the publicly owned company without a real increase in the performance / price relationship of the equipment developed or supplied, or an excessive aid that might not be required to solve the market failure in question.

[112] Lack of friction between public and private companies has been mentioned during the survey. It may mean that there is an implicit market distribution, where private companies do not attempt to compete directly with publicly owned companies due not only to capability differences, but also to larger barriers raised by the government preference to publicly owned companies. This may confirm the crowding out effect already mentioned.

If these practices are perceived by the remaining industries forming part of the supply chain as a common feature, they may give the Public prime contractor a stronger market power, allowing the imposition of conditions for being integrated into its supply chain not necessarily related to competition and efficiency criteria. This may allow the extraction of rents from the supply chain for its own benefit, and not favour customers with improved or cheaper products.

4.3. FOREIGN INVESTMENTS, MERGERS AND ACQUISITIONS

The market of corporate ownership can be a good option in restructuring the EDTIB and achieving a more efficient allocation of resources. In the defence market, three restrictions may have a potential distorting effect, which are analysed in the following paragraphs.

4.3.1. NON AUTHORISED FOREIGN INVESTMENTS

Distortions of the corporate ownership market are created when foreign investments are not authorised. Two cases need to be distinguished. The first one is a simple share exchange where a current shareholder wants to sell their shares. If the investment is restricted or prohibited, the holder may sell his shares in the national market, losing some gains, if foreign bidders are willing to enter into the company and thus offering a better price. The second case could be if the company wants to diversify or expand its operations, and needs a capital increase through the emission of new shares. If foreign buyers are not permitted to bid and the operation is frustrated, the effect may be an increase in the costs as the company may need to finance its research, development or production capabilities. These capabilites may be impaired, since the financing may be too expensive, if the company turns out to the debt / bond market. This case may be uncommon, since denial will be motivated by the strategic nature of the company, the State being the most interested party in injecting new capital, hence avoiding a failed operation.

When foreign investment involves a takeover or a merger operation that results in a concentration of the industry, the following cases can be distinguished:

4.3.2. CONCENTRATIONS SUPPORTED BY ESSENTIAL SECURITY INTERESTS

Concentrations can, based on the invocation of Article 296 EC Treaty, argue that they are needed to safeguard essential security interests. Considering this to be the case, the principal problem is a potential increase in the dominant position of the merged organisation, with a larger market share and a lower number of suppliers in a relevant market, that may significantly impede effective competition, something that may be quite common for certain defence equipment where potential suppliers are few.

The main potential distortive effect will be an increasing ability to raise the price of products and services offered in the defence market. Still, the real distortive effect can only be measured through a comparison of similar product prices in other markets where competition exists. However, these markets may not exist in the defence field, or information about prices may not easily be obtained. In addition, heterogeneity can be serious enough to impede an accurate measure of the price difference, since products substantially differ in features and performance.

4.3.3. NON AUTHORISED CONCENTRATIONS BASED ON ESSENTIAL SECURITY INTEREST

Concentrations compatible with the internal market and making economic sense may not be authorised by governments based on the safeguarding of essential security interest[113]. In these cases, while autonomy is preserved, distortion is expressed as an opportunity cost due to the loss of economies of scale and scope and other efficiencies that are not passed on to the customer; and whose final outcome will be a lower performance of the EDTIB. It is complex to make an accurate measure of this opportunity cost.

An alternative solution to preserve the independence of key defence industries is the creation of joint ventures, a common practice in the EDTIB. However, these solutions are suboptimal because they have a limited impact on improving efficiency owing to the lack of complete integration that results in large economies. Here, there is also an opportunity cost that cannot be dismissed.

4.4. PUBLIC / STATE AIDS

The main distorting effect of Public / State aids occurs when they are inadequate in achieving the objective of common interest that the market fails to obtain; or the expected benefits do not outweigh its negative impact on competition. In the first case the aid is wasted uselessly, while in the second there is the risk that benefited undertakings achieve key advantages over their rivals or misuse it for predation, whilst goals achieved are meagre. In practice, measuring the opportunity cost of each case in economic terms may be quite difficult. Yet, the higher the aid awarded the greater distortion will exist, if any of the aforementioned conditions are met.

4.4.1. R&D AIDS

Competition in the innovation race in defence can be unbalanced with R&D aids due to the heavy impact on the outcome of future product market competition. Here two different kinds of aid can be distinguished: (a) Those awarded based upon R&D&I aid schemes of the EU, (b) R&D outsourced to defence companies through public procurement.

In the first case aids may be granted for fundamental and industrial research and experimental development projects, the latter being the most common in defence. The intensity of the aid does not cover the full costs of the project and companies will have to risk their own resources. Aid intensity diminishes as far as the project outcome is closer to being saleable in the market, since market failure becomes smaller. Tendering process is based on open selection rules, where the most advantageous proposal will be contract awarded. Both conditions mean that the distortive effects may be deemed low.

In the second case, the most common in defence, research and development is carried out on behalf of the MoD. Here, the main concern is that the award can give important advantages to win the production phase of the programme with a multiyear contract award for a large number of units, thus the future market structure is being shaped by the aid. If the award procedure is not open, transparent, non discriminatory and based upon objective criteria –a condition easily lost when the safeguard of essential security interest is invoked–, the selective nature of this kind of aid may create a relevant market distortion. This may be particularly important in Europe where budget generally restricts the awarding of this kind of aid to a single company. Moreover, the funding of a single R&D project will curtail the company incentive to invest its own resources to gain a better position when bidding for the production phase[114].

[113] Shareholders may also oppose a concentration.

[114] Since dual or multiple sources of supply for defence equipment may lead to cost inefficiency *vis a vis* with a sole source supply, production of defence equipment in Europe is usually awarded to a single company.

Apart from that, distortive effects will be expressed as the raising of the market entry barriers in projects where large R&D costs cannot be financed by companies. The fact that aids usually cover the full cost of the development and the final product or service is so close to commercialization, has a true distortive effect because the awarded company can achieve fundamental advantages (in terms of technological advance or in terms of timing) against rivals, whose sunken costs on R&D will not be recovered if they do not win the tendering of the production phase, thus crowding them out of the market or creating higher barriers to entry. On the other hand, the intensity of the aid provides advantages at no cost that may spill over into new developments, which may clearly discriminate rivals[115].

This support may also have a distortion risk if a true market failure is not addressed. This may be the case with aids awarded to large companies that enjoy good financing and its size reduces the problem of imperfect information regarding new technology and potential markets. These aids will be welfare reducing since they will not provide an incentive at all (the company will do the R&D irrespective of being granted with an aid), being a sheer windfall gain if the subsidised R&D activity will be profitable *per se*.

Finally, the excessive accumulation of R&D aids in a single undertaking can also be a potential source of distortion for two reasons. The first is the potential discrimination of rivals and competitors. Even if the aids are apparently unrelated, frequent aids to the same company may indicate that it enjoys the special favour of the national authorities, thereby discouraging potential entrants in a market. The second one is the potential growth in cash flow due to granted aids that may be used for other investments and activities not directly related to the aid (see also § 4.4.5).

4.4.2. RESCUE AND RESTRUCTURING AIDS

Rescue and restructuring aids, in particular for large companies, are among the most distortive types of Public aid. This is due to the size of the aid aimed only at a specific company that can be used to achieve real advantages –otherwise the company could exit the market– but with little impact on the reinforcement of the EDTIB. The danger is that these aids may be used to palliate current problems, such as the support of routine company activities rather than major structural problems. This will only help to maintain inefficient market structures –such as overcapacity, obsolescence (labour intensive and low technological level industries) or declining markets–, without emphasis on solving the root problem and on providing benefits outside the company. An indication of aid failure may be its recurrent use, showing the inability of the company in returning to long term profitability. This has been the case with many European aids in the past (e.g. shipyards).

Rescue and restructuring schemes are likely to have significant distortive effects as they soften the budget constraints of the recipient and may lead to overinvestment, reduced effort, misallocation of resources, lack of incentives to make appropriate (dynamic) business decisions and reduced incentives to innovate. In addition, competitors' incentives can also suffer, as their rewards are less correlated with their performance. Moreover, companies that may benefit from these aids, such as publicly owned companies, have a potential incentive to engage in wasteful lobbying activities.

The main distorting effect, therefore, is the wasteful subsidy expenditures of pMS to keep unprofitable defence companies afloat, while deferring necessary structural adjustments. Only the protection of essential security interest could justify the maintenance of these industries in difficulties. Yet, trade-off

[115] The extensive participation of companies in highly sophisticated military R&D projects helps train technical personnel in those companies and therefore increases general know-how. Military R&D also pays for basic equipment, such as highly specialized tools, that may later be used for commercial work. Even if a military R&D project does not lead to a specific technological advance ("*failed programmes*"), it may have commercial utility to the company that carried it out by informing the company of research "*dead-ends*" that should be avoided.

analysis to evaluate cheaper alternatives could have a real effect in reducing the associated social burden.

4.4.3. EXPORT PROMOTION AIDS

Export aids may create a true market distortion on competition if the commitment of the pMS to promote foreign sales is high in terms of resources, equipment, and other means and services –something that may not be uncommon in the international defence equipment market where a fierce competition exists– and large differences exists between pMS. Their value is determined by the amount of effort spent by the State to support the sale, minus the amount that beneficiaries have paid for the real economic value of the committed resources. Some aids may involve considerable resource waste when the export comprises large quantities of sophisticated equipment. If there is not an agreed playing field between pMS on this issue, this may give way to subsidy races, where the State that commits higher resources will have a better chance of success. Export aids with potential distortive effects are:

- R&D support approved for the development of a national product, but ultimately also used to support the development of a different product for international sale. These aids distort competition since they favour the beneficiary giving him export advantages in relation to other pMS.

- Excessive export credit insurance aids awarded to finance high risk operations, which may fail in the end (e.g. heavily indebted poor countries), and may force the covering of the unpaid loan with higher taxes and less citizens net income, while defence exporting companies become wealthier, without a clear increase in global profitability.

Distortion will also be expressed when export aids are only granted for the company's profit (and taxpayers' expense) and do not really address a clear increase in defence capabilities that will serve to achieve the objective of the common interest: the security of citizens.

In the case of defence products supplied using Official Development Assistance; the distortive effect depends on the amount of tied aids attached to the supply of defence products and their price differences with market value; the higher the value the greater the distortion. Yet, the size of these aids is not too large (total 13 billion € per year for the whole EU in 2000, for which the value of defence equipment is unknown), therefore the amount of defence products supplied may probably be low and focused on less sophisticated equipment [116].

4.4.4. HORIZONTAL AIDS

Cross-industry or horizontal aids aimed at tackling problems which may arise in any industry or region have less risk of distortion and a better track record of successful implementation. Most of them (training, employment, environmental protection) are offered to the industry as a whole, and every undertaking may tender for them in open, transparent and non discriminatory procedures. Furthermore, the size of these aids is generally small enough to give any relevant advantage to the industry that may influence trade conditions. Only accumulation of many aids on a single company can be deemed as potentially distorting. The fact that some of these aid schemes are block exempt from notification to the EU Commission confirms that they are considered to have a very low distortive effect. Once notified, the scrutiny capabilities of the EU Commission are another guarantee that these aids are analysed to verify they contribute to objectives of common interest and do not distort competition to an extent contrary to the common interest.

[116] Cf. www.actionaid.org/docs/competition_policy.pdf

4.4.5. MONITORING OF AID APPLICATION

Distortion on efficiency may occur when the awarded aid is hardly traceable and is used to cross-subsidise other activities such as current company operations, activities in other markets, or direct predation such as marketing, advertising, and lobbying, instead of addressing the objective of common interest. This possibility depends on the one hand on the control capability and the available resources that the monitoring organisation has, but on the other hand on the size and activities of the awarded company such as large conglomerates where the aid can be diluted more easily. Yet measuring the aid efficiency is not easy. From example in the case of R&D, the number of patents could be used as an indicator. However, innovations in defence are rarely patented, and therefore this value is not appropriate.

A slightly different question is the cross fertilization of know-how between the defence and civilian side of a company that may eventually occur when defence aids are received. This phenomenon can occur naturally and will provide advantages, still it is inherently unavoidable. However, the transfer of this gained knowledge into new civilian products is not simple or easy and may be restricted by aid awarding conditions to protect strategic innovations.

4.4.6. NEGATIVE EXTERNALITIES OF AIDS

There is an inherent discrimination on Public aids based upon the budgetary envelope allocated to aids by each pMS, as up until now some types of aids and assistance have no ceiling on size, intensity, or global value. The industries in those States with larger aid resources, in absolute and relative terms, have a higher chance of being favoured than those located in pMS with more limited ones. The case can be especially discriminatory in the R&D field, because it enables some pMS to finance the development of complete equipments, while this is impossible in others due to the large expenses required. PMS who lack these resources have to import the equipment and, in the best case, agree on some kind of offset to produce the equipment, or parts of it, under license.

If aid benefits are largely national, but the economic burden is carried to a large extent by other pMS, governments can have a powerful incentive to provide excessive aid or have a lenient attitude towards its final use[117]. States may try to protect (or expand) their domestic industry through subsidies and deter foreign competition from entering the market. In such a way they will shift profits from abroad to the home industry[118]. For example, aids for firms in difficulties that normally compete in the international defence equipment market (e.g. shipyards), will impose significant costs to similar industries operating in other pMS. The resulting trade distortion may lead to friction amongst national governments, to expensive subsidy races, and to retaliatory measures such as domestic market closure, which may slow down the consolidation of the EDEM and be a source of further inefficiency.

4.5. GOVERNMENT TO GOVERNMENT SALES, PROCUREMENT THROUGH INTERNATIONAL ORGANIZATIONS OR COLLABORATIVE PROCUREMENTS

Government to government sales that include compensation (offset) agreements and international procurement through collaborative programmes provide advantages to pMS. However, they may be a source of distortion on competition and efficiency from an EDEM point of view. This is due in the first place

[117] Cf. Commission decision of 11 March 2008 on a State aid scheme implemented by Italy for the aeronautical industry (C 61/03 (ex NN 42/01)).

[118] Here the best known case is Airbus (Europe) against Boeing (USA). However, other cases may be easily found in the defence sector within the EU.

to the principle of *juste retour* and geographically balanced distribution of work that may collide with open competition and an efficient allocation of resources forcing a partner selection not based on comparative advantages. Secondly, to the extra transaction cost and the additional time required for negotiating the offset agreements (always more complex than a simple tendering) and for reconciling and synchronising the interests and budgets of different nations, as well as the cost control of the intergovernmental sale or the collaborative procurement. Thirdly, to the classical inefficiencies associated with non-monetary exchange (barter trade). These costs may be considerable and increase the economic burden associated to this kind of procurement.

The selection of domestic companies in offset agreements that participate in the compensation contract related to government to government sales may be based on non competitive tendering or direct awarding to preferred companies. Market distortion will appear if there are other companies with similar capabilities able to offer the same kind of product or service to the MoD under better conditions such as higher quality, earlier delivery time or lower price. Some forms of mandatory offset obligations may inhibit the buyer's flexibility in negotiating advantageous deals and thereby resulting in inefficient procurement. Distortion in these cases should be measured through a counterfactual analysis when available options in an open competitive tendering process offer a more advantageous alternative. Further, offsets may result in lower efficiency if the selected company has to invest in new production capabilities and exhibits, being new, a lower productivity due to a lack in economies of learning in comparison with other companies available in the EDEM.

The same problem applies to international collaborative procurement. Distortion on competition will appear if other companies with good technical capabilities are excluded from the chance of making a proposal, because the international programme agency will only invite to tender companies of the pMS selected to participate in the collaborative procurement, and the granting process is guided by political and equity rather than efficiency criteria. The political market place and the associated bargaining process create constraints on the choice of the most efficient organizational arrangements and contractors. Once again, this practice may result in overcapacities if one of the nations has sufficient development and production capabilities, but work is finally assigned to another pMS lacking adequate knowledge, technological expertise and infrastructures.

4.6. RESUME

The policies and practices described may have distortive effects on the EDEM when pMS constantly derogate from the internal market and competition rules of the EC Treaty and derived legislation on public ownership; foreign investments, mergers, and acquisitions; or Public / State aids on the basis of Article 296 EC Treaty.

These distortive effects have to be accepted if pMS apply these policies and practices due to a genuine need to protect their essential security interests. The negative effects on the EDEM can only be minimised if the internal market and competition rules of the EC Treaty apply to most cases. This requires pMS to refrain from using and abusing special exemptions, most importantly Article 296 EC Treaty and related Community and national laws, when their use is not necessary or not motivated by essential security concerns. This includes the setting of unnecessary requirements favouring domestic suppliers and discriminating against competitors from other pMS. In an environment where Europe seeks to consolidate a common ESDP which includes a common armaments policy, these policies and practices have to be significantly reduced. They have to be the exception rather than the rule to ensure the consistency of European policies.

However, if pMS "*overuse*" Article 296 EC Treaty to allow non competitive award practices, then the chance of market distortion is likely to arise. Such market will be less efficient and will impede the proper

allocation of resources eroding EDTIB capabilities. The resulting lack of a level playing field will hamper the consolidation of the EDEM.

The decrease of the EDTIB performance is not easy to calculate due to the difficulty in identifying appropriate measurement patterns. An evident measure could be the comparison with the United States defence industrial base performance, using different economic ratios. However, the large resources invested in the US industry in the defence field and the different market structure on each side of the Atlantic make it difficult to perform these comparisons *ceteris paribus*. An indicator of real erosion of EDTIB capabilities could be the industry's inability to offer security guarantees or leading edge technologies that could be measured by a loss of the European market share in the international defence equipment market.

4.6.1. A CLASSIFICATION OF DISTORTIVE EFFECTS

In terms of market distortion, with all caveats in mind, the results of the preceding analysis can be resumed in the following points:

1. R&D assistance when the following conditions are met: large research projects, no open competition granting process, only a single project granted, and fully financed by the MoD, since the awarded organisation will gain a strong advantage in terms of better products, crowding out of the market potential competitors that may no longer find it profitable to participate in the innovation race. The R&D recipient firm of the aid will become an undisputed leader, in terms of technological advancement or timing negatively affecting rivals when competition is "*for the market*" rather than "*in the market*". Competition "*for the market"* is often associated with "*winner takes all*" competition implying that there is a sharp difference between the revenue prospects of the winner and the company that comes second. Ending with success, in particular in large systems procurements, the chance that other competitors offer a better proposal for the production phase of the system will certainly be slim. When the aid is closer to development than research, as many defence products are, the distortive effect may be greater. The outcome is the reduction or absence of competitors that may increase the market power of the beneficiary[119]. Finally, R&D Public assistance granted by pMS tends to favour the domestic industry, being geographically quite selective.

2. Rescue and restructuring aids as long as they soften company budget constraints allowing the current maintenance of inefficient business activities and structures, leading to unnecessary investments, decreasing efforts, misallocation of resources, or reducing incentives to make appropriate business decisions. Such aid application may not solve the structural problems of the industry –such as declining markets, overcapacity, obsolete production methods, lack of innovation, etc– to become profitable again. Moreover, some of these resources may be used in publicly owned companies to engage in wasteful lobbying activities. These aids can help to defer necessary adjustments, without providing any real benefit to the EDTIB.

3. Offset agreements and *juste retour* principles in collaborative procurements when they use non competitive practices to select potential candidates to participate in the programme and for contract awarding that are mainly conditioned by pre-agreed work share distribution and where efficiency may be a secondary goal. These practices can also be an incentive to the enlargement of industrial capacities that may result in duplication and overcapacities thus not contributing to the improvement of the global efficiency of the EDTIB.

[119] Cf. page 43 of bibliographical reference 15.

4. Public ownership if it favours the recurrent contracts award of public procurement or State aids, when other private companies exist in the market, which are willing and able to offer R&D or manufacturing competitive solutions, and they are not allowed to do so, due to the non competitive nature of the tendering process.

5. The pMS opposition to concentration of industries, when it is not really based upon the safeguarding of essential security interests, concentrations do not create a dominant position that may significantly impede effective competition, and relevant efficiency gains owing to the large size could be achieved.

The common factor of distortion in the first three points is the selectivity of the aids providing considerable advantages to the awarded company, with an impact on trade conditions and trust in the fairness on a competitive market. This environment may promote the use of defensive measures to protect national industry that may result in national market closures and the selection of less than optimal solutions from the EDTIB perspective.

5. CONCLUSIONS

5.1. A COMPLEX AND VERY SENSITIVE PROBLEM

As a first conclusion, it can be stated that the question of a level playing field in the EDEM seems a complex and very sensitive problem. The role of ownership and Public aids policies and practices is only one of the instruments of general national industrial policies concerning the supply of defence equipment to the armed forces. These policies and practices have a clear and relevant effect on the functioning of the EDEM, but its real impact is highly dependent on the context of each individual case such as market structure, industrial policy, available budget, and strategic security concerns. The concrete effects of these policies and practices may be detrimental to fair competition and defence restructuring at the European level.

Measuring the effects and the potential distortion capability of each policy and practice in economic terms becomes difficult. This is due to its variety, the lack of information and the need of counterfactual analysis based always on debateable assumptions. Furthermore, aggregating this information to measure total effects on the defence field is also complex due to the required accounting and statistical information which is neither available nor easy to collect. Therefore, the study presents only a first analysis of the problem without enough quantitative support. Some findings will require a deeper econometric analysis if a clearer and sharper picture is desired in order to facilitate the progress in the consolidation of a level playing field in the EDEM.

The survey has shown that the question of a level playing field is a very sensitive issue for all stakeholders, due to the large potential effects on company profits. Large companies perceive discrimination in comparison to small companies and *vice versa*. Small pMS complain that they do not have a large budget to develop their own defence equipment and have to rely on imports, while large pMS complain about having to negotiate offset agreements if they want to sell their equipment to smaller countries. Very large defence companies complain that the real problem is the lack of a Euro-Atlantic level playing field that avoids the large subsidies that the North American defence industry receives. The general perception is that competitors have considerable advantages, while they do not recognise their own potential advantages, or consider them to be irrelevant. Complaints about the scarce government support to the industry are also frequent in a sector where aids are certainly common. The lack of transparency and accurate information, which often pervades defence business, may be one of the reasons that breed this feeling of grievance when true advantages of rivals are hardly known. The scepticism on this issue is such that the discourse of "*a level playing field*" has been labelled in the survey as "*nice speeches*" or "*unfeasible*", due to the perception that market forces (competition) play a minor role compared to negotiation procedures where politics play a substantial role.

5.2. POLICIES AND PRACTICES STRONGLY ROOTED IN PMS CULTURE

These policies and practices are intertwined with pMS national defence, political, industrial, and social policies and are deeply rooted in their culture and conduct of the defence market agents. Questions like industrial policy, security of supply, trade compensations, regional welfare, and exports may have for pMS priority over fair competition rules and a level playing field in the EDEM.

Principles of sovereignty, autonomy and independence of defence production and logistical support assets for backing key operational capabilities is still seen as necessary by many pMS. The rigidities of these goals may imply that the industrial solution selected is second best from an EDTIB perspective.

5.3. ARTICLE 296 EC TREATY: THE BASIC LEGAL SUPPORT

Article 296 EC Treaty is the basic legal argument for the justification of these policies and practices of governments and their national industries. The frequent rather that the exceptional use of Article 296 EC Treaty by pMS to support their defence decisions concerning the acquisition of military equipment, ownership and Public aids and circumvent internal market rules may be detrimental to the consolidation of a level playing field where fair competition should be the rule. The right to decide what is an essential security interest in the sense of Article 296 EC Treaty and the lack of a notifying obligation for its use ,only allowing an *ex post* investigation always less effective than an *ex ante* investigation, reinforces the power of pMS to invoke this Article with only very limited restrictions.

Whereas the problem of the abuse of Article 296 EC Treaty can be addressed, it is not easy because there are many cases where legitimate security interests are so intermingled with other political, economical and societal interests that, in practice, it is often very difficult to ascertain its correct use. This applies to both the control functions of the EU Commission and the Courts under Article 298 EC Treaty. It seems that an agreed voluntary restraint of pMS to limit its use in practice, offers the best prospects to overcome this problem.

Nevertheless, even self restraint on the use of this Article will not prevent a tilted playing field, if pMS set out unnecessary conditions in competitive tendering that in practice will make the contract award, when there is a preferred supplier, very unlikely to other (foreign, private) bidders able to offer a good development or production proposal.

The EDA Code of Conduct signed by pMS establishes that nations should report to the Agency, in addition to public procurement, mergers and acquisitions or State aids supported by this Article. This requirement is important to analyse the real use of the Article and its impact on the level playing field. Yet, it seems that pMS are defaulting on this commitment, thus preventing further research.

5.4. PUBLIC OWNERSHIP NOT AN OBSOLETE PRACTICE

Public ownership or the preservation of a certain public control over defence companies does not seem to be an outdated practice as can be seen in the study results, France and Italy being the leading countries. Moreover, the four largest European defence companies (BAE Systems, EADS, Finmeccanica, Thales) have some kind of public ownership or control. Yet, it does not show any trend to increase, while in Central and Eastern European pMS the most plausible trend is to decrease. Public ownership concentrates on main suppliers and services which are considered strategic. Entire public ownership also seems to be mostly related to less profitable companies.

The main problem appears to be when pMS tend to favour defence publicly owned companies when planning and performing the procurement of goods and services for the armed forces and / or granting aids. While awarding reasons may be legitimate, the use of non-competitive practices for procuring or granting aids damages the consolidation of an open and competitive EDEM and unfolds the setting of a procurement price or aid value to a quantity that may be far away from "*best value for money*" criterion.

While statistics show that the awarding of equipment procurement contracts to publicly owned companies predominates, this trend may not be minor for private national champions, when foreign bidders are present.

5.5. Foreign Investment and Concentrations are Common in the EDTIB and Usually are not Opposed. Article 296 has Rarely been Invoked

Mergers and acquisitions are one of the principal methods to restructure markets; gain size to benefit from economies of scale, scope and learning; streamline or expand production and distribution capabilities as well as other synergies and efficiencies. This restructuring enables the defence industry to improve their competitiveness and to better exploit and benefit from the new opportunities that wider markets offer. This includes markets such as the European and the international defence equipment market. The size of US companies, the main competitor of EU industry in the international market, also suggests the increase in the EDTIB industrial concentration level to improve its performance.

The main concern here is to maintain competition as long as possible between suppliers so that they have incentives to allocate resources properly and search for efficiency, and transfer a part of these gains to consumers in terms of lower price, higher quality and performance, or innovation. The study has shown that concentrations of defence industries with a European dimension are common and are regularly scrutinised by EU competition authorities. Few cases of mergers have been resisted by the EU Commission, in spite of carrying out a deep analysis of the creation or increase of a dominant position in relevant markets.

Article 296 EC Treaty has been used in only a few cases to support these operations. Main concentrations appear in the fields of aeronautics and information and communications technologies. Explicit evidences of non authorised investments and mergers based on essential security interests has not been found, possibly due to the informal consultancies conducted beforehand, and because companies exercise self restraint if the operation is not welcomed by the government. However, cases have been found during the survey where opposition has appeared.

5.6. Security of Supply: A Source of Market Distortion

Whereas security of supply is a requirement necessary for the armed forces, its implementation through national suppliers may be a source of potential market distortion. This is because it will establish requirements in the tendering process such as local development or production, composition of shareholders, etc that will not easily be fulfilled by foreign or, in certain cases, by private companies.

Public procurement or State aid laws, and in the last instance Article 296 EC Treaty, are extremely powerful and flexible tools to tailor the competition level to filter only a small number of companies, even a single one, thus creating an environment where true intra-EU competition in the supply of defence products and services is low or even absent. As a secondary effect it may create unnecessary duplication and overcapacities instead of higher specialisation (centres of excellence), thus preventing a more efficient EDTIB.

While pMS conceive security of supply as an autonomous production capability that has to be preserved, there will be few opportunities within the EDTIB to attain synergies and economies of scale, since they will inevitably create greater interdependencies in the defence equipment production. In short, national independence is costly for pMS[120].

[120] Evidence shows that unitary production cost reduction from international competition typically range from 10% to 25% and gains from economies of scale and learning offer further savings from 15% to 25%. Cf. bibliographical reference 37 page 1172.

5.7. AIDS FOLLOWING OPEN SELECTION RULES HAVE LESS CHANCE OF DISTORTION

Regarding State aid, the defence sector, as any other kind of industries, benefits from horizontal (cross-industry) aids that are well defined by the EU. In general, these aids are beneficial and have very limited influence on trade conditions. In addition, the defence industry also receives Public assistance or aids mainly from the MoD. The most frequent is the use of public procurement to support the research and development of new defence equipment. The reasons for the potential distorting capability of the latter are:

- They are the largest type of aids in defence.
- They are very selective and tend to be of high value and intensity. Therefore, they may favour the granted undertaking and the production of certain products and thus affect trade conditions. This is particularly true in Europe where aids to more that one R&D project in order to increase competition for the award of the production phase cannot be made owing to budget constraints.
- The openness and transparency of the award procedure may be limited by the safeguarding of essential security interests, damaging on one side fair competition and losing on the other the benefits associated to it.
- They do not need to be reported to the EU Commission since they are usually supported by public procurement rules and are only subject to investigation by pMS national rules.
- The advantages they provide may crowd out private investment and other competitors from the defence market (winner takes all).
- Aids may create negative externalities (diseconomies) that are borne by other pMS, therefore the incentive for State to provide too generous aids, or have a lenient attitude toward its final use is a real risk.
- Uncoordinated pMS aids of this kind may result in suboptimal solutions to equipment modernisation (overcapacities, loss of synergies) at EU level.

Rescue and restructuring aids can also be considered potentially distortive, as they are usually very selective (*ad hoc*) and may create an artificial market where wasteful resources are spent, efficiency is not properly rewarded and its absence is not punished.

Export aids can be distortive due to the lack of any kind of harmonisation on size and award conditions between pMS. Yet, there may be great resistance of any export aid code of conduct, if it may curtail these aids at a time where domestic spending on arms is stagnant or falling.

Opaque aids such as prices above market value, non monetary aids and aids in preferential terms are not uncommon on the EDEM. They are very selective, non transparent and discretionally awarded, thus potentially impairing the level playing field. Yet, the real distorting effect requires the economic measurement of the aid, a burdensome task that may only indicate that its size and impact is rather low.

Two main problems are associated to aids. The first may be called the "*infant industry*" syndrome, where aids are recurrently awarded without success in creating a mature and long-term profitable defence industry. The second is any advantage achieved through Public aids can be used for other activities (e.g.

predatory or anticompetitive practices[121] not only in defence, but in other markets such as export or civilian markets) instead of addressing defence market failures or protecting national security interests. This will ultimately damage the mutual confidence of pMS in a level playing field in the EDEM and consequently impair the EDTIB performance.

5.8. Government to Government Sales and International Collaborative Programmes are Another Source of Distortion on Open and Fair Competition

Other activities like sales between governments and international collaborative programmes often do not follow competition rules; due to offset agreements and selection based on *juste retour* principles where more cost-efficient solutions may be balanced with other national industrial or economic objectives. The use of non competitive practices for the selection of participating companies is a source of market distortion, since it allows a negotiation procedure in which it will be more difficult to fix a price as low as a competitive tendering procedure. Thus, these practices may be a high-cost course of action in achieving whatever benefits they may bring. Governments' self-restraint on this issue seems complex in particular for large acquisition programmes, with a significant impact on the national economy and industry. These practices have been considered during the survey, by the majority of stakeholders of the larger defence producers pMS, as the main source of concern in achieving a level playing field.

5.9. Distortion of Practices based on the Economic Size and Specific Surrounding Conditions

A classification of distortive effects should focus in the first instance on the economic size of the procurement, concentration, or aid. The higher the transaction value, the greater the chance to distort market performance. While a qualitative analysis has been made of potential sources of distortion, the final impact on market and industry efficiency depends on particular practice application and surrounding conditions such as the industry structure. Therefore, distortion can only be evaluated on a case by case basis.

To evaluate the magnitude of the distortion, it is necessary to perform econometric studies of the ownership and Public aids policies and practices that allow the measurement of its size in pMS, as well as detailed analysis of conditions of most relevant and typical cases that may help to better understand its impact on the EDTIB efficiency and performance. Only a serious and objective analysis on this issue, rather than subjective judgements, may allow the beginning of a rational and informed debate to progress towards a playing field, seen by all stakeholders as reasonably levelled.

5.10. A Level Playing Field an Achievable, Yet Complex Goal

While there is a general consensus over the need to increase competition and efficiency in the EDEM in order to improve the performance of the EDTIB, tracing a roadmap to reach these objectives does not seem easy, having in mind that national goals may implement policies that conflict with these objectives. In such a case, powerful tools are at the disposal of governments to avert any negative impact in their national DTIB, yet delaying or even preventing, in such a way, more optimal EU scale solutions.

[121] For example, the aid received may allow the setting out of a sale value low enough to exclude competitors and reduce the number of suppliers in the market, increasing in the long term the market power of the company.

The agreement of common policies and rules between pMS is a requirement in achieving an EDEM where fair competition prevails, thus helping to obtain a more specialised, rational (less redundant) and efficient EDTIB. Finding and agreeing on adequate incentives, whether positive or negative, for all stakeholders to change their behaviour, abandon national polices with detrimental impact on these objectives and adhere to a common policy does not seem to be an easy task, when sacrifice in the form of adjustments and unemployment of labour and capital is implied. Yet they are required if the pace is to be accelerated and opportunities not lost. However they shall be designed with care in order to avoid making things worse. As an example a binding agreement to reduce Public aids and better target them using a more refined approach, whilst promoting incentives to increase cross-border competition should be studied, as these policies may largely improve industrial efficiency, innovativeness and product quality rather than the continuation of current practices.

It is evident that the consolidation of the EDEM will provide advantages to all pMS, but governments would also have to concede many of their traditional rights to protect defence industries and agree to transfer the regulatory authority to European institutions. Moreover, the consolidation will also create potential losers in the new market, something always difficult and painful to accept. The principles of social cohesion and solidarity among pMS (Article 2 EC Treaty) should be taken into account to help those facing difficulties. A smooth adaptation process to a single defence market in Europe may require a long transition period (adjustment takes time), a stepwise approach, and potentially the support of specific aids (adjustment have a cost). However, a hands-off policy on this issue seems to be self-defeating to the European defence industries.

Annex A. Survey Analysis.

INDEX

1. INTRODUCTION A.1
2. OWNERSHIP A.5
3. M&A AND FOREIGN INVESTMENTS A.7
4. PUBLIC AID A.13
5. ADDITIONAL ASPECTS A.19

LIST OF TABLES

Table A-1 Position in the Supply Chain of Companies who Answer the Questionnaire A.4
Table A-2 Main Area of Defence-Related Activities of Companies that Responded A.4
Table A-3 Main Companies' Response Regarding own Involvement in M&A/Foreign Investment A.11
Table A-4 Companies' Response to the Question if they have Received Public Aid in 2003-2007 ..... A.16
Table A-5 Benefits Received from Public Aids A.17

1. INTRODUCTION

1.1. RESPONSE RATES

The overall response rate was lower than expected (for details on the participants please cf. annex B).

There may be a number of reasons for this outcome:

- Companies that do not produce exclusively for the defence sector (or below a threshold that will vary individually) might not have felt the need to participate.
- There might be a reluctance to respond to any kind of survey and apply resources without a real incentive.
- As we have addressed a high number of companies in order to get a broad, rather than a narrow overview on the topic, it was impossible to increase the response rate by intensive personal contact with every single addressee and overcome with reasoning the mentioned reluctance to answer.
- Sensitivity regarding confidentiality (despite the inclusion of a disclaimer) may have been a de-motivating factor.
- Requested figures from some countries were not readily available; often the data (if recorded at all) is distributed among several authorities and there is no standard procedure to collect the information. This obviously increases the effort needed to give a comprehensive answer, thereby lowering the response rate.
- Obtaining direct e-mail address proved difficult. An effort was made by the Consortium to develop an address database (close to 2000 contacts) to overcome the lack of availability of direct points of contact, at an additional cost in both time and budget.

In most cases, the filled questionnaires have been returned as a PDF form attached to an e-mail; few questionnaires have been returned in another format (filled PDF forms that have been scanned and sent as an image file; questionnaires that have been printed and sent by paper mail or fax; text files).

1.1.1. DATA INTERPRETATION

The analysis concentrates on specific but representative answers.

When looking at statistical results given in this annex, one should always keep in mind the limitations given by the low response rate.

In order to give orientation for the significance of single results, answers given by the different stakeholders are supplemented by the percentage of EDA pMS total defence expenditure that is represented by the pMS providing an answer to single questions.

1.1.2. HOW WERE COMPANIES CONTACTED?

In agreement with the EDA, companies from every pMS were to be addressed, with no hard criteria concerning a selection from all companies belonging to the defence sector, since SMEs should also be addressed, as well as companies with a part of their business located in the civilian market.

It was decided to contact the companies directly because:

- Assistance from NDIAs varied greatly, e.g. with regards to the information they were prepared to share concerning Points of Contact
- It was not possible to ensure that all NDIAs would distribute the questionnaire as intended by the consortium. The objective was to receive answers that were not aggregated or biased.

In light of this, during phase I of the study, point of contact details were updated. This resulted in a list of more than 1800 companies; compiled from checked information provided by NDIAs and our own research. Any comprehensive contact list sent by an individual NDIA was integrated into the address list for the survey. If possible, the data was cross-checked against available data from further sources (data bases from the consortium, open available data etc).

In some countries, the member list provided by NDIAs included R&T organisations and/or non-profit organisations. They were surveyed, enabling a complementary view and were sent the standard questionnaire.

Additionally, using company lists per country as provided by NDIAs, resulted in addressing different companies/business units of a group separately, even if residing in the same country. To facilitate the detection of different perspectives - due to national differences or due to differences based on the supply chain position or similar - the different companies/business units of a group have been addressed individually.

1.2. National Competition Authorities

The survey was conducted among the 26 EDA pMS competition authorities. The main focus was to gain an overview of current national policies and practices regulating or at least influencing industrial M&A activities (respectively any kind of foreign investment in national undertakings) and to identify in particular whether specific regulations and practices exist for the national defence industry. Attempts were then made to obtain precise descriptions on M&A activities in the last five years (i.e. 2003 – 2007), the respective legal approval or disapproval (if necessary) and/or on the application of Article 296 EC Treaty including reasons for its application.

11 out of the 26 national competition authorities replied to the survey. National competition authorities from France, Italy, The Netherlands and the United Kingdom did not respond, thus limiting overview as well as the significance of the conclusions which could be drawn.

1.3. National Public Aid Authorities

Public aid authorities in all 26 pMS were surveyed to gain an overview on current national policies and practices concerning the awarding of Public aid, and to identify in particular whether specific regulations and practices exist for the national defence industry. An attempt was then made to obtain figures on granted public aids to the national defence industry in the last five years, i.e. 2003 – 2007, if those State aids for the defence sector were regularly notified to the EU Commission or if Article 296 EC Treaty had been applied (including the reasons and outcomes of its application).

11 out of the 26 national State aid authorities replied to the survey, but only five pMS sent back their questionnaire. Replies from the other six pMS highlighted that either (i) this survey is not relevant for them at all, because they have no defence industry (e.g. Malta), (ii) that the survey was forwarded to the MoD

(e.g. Portugal), or (iii) that the questioned authority had no relevant information (e.g. Cyprus). Among those who did not respond were France, Italy, and the United Kingdom.

1.4. Ministry of Defence Contact Points

The 26 EDA pMS MoDs have been addressed in order to gain an overview on the current level of national public ownership including an assessment and possible plans for change. The survey also focussed on aid provided for the defence industry, terms and conditions for procurement, export and government to government sales.

8 out of 26 MoDs replied to the survey, 2 further MoDs explicitly declined.

1.5. National Defence Industry Associations

NDIAS have been contacted with the objective of obtaining their assessment on the current influence of public ownership, M&A regulations and practices and Public aid in the defence sector; it was also requested whether NDIAs had received complaints by their members regarding those issues.

11 NDIAs responded, a twelfth NDIA forwarded the questionnaire in place of responding to it and 2 NDIAs have acknowledged the receipt of the questionnaire[1].

Even though the accompanying letter for NDIAs made clear that the appended questionnaire was meant for them, at least two NDIAs simply forwarded the questionnaire to their members without further call-back or notice to the consortium. In one case, this was found out by chance when a company called backed and mentioned the receipt of different questionnaires on the same subject. The other case was even less comprehensible: We first got a filled questionnaire by an NDIA representative. Two months later the same NDIA forwarded filled questionnaires it had received from their member companies to us – but the questionnaire format was the one tailored for NDIAs that they had already answered.

1.6. Defence Companies

The defence companies have been surveyed to explore their specific perspective regarding the current influence of public ownership, M&A regulations and practices and Public aid in the defence sector.

62 companies have sent a filled questionnaire; the data for 2 companies that answered in an interview only are also included here.

A further 3 companies have returned a filled questionnaire for NDIAs. Their answers have not been taken into account when specific answers to questions of the questionnaire for companies are concerned, because there are nearly no corresponding questions. Nevertheless, their answers have been regarded as additional comments and have been incorporated in point 5.

One company has forwarded a questionnaire to a subsidiary outside EDA pMS; this answer has not been taken into account.

[1] Additionally to addressing the NDIAs, an interview with several representatives from ASD has been conducted. The representatives pointed out that their contribution would be general comments (also to the study itself) rather than specific answers; the latter would have to be consolidated among all ASD members, and this was not deemed possible for this purpose. Thus, the answers given by ASD have been taken into account when summarising the received assessments.

The position in the supply chain of the companies who responded is as follows:

PRIME CONTRACTOR	21	33%
SUBSYSTEM SUPPLIER	12	19%
COMPONENT SUPPLIER	5	8%
MIXED	23	36%
NO ANSWER	3	5%

Table A-1 Position in the Supply Chain of Companies who Answer the Questionnaire

When asked, the main area of defence-related activity mentioned is “Ground based platforms” (10), “Sensors, electronics, avionics, vetronics, signal processing, EW” (9) and C4ISR (7) (cf. table below).

“Maintenance, repair, logistics and infrastructure”, were mentioned more frequently, but only as a lower-ranking area of defence-related activity.

AREA OF ACTIVITY / ORDERING ACCORDING TO IMPORTANCE	1ST	2ND	3RD	4TH	5TH	6TH	SUM
C4ISR	**7**	4	3	0	0	0	**14**
NCW, NEC	1	1	3	1	0	1	7
Sensors, electronics, avionics, vetronics, signal processing, EW	**9**	7	1	2	0	0	**19**
Air based platforms	4	4	2	1	1	2	14
Ground based platforms	**10**	6	2	2	1	1	**22**
Sea based platforms	3	0	1	2	0	0	6
Space based platform	0	0	0	0	0	1	1
Weapons and ammunition	5	0	3	0	2	0	10
Maintenance, repair, logistics and infrastructure	6	12	6	3	0	1	**28**
CBRN detection, protection and decontamination	3	0	1	1	0	0	5
Medical services	0	1	1	0	0	0	2
System soldier and personal equipment	1	1	2	2	1	1	8
Modelling & Simulation	3	1	2	2	1	0	9
Education, documentation, training	2	4	2	3	0	0	11
Environment and operational safety	0	1	1	0	0	0	2
Engineering and consultancy	3	3	2	4	2	2	**16**
	57	*45*	*32*	*23*	*8*	*4*	*169*

Table A-2 Main Area of Defence-Related Activities of Companies that Responded

Additionally to the areas given as pre-selection in the questionnaire, the following areas have been appointed by the questioned companies:

- Electronic and IT systems.
- Engineering in communications and IT.

- Naval communication systems and equipment.
- Stand-off missile systems.
- Ground based and sea based air defence systems.
- Surface to air missile systems.
- Anti-tank missile systems.
- Propulsion.
- Warheads.
- Laser weapon systems.
- New innovative missiles and missile systems.
- Ballistic protection components for land vehicles, aircrafts and naval vessels.
- Air based Systems.
- Centrifugal and positive displacement pumps for any vessel service.

2. OWNERSHIP

2.1. OWNERSHIP: MINISTRY OF DEFENCE CONTACT POINT RESPONSES

2.1.1. THE ROLE OF PUBLIC OWNERSHIP IN THE DEFENCE INDUSTRY

In order to assess the existence of public ownership of defence industry companies, the 26 MoDs were asked to specify the respective companies including information regarding the percentage of public ownership, the number of governmental representatives on their management boards and the reasons for that type of ownership.

Eight pMS provided answers (30.8 % of pMS, representing 46.9 % of total EDA pMS defence expenditure).

The indicated percentages of public ownership varied, with a range of 0 % to 100 %, while those indicating 0 % also reported “golden shares” in the respective companies. The number of government representatives on the management boards also varied and ranged from 0 to 6. Reasons for public ownership included, in order of mentioning:

- "National Security Interests",
- "Outsourcing of former military capabilities"
- "Security of supply"
- "Security of information"
- "Better control of final products"
- "Future maintenance
- "Test & Evaluation"
- "R&D"
- “Privatisation not finished”.

2.1.2. PRESERVATION OF PUBLIC OWNERSHIP IN THE DEFENCE INDUSTRY

When asked about their plans to maintain and/or to further attain public ownership in their defence industry, 25 % of those who responded answered that the respective MoDs do plan to maintain and/or further attain public ownership within their national defence industry. In one case, this initial statement was in fact retracted in a subsequent interview since the question had been misunderstood in the first reading.

The only reason for preserving public ownership in the defence industry, which could be disclosed, was "outsourcing of former military capabilities".

2.1.3. ABANDONING PUBLIC OWNERSHIP IN THE DEFENCE SECTOR

Furthermore, MoDs were asked to divulge their plans to abandon public ownership within their national defence industry. Two pMS confirmed that they have such plans, thus expecting an improvement in competitiveness of the companies concerned.

2.2. OWNERSHIP: NATIONAL DEFENCE INDUSTRY ASSOCIATION RESPONSES

All surveyed NDIAs were given the opportunity, to provide their general assessment on the impact of public ownership on a level playing field for the EDEM. From eight NDIAs such an assessment was provided (30.8 % of pMS, representing 61.5 % of total EDA pMS defence expenditure). Some NDIAs stated that public ownership has a positive impact, most however assessed otherwise.

Two countries recognised no impact of ownership on fair competition.

In one case the opinion here was rather indifferent: Advantages of public ownership were viewed with regards to greater flexibility and mobility of financial resources, in relation to the ability of publicly owned companies to act as capable coordinators in collaborative projects and with regard to consistent policies and direct coordination. A disadvantage, however, which was felt not only by this particular NDIA, was related to the awarding of State aids, which are often awarded directly to state owned companies.

One NDIA reported that publicly owned companies have strong advantages compared to private companies in the respective national defence industry. It was mentioned that in the last five years there was no single contract awarded under terms of competition.

Another NDIA reported that only low level competition exists in the sectors of the national defence industry which are dominated by publicly owned companies, as the latter mostly have a monopoly position in their specific sector. Further advantages reported for publicly owned companies included access to government information and international contacts between governments.

Several NDIAs mentioned that there is a general tendency to support publicly owned companies, some with regard to their own government, and some with regard to other pMS. It was also recognised that these practices present a hurdle in terms of a fair and competitive EDEM.

2.3. OWNERSHIP: DEFENCE COMPANY RESPONSES

16 companies from eight different countries indicated in their responses that they have some kind of public ownership or shareholding. Of these 16 companies with public shareholding, in three cases (and from three different countries) a golden share was said to be involved. Three companies with public shareholding replied that they have governmental representatives on the management board of their company.

Two other companies with a governmental representative on the management board are completely privately owned. Those five companies also provided the number of governmental representatives on the management board in relation to the overall number of directors, ranging from 14 % to 56 %. In four

cases, additional details on the position and voting rights of the governmental representatives were given. These details are highly divergent, hence no further conclusion could be drawn from this information.

With regard to the existence of specific framework agreements between undertakings and their governments for defence contracting (typically a case by case agreement on the basis of public procurement rules or national laws), 13 companies from seven countries confirmed such agreements. From those who confirmed, eight companies also gave details concerning the duration, pricing and specific contract content of the framework agreement.

In three of those cases, the duration was short (two to three years) compared to the other five cases (15 years to unlimited). Pricing is varied, ranging from less than one million € up to more than 65 million € per year.

One company directly commented on the impact of ownership structure:

"When a (fully or partially) publicly owned company competes (even in a third party market) with a private company, the appetite and attitude to risk can be very different. Typically, a publicly owned company may be able to price risk at a significantly lower level, because its balance sheet is supported by its public shareholder in a way that a privately owned company is not, allowing more competitive prices to be quoted."

2.4. Ownership: Summary

- *MoDs:*

  Based on the described data, no general trend regarding the future role of public ownership could be identified; most MoDs that answered intended to keep the *statu quo*. The most important reason for keeping public ownership in the defence industry seems to be "national security interests".

- *NDIAs:*

  Most of the NDIAs that gave an assessment stated a negative influence of public ownership in the defence industry on the goal of a fair defence market. However, there were also opinions reported that assessed the impact of public ownership as positive or at least indifferent.

- *Companies:*

  The majority of companies that responded gave no assessment concerning the influence of public ownership. Comments which were made expressed the view that a publicly owned company may enjoy competitive advantages, e.g. in terms of the readiness to assume risks or in terms of pricing, which might lead to a distortion of the market.

3. M&A and Foreign Investments

3.1. M&A and Foreign Investments: National Competition Authority Responses

Not surprisingly, almost all competition authorities who responded stated that currently national laws and regulations, which are relevant for M&A and other foreign investment activities, are in force. Only one country declared that there is no law or regulation in place regulating M&A or foreign investment.

Typically, there is a general competition law / law for the protection of competition etc. issued, sometimes including specific regulations regarding M&A and foreign investment activities. Those who responded claimed (by the majority) that the national competition and/or merger control rules are neutral regarding the economic sector, i.e. that no specific regulations are applicable to the defence industry sector, while some countries indicated that specific governmental rights could be applied should certain public interests like defence and national security be affected.

Identified regulations for control of M&A and foreign investments are, according to the survey:

- Provisions concerning inadmissible industrial concentrations in general (protection of competition),
- Provisions concerning specific "criteria of general interest" for the public assessment of industrial concentrations, other than protecting competition, e.g. national security and defence,
- Provisions concerning a mandatory preliminary public authorisation of mergers, if the turnover of the merging undertaking is higher than a defined national turnover threshold,
- Provisions that all mergers must be notified, or at least over certain thresholds,
- Specific provisions for financial institutions and property funds, if these obtain control of a company for a period less than a year (equal to the economic sector),
- General prohibition of foreign investments in economic activities guaranteeing national security and defence (including certain exemptions of the prohibition),
- Provisions concerning specific requirements for the access of undertakings to the national armaments industry.

Finally, no evidence was given, even in case defence-specific competition rules and regulations on M&A and foreign investments, that these regulations have been used in the last five years to deny any kind of foreign investment into the national defence sector. No evidence was provided by interviews and questionnaires that Article 296 EC Treaty had been applied during that period of activity. Yet EU web pages show that the Article was used.

It might be possible that just the existence of national M&A control rules may avert transnational M&A activities, if foreign undertakings can expect that their acquisition interest will most likely be prohibited, anticipating that a publicised failed acquisition attempt may have a negative influence on its market value (in particular if this undertaking is listed on the stock exchange).

3.2. M&A AND FOREIGN INVESTMENTS: MINISTRY OF DEFENCE CONTACT POINT RESPONSES

Few surveyed MoDs reported that there are no laws/regulations/policies related to M&A and / or foreign investment in force in their countries.

On the other hand, some other surveyed MoDs reported that such laws do exist. This corresponds in general with the statements of the competition authorities, which are in charge of these laws and regulations, although in the mentioned few cases a different interpretation of the existing laws and regulations and its provisions on M&A and foreign investment seems to be the case.

3.2.1. Assessment of the Impact of M&A and Foreign Investment on the Defence Industry with Regard to Support and Concern

All surveyed MoDs were given the opportunity to provide their opinions regarding M&A and foreign investment in the defence sector. An assessment was delivered by six MoDs (equates to 23.1 % of pMS, representing 44.6 % of total EDA pMS defence expenditure), of which five MoDs generally had a positive position supporting M&A and foreign investment in the defence sector.

Reasons stated for this positive attitude include (i) the strengthening of local industrial capabilities and capacities (including technology and intellectual assets), (ii) improvement of international activities and exports, and (iii) the creation of employment.

However, it was also reported that there would be concerns if national security issues were to be involved.

One MoD expressed a negative attitude towards M&As and foreign investment, reporting that there is no support for international investment in the respective domestic defence industry, while mergers among national defence companies are allowed.

3.2.2. Prevention of M&A or Foreign Investment

MoDs were also asked whether there have been any cases of M&A or foreign investment prevention in the last five years in their defence industry. There was a reply from eight MoDs to this question (30.8 % of all pMS, representing 46.9 % of total EDA pMS defence expenditure). None of these MoDs reported that this had occurred.

3.3. M&A and Foreign Investments: National Defence Industry Association Responses

3.3.1. Assessment of EU and National Regulations on M&A/Foreign Investment in the Defence Industry in Relation to the EDTIB

NDIAs were asked to provide an assessment of EU and national regulations on M&A in the defence sector. Seven NDIAs were willing to provide such an assessment (covering 31.5 % of pMS, representing 55.5 % of total EDA pMS defence expenditure). However, during analysis of the answers it became clear that there were various interpretations of this question.

The following overview of reported assessments could be compiled:

In one case it was mentioned that the high diversification level (i.e. many SMEs in many different sectors of the defence market and small scale of production) of the concerning national defence industry seems to be an obstacle for international mergers, as the latter are very rare in the respective country.

One NDIA mentioned that it is important to prevent investments from overseas, as this is felt to be very dangerous for the EDTIB. It was thought EU legislation in this interrelation is sometimes too binding. Another NDIA, however, also welcomed investments from outside EU. In two cases investments from inside EU was reported as difficult, due to its potential impact on other companies with regard to their competition ability. However, an advantage of foreign investment was presumed in terms of consolidation of the domestic defence industry.

It was also mentioned that it is important for the government to retain some control over the national defence industry, despite the possible advantages of foreign investment.

3.3.2. Failed Attempts of M&A/Foreign Investments in the Defence Industry Sector

NDIAs were asked to specify failed attempts of M&As or foreign investment as a consequence of security concerns which were reported to their association. Seven NDIAs provided an answer to this question (covering 27 % of pMS, representing 58.7 % of total EDA pMS defence expenditure). Two out of these seven reported a case of a prevention of an M&A attempt by a foreign company due to strategic issues. However, in one of these two cases the intervention had been unofficial and was not executed by the reporting country but by the country the company was based in. The second intervention was due to concerns over losing important know-how.

Another NDIA reported that it had received information on problems related to difficulties with creating facilities for national companies in other pMS.

3.4. M&A and Foreign Investments: Defence Company Responses

3.4.1. Company Involvement in M&A and Foreign Investments

30 % of companies surveyed reported that they had been involved with transnational M&A or foreign investment activities during the period of 2003 -2007.

	YES	NO	NO ANSWER	
AT		1		1
BE	1			1
BG		1		1
CY				0
CZ		3		3
DE	3	6	1	10
EE				0
ES	3	3	3	9
FI	1	2	1	4
FR	4	1		5
GR	1	1		2
HU		5		5
IE				0
IT	1			1
LT				0
LU				0
LV				0
MT				0

	YES	NO	NO ANSWER	
NL	1	4		5
PL		5		5
PT			1	1
RO		2		2
SE	1	1		2
SI				0
SK				0
UK	3	4		7
	19	39	6	64

Table A-3 Main Companies' Response Regarding own Involvement in M&A/Foreign Investment

36 distinct transnational M&A or foreign investment activities are described in the answer; in 28 cases, the respective company was the offerer, in the remaining eight cases the offeree. 30 of these activities had been successful, two failed, one was an ongoing process and for three cases no outcome was given.

3.4.2. RATIONALISATION IN CASE OF M&A

21 % of the companies above have experienced rationalisation in cases of mergers or takeovers, a further 58 % did not, and the remaining 21 % did not answer.

Maximization of synergies within the group included:

- Merger of sales and marketing across the organisation/common infrastructure,
- Elimination of duplicate under-utilised facilities,
- Creation of centres of excellence,
- Combining of head office/back office functions (treasury, finance, legal, communications etc),
- Combining of Business Development,
- Combining of Supply Chain, Procurement, Engineering Design,
- Increasing purchase leverage,
- Increasing manufacture volumes of common components; commonality of parts in design,
- System consolidation (information technologies, human resources, payroll, accounting),
- R&D spend – 'develop once, use twice'.

3.4.3. BENEFITS OF M&A

Reported benefits accompanying M&A or foreign investment included:

- *Market position:*
  - Expansion to new markets,
  - Cooperation with a strong partner with international standing,
  - Company growth and profitable product.

- *Product/portfolio:*
  - Increase of product offering,
  - New product offering combining technology.
- *Synergies/efficiency:*
  - Maximizations of synergies between the new and existing capabilities and facilities, their volumes and natures depending on the kind of activities impacted,
  - Engineering expertise in house reducing subcontracting.
- *Stability:*
  - Opportunities for cross-selling systems and services,
  - Longer term stability that allows the pursuit of larger deals (secondary effect due to global market position),
  - Assurance of key technology,
  - Consolidation of the industry.

The expansion to new markets was mentioned most frequently; in one case, it was explicitly limited to "mainland Europe", in two other cases, the "global market" was targeted. All other benefits were mentioned by one or two companies.

3.4.4. FUTURE PLANS

19 % of these companies also disclosed respective future plans.

The reaction to the question tackling the details of planned future transnational M&A and/or foreign investment activity was diverse; some companies stated that the answer relates to information that is too sensitive to be divulged. Some companies, however, provided sufficient material, and some answered by stating that the situation is under constant review.

3.5. M&A AND FOREIGN INVESTMENTS: SUMMARY

- *MoDs:*

  The surveyed MoDs expressed support for activities related to M&A and/or foreign investment, and reported no prevention of M&A and/or foreign investment in the defence industry.

- *NDIAs:*

  M&A and/or foreign investment (especially when originating outside the EU) were seen as having a negative impact on the achievement of a level playing field. NDIAs also reported failed attempts of M&A and/or foreign investment (cf. § 3.2.2).

- *National competition authorities:*

  The majority of the responding authorities claimed that the national competition and/or merger control rules are neutral regarding the economic sector, while some countries stated that should certain public interests like defence and national security be affected, specific governmental rights could be applied.

- *Companies:*

  In several countries, M&As (in the defence sector) have to be approved by the respective government, but in only one case in recent years has this principle been applied.

4. PUBLIC AID

4.1. PUBLIC AID: MOD INFORMATION

4.1.1. PUBLIC AID TOTALS

MoDs were asked to disclose the amount of Public aids provided to national defence industries in the different pMS order to carry out assessment and analysis (questionnaire for MoD NADs, question 6). 8 MoDs (30.8 % of pMS, 46.9 % of pMS total defence expenditure) provided response of various depths.

6 MoDs reported that no Public aid for their defence industry had been provided by the MoD in the last five years. However, it is not clear whether the different MoDs share a common understanding of the definition of “Public aid”. There are for example cases where R&T/R&D aids or regional assistances are not seen as Public aids. Other MoDs describe Public aid for the defence industry as not differing from Public aid given in other industries and therefore regard Public aid for defence industry as nil. I.e. the answer “no Public aid” does not exclude that, actually, Public aids are provided.

Only 2 MoDs (7.7 % of pMS, 1.5 % of pMS total defence expenditure) were willing to provide precise budget data. One MoD indicated that Public aids awarded for R&D were in the range of 23-28 000 000 € per year in the last five years (which was, however, far less than R&D aid for civil purposes in the respective country), another MoD reported 6-9 000 000 € p. a. of awarded R&D aid for the last two years.

A lack of provided data by the various MoDs makes the drawing of any general conclusions, in terms of Public aid totals, difficult.

When information was requested regarding national regulations relating to public procurement, State aid, respective awarding criteria and monitoring, responses were varied. Two MoDs stated that there are no regulations or the like in their countries. One MoD stated that there is no support for defence purposes while another described its awarding process for R&D aids. References to the respective national laws or regulations were provided by some (but not all) countries surveyed (cf. also § 2.6 of the main document of the study).

4.1.2. BENEFICIARIES OF PUBLIC AID PROVIDED BY MODS

6 MoDs delivered a list of their top suppliers in 2007 (varying from a top 7 to a top 10 supplier list). 4 of those MoD also provided figures; the average quantity procured ranges from 3 000 000 € to more than 300 000 000 € per top 10 supplier per year.

MoDs were also asked to provide a list of the top ten beneficiary companies of Public aids in the defence sector (questionnaire for MoD NADs, question 8). The same 2 MoDs (7.7 % of pMS, 1.5 % of pMS total defence expenditure) already willing to provide amounts of Public aid in the last years (cf. § 4.1.1), provided information on this question.

Mean amount ± standard deviation of Public aids (per top ten beneficiary company) in these countries was 500.000 € ± 283.000 € for one country and 647.000 € ± 321.000 € (R&D funding) for the other country. Only in one case (1 of 31 different companies) a company is on both the top beneficiary and top supplier list. This company is also the only company that mentioned public ownership (both pMS list two national companies with public ownership). The data base is not sufficient to reach a conclusion as to whether a general correlation between ownership and Public aid can be confirmed or excluded.

4.1.3. Defence Industry Concerns Relating to the MoD Awarding of Public Aid in the Last Five Years

None of the defence industry companies surveyed who provided an answer made complaints to MoDs in relation to the awarding of Public aids in the last 5 years.

When asked whether they received complaints from defence industry companies regarding the awarding of Public aid in the last five years, 7 MoD (27 % of pMS, 46.5 % of pMS total defence expenditure) provided an answer. All of these 7 answers were negative, i.e. there were no complaints from industry concerning the awarding of Public aid in the last five years (cf. question as answered by NDIAs; however, note that composition of countries differed partly between surveyed MoDs and NDIAs).

4.2. Public Aid: National Defence Industries Association Responses

4.2.1. Main Aggregates of Public Aid in the Defence Sector in the Last Five Years as Given by NDIAs

Information about Public aid given to the defence industry in the last five years was also gathered (questionnaire for NDIAs, question 5a & b). Seven NDIAs provided an answer (27 % of pMS, 58.7 % of pMS total defence expenditure). Five NDIAs answered that there is “no information available” pertaining this point, two NDIAs could provide information on this issue. In one case it was reported that, in general, arms export receive as much aid as exports of other industry sectors (e.g. assistance to establish international collaboration projects, assistance in developing MoUs etc.). The other NDIA stated that there were Public aids for SMEs of 45 000 € in 2007.

4.2.2. Complaints from Industry Regarding the Awarding of Public Aid in the Last Five Years as Given by NDIAs

When NDIAs were requested to provide details of any complaints received from industry regarding the awarding of Public aid (questionnaire for NDIAs, question 6a/b), seven NDIAs provided an answer (27 % of pMS, 58.7 % of pMS total defence expenditure), of which two answers reported no complaints from their national industry (cf. complaints from defence industry regarding the awarding of Public aids as given by MoDs; however, note that composition of countries differed partly between surveyed MoDs and NDIAs).

Of those complaints made, the most frequent were:

- preferential treatment of public owned companies (direct awarding of Public aid, insufficient amounts of Public aid) and
- Public aid practices in other countries (especially in the USA).

Another complaint mentioned is the awarding of Public aid for the development of nuclear power ships, which was approved at the expense of Public R&D aid for the development of conventional ships.

4.2.3. Assessment of EU and National Policies and Practices on Public Aid in Order to Support/Prevent a "Level Playing Field" by NDIAs

8 NDIAs (30.8 % of pMS, 61.5 % of pMS total defence expenditure) provided a statement detailing their perspectives on EU and national policies and practices concerning Public aid and its impact on the objective of achieving a "level playing field" (questionnaire for NDIAs, question 4).

The analysis of the prevalent opinion reveals no clear picture. Answers range from being indifferent to positive or negative.

The following negative national practices were reported to NDIAs:

- Too little R&D aids awarded to SMEs, weakening their competitiveness.
- A lack of a preparatory (supporting) phase for SMEs in order to enhance competitiveness.
- The ambitions of governments of countries with large defence companies to introduce rights for the government to invest in new R&T in order to remain capable in competing with US defence industry.

The negative practices at EU level were described as being related to an unbalanced market situation due to countries with a strong GDP resulting in high levels of Public aid, which, additionally, accumulated over the years.

This situation created a market characterised by some dominant defence companies and a disadvantaged sector in countries with a smaller GDP.

It was further mentioned that common EU rules, accompanied by common definitions, regulating Public aid could help to improve the "level playing field". The EDA EBB was seen as a good step in the right direction.

4.3. Public Aid: National Public Aid Authority Responses

In particular the expected summary of the figures of Public aid granted to the national defence industries could not be compiled, due to a lack of relevant data. Any sporadic data given related to R&D&I aid, highlighting that these types of aid cannot be seen strictly as State aid in the sense of Article 87 (1) EC Treaty.

The pMS that provided the above data declared that they do not have specific aid schemes for their national defence industry.[2]

[2] In this context, it has to be mentioned that a scheme for direct R&D grants for the defence sector in the Czech Republic has been approved by the EU Commission (case number N543 / 2007).

4.4. PUBLIC AID: DEFENCE COMPANY RESPONSES

4.4.1. NUMBER OF COMPANIES THAT HAVE RECEIVED PUBLIC AID

16 of 64 companies (25 %) that responded to the survey stated that they have received Public aid during the period in question (2003-2007; questionnaire for companies, question number 5); 43 companies (67 %) answered that they have not received any Public aid during this period; the remaining 5 companies (8 %) did not provide an answer to this question.

	YES	NO	NO ANSWER	
AT		1		1
BE	1	1		2
BG				0
CY				0
CZ	2	1		3
DE	1	9		10
EE				0
ES	3	4	2	9
FI		3	1	4
FR	2	2	1	5
GR		2		2
HU				0
IE				0
IT	1	5		6
LT				0
LU				0
LV				0
MT				0
NL	2	2	1	5
PL	2	3		5
PT		1		1
RO		2		2
SE		2		2
SI				0
SK				0
UK	2	5		7
	16	43	5	64

Table A-4 Companies' Response to the Question if they have Received Public Aid in 2003-2007

4.4.2. BENEFITS RECEIVED FROM PUBLIC AID

Main benefits gained as a direct result of Public aids are categorized below (question number 6 of the questionnaire for companies). The most frequently given answers to the question of benefits resulting from receiving Public aid can be subsumed in the three categories (as exemplary included in the question). Figures on the right hand side indicate frequency of mentioning by single companies:

MORE INNOVATION	8
IMPROVED MARKET POSITION (ON THE NATIONAL LEVEL: 1, NO SPECIFICATION: 4)	5
HIGHER EFFICIENCY	3
INCREASED LEVELS OF TECHNOLOGY INVESTMENT	1
REDUCTION IN THE COST OF INNOVATION	1
ACCESS TO DEVELOPMENT TOOLS AND TESTING CAPABILITIES	1

Table A-5 Benefits Received from Public Aids

4.4.3. BIDDING FOR STATE AID IN FOREIGN EDA PMS AND POSSIBLE DISCRIMINATION

Bidding for Public aid in another EDA pMS has been practised by 3 companies (5%) who responded to the survey; 55 companies (86%) reported that they had never bid in another EDA pMS for Public aid, and 6 companies (9%) did not answer this (questionnaire for companies, question 7).

All 3 companies (5 %) that stated to have made bids for State aid in other EDA pMS answered that they had experienced no discrimination during their bidding process.

4 companies reported that they had experienced unfair treatment when bidding for foreign procurement contracts (questionnaire for companies, question 8b).

The reasons given for this included (questionnaire for companies, question 8c):

- Competition with companies that had stronger lobbying capabilities.
- R&T contracts being in general awarded to country based industries.
- Protection of the (national) defence equipment market by favouring national defence industry.

13 companies (20 %) reported that they had not experienced unfair treatment when bidding for foreign procurement contracts, and the majority of companies (47 companies; 73 %) that responded to this survey did not answer this question.

One company reported that it had raised its complaints on aid or procurement in Court, although the same company reported that this had not affected their continuance of business activity in the corresponding market sector (questionnaire for companies, question 8c/d).

In not responding to this question, that does not mean that no problem is experienced. This is underlined by the fact that three companies that have not been among the 4 with a positive answer to question 8b gave additional comments that suggest a variance of problems encountered:

- “Always subtle barrier to avoid that a foreign company sells their equipment in other Member States when national preferences are other.”

- "A practice identified is that products are sold with a higher price to the Member State while for foreign sale the price is considerably lowered (a kind of dumping or hidden State aid)."
- "More dangerous is the practice of corruption or bribery in international sales."
- "The large expenditure of some countries in nuclear propelled ships is a question of high concern, because this research is outside any control and can be used also to improve conventional propelled ships. These advantages can be used to predate against other shipyards, which do not enjoy these aids."

4.4.4. *Further Remarks*

The definition of "State aid" has been interpreted in various ways:

- Most companies did not comment.
- Several companies stated that they did not count R&T aid as State aid, whereas others used the predefined sub-selection (R&T&I) for State aid without complaint or comment.
- Several companies from one country replied to all State aid related questions with the comment that according to EC Treaty Articles 87-89 there are no "State aids" for the defence activity in Member States of the EU.

Additionally, it was remarked that dual use nature of many products might indirectly lead to market distortion, as - due to the large cross-fertilization between the two areas - civilian or defence aids can generate externalities in the other area. Companies with a smaller percentage of military activity experience a disadvantage in comparison to other defence companies that "may even use Article 296 to increase aids".

4.5. Public Aid/State Aid/Subsidies: Summary

- *MoDs:*

  From the available data, no general conclusion pertaining amounts of provided Public aids can be drawn. MoDs reported no complaints from industry regarding the awarding of Public aid.

- *NDIAs:*

  Neither can a general conclusion pertaining amounts of provided Public aids be drawn based on the available data. NDIAs did however report complaints from national industry regarding the awarding of Public aid (cf. § 4.1.3; however, note that composition of countries differed partly between surveyed MoDs and NDIAs).

  Prevalent assessment of NDIAs pertaining to the role of public aid for a "level playing field" ranged from positive to indifferent and negative.

- *Companies:*

  The assessment of the effect of received Public aid is, not surprisingly, deemed positive, with the main effects of increasing the innovation potential and improving the market position. Concerning the potential distorting effect regarding a European level playing field these aids may have, there is no uniform answer.

Additionally, the described cases when unfair treatment was experienced comprise possible causes beyond Public aid regulation and practices that can be described with hard facts and therefore remain difficult to judge.

5. ADDITIONAL ASPECTS

5.1. PUBLIC PROCUREMENT

Alongside addressing the main topic of the current regulations and practices for merger control and foreign investments, the issue of the knowledge of these authorities concerning complaints from industry regarding public procurement in the defence sector in the last five years including the nature of the most frequent complaints, and if public ownership of defence undertakings played a role there, was investigated.

Four out of the eleven responding competition authorities (36%) declared that they have received complaints from industry with regard to public defence procurement activities. It seems that all complaints were focused on pure national circumstances, i.e. no evidence was given that national competition authorities received complaints from national defence industries dealing with procurement activities in other countries.

Nevertheless, it should be acknowledged that typically the investigation rights of competition authorities in defence procurement are limited, sometimes even excluded. This goes along with most likely common exception rules for defence procurement agencies to use public procurement rules (e.g. publicising of tenders), if “procurement of goods and services covered by Article 296 EC Treaty or otherwise covered by national security interests” is touched.

The complaints which were investigated by this survey were in most cases related to bid rigging behaviour of the defence procurement agencies, in one case a collusion of interests was alleged, because three bidders had the same sub-contractor.

The MoDs were asked to provide information about whether they received complaints in the last five years with regard to public procurement procedures, and what the nature was of the most frequent complaints with respect to their own country and/or other EDA pMS, respectively (Questionnaire for MoD NADs, question 11a & b).

86% of those MoDs that responded to the survey reported that they had received complaints from industry. Answers from seven MoDs were received (27 % of pMS, 46.5 % of pMS total defence expenditure), of which all but one reported that they received complaints from industry. Further details of these complaints were related to:

- potential misuse of Article 296 EC Treaty,
- lack of transparency, non-discrimination and equal treatment, and
- awarding process.

5.2. Specific Organisation to Support Defence Equipment Exports or International Programme Cooperation

The MoDs (questionnaire for MoD NADs, question 12a, b, & c) and NDIAs (via interview) were requested to provide information about specific organisations that support export activities or international cooperation in the defence sector.

7 of the 26 MoDs surveyed provided a response (27 % of pMS, 46.5 % of pMS total defence expenditure).

The only organisations with such function were named by the Czech Republic. They indicated LOM Praha s.p. as mediators of procurement and the Redundant Materiel Handling Department for sales of redundant material.

Sweden reported that there is no specific organisation, however, FMV (Swedish Defence Material Organisation) includes a department supporting the Swedish defence industry with regard to sales of surplus material and export; another department of FMV supports international cooperation.

Organisations supporting business and exports in general in the UK include BERR (Department for Business Enterprise & Regulatory Reform previously the Department for Trade and Industry) and FCO (Foreign & Commonwealth Office) which works under umbrella of the UK Ministry of Trade & Industry Investment (UKTI). It was reported that this organisation formerly was, in contrast to civil companies, free of charge for the defence industry. However, it was mentioned that larger companies have an advantage when it comes to international contacts via ambassadors whereas smaller companies “do not have this kind of access”.

It can therefore be concluded (based on the available data) that organisations supporting defence equipment export exist in some countries.

5.3. Government to Government Sales

With respect to government to government sales of defence equipment in the last five years (questionnaire for Mod NADs, question 15), seven answers were received from MoDs (27 % of pMS, 31.7 % of pMS total defence expenditure). Two of those MoDs who responded reported no government to government sale in the last five years.

The Czech Republic reported the leasing of JAS Gripen Aircraft.

Finland procured F-18 related material and missiles from the USA, and surplus material from other nations including Multiple Launch Rocket System (MRLS) from The Netherlands in early 2006.

Sweden mentioned the sale of Gripen fighter aircraft to Hungary.

Slovenia reported government to government sales regarding C4I, equipment, service, training and others.

UK agreed with the Saudi Arabian government in September 2007 over the supply of 72 Typhoon combat aircrafts.

Asked for national laws regulating government to government sales in defence Germany, Finland, Ireland, Slovenia and UK reported that there is no special law in their country. Belgium, Czech Republic and Sweden, however, gave reference to their respective laws.

One company comments: “Government to government sales: the awarding of contracts for participating is more related to the national industrial structure rather than government industrial policy. Government to government sales include many agreements (compensations) with more political than economical content.”

National laws regulating government to government sales in defence exist in some of the countries surveyed.

5.4. OFFSETS

When MoDs were asked for existing offset agreements in their countries related to government to government sales (questionnaire for MoD NADs, question 14), seven MoDs provided an answer (27 % of pMS, 46.5 % of pMS total defence expenditure). While 5 of them stated that there are no offset agreements, 2 MoDs (4.5 % of pMS total defence expenditure) reported that there is a regular application of offset agreements (up to 120 % of deal value).

Offsets and juste-retour practices are mentioned several times by companies when complaining about market distortion:

- “Offset agreements. Offset agreements fix the workshare in international collaborative projects or government to government sales based on political reasons. They are also important to maintain an equilibrium in the balance of payments of the different States.”
- “Offsets and juste-retour are practices followed by many EU countries in the Defence domain, which introduce market distortions and have negative effects on the building of a strong, competitive and competent EDTIB.”
- “One of the requirements to sell in foreign countries is to share the work with national partners as part of offset agreements. Even in the USA, the only way to sell is to achieve a contract where more than 50% of the system is made in that country.”

5.5. FURTHER ASPECTS: COMPLAINTS, COMMENTS AND RECOMMENDATIONS

5.5.1. NATIONAL COMPETITION AUTHORITY PERSPECTIVES

It is worth noting that almost all responding competition authorities had no specific comments or recommendations from their point of view concerning any aspect of a level playing field in the European defence sector which was not touched by this survey.

Taking into account all responses in general, it seems that the national defence sectors in the pMS do not play a specific role in terms of competition and competition control (i.e. the defence sector in general is treated like other economic areas), while from a European perspective differing national policies and practices regarding in particular the control of M&As and foreign investments becomes visible, perhaps indicating that, in spite of the existing approach concerning merger control at a regulation, derogations based on Article 296 EC Treaty may impede harmonisation on European level.

5.5.2. National Defence Industry Association Perspectives

All NDIAs were given the opportunity to comment on obstacles preventing the achievement of a "level playing field" and on any other relevant issue they wished to address.

Potential obstacles noted preventing fair competition in the defence market included:

- Political control of the market.
- Lack of use of the principle "best value for money" as pMS tend to keep key capabilities in their country.

Recommendations made can be summarised as:

- Restructuring of the defence industry can be achieved by insertion of a period of adaptation and compensatory programmes (like the Konver programme) that weaken the sacrifices necessary for some national defence industries.
- Common rules for all EU entities.
- Acceptance of the "principle of European preference".
- Encouragement of pMS to foster complementarities with other pMS.

5.5.3. Ministries of Defence Perspectives

MoDs were also given the opportunity to comment on obstacles preventing the achievement of a "level playing field" and on any other relevant issue they wished to address.

Potential obstacles noted by MoDs that could prevent fair competition in the defence market included:

- The direct awarding of State aid.
- Offset agreements.
- Close relations between government and industry in some countries.
- Public shares in defence industry companies.
- Political control of the market.
- Lack of knowledge regarding distortive practices in the pMS.
- Lack of common EU rules.

Further important issues that were raised by MoDs were:

- The need for common understanding of "distortive practices".
- The need for common definitions in order to increase transparency.
- A Code of Conduct on Defence Exports to ensure transparency in this regard.
- The EDA Code of Conduct on Defence Procurement's threshold of 1 000 000 € is regarded as being too high for SMEs to enter competition.
- It would be important to have a period of adaptation to a fair competition market (compensatory programmes like Konver) to facilitate the restructuring of the defence industry.

5.5.4. National Public Aid Authority Perspectives

As already mentioned, out of all EDA pMS State aid authorities which were surveyed, only five addressees (19%) responded via the questionnaire. None indicated that they had received complaints from their national defence industry in relation to the awarding of State aid in the last five years (2003-2007), regardless of the awarding country.

Contrary to this, additional interviews with selected State aid authorities painted a different picture. Sometimes "massive complaints" from national defence industries were recognized, typically about State aid practices in other countries. It was highlighted that one reason for complaining was that State owned defence companies in other countries were suspected of having access to hidden/indirect State aid, e.g. when the State owner increases the capital stock of the company.

It was also argued that the EU Commission does not yet pay as much attention to these issues as might be desirable, in particular with regards to the defence sector.

State aid authorities considered the role of offsets as being of greatest concern with regards to their potential distorting effects for the European defence market. Excess use of subsidies (direct or indirect) and any governmental influence on economic decisions, indicating that e.g. public ownership as such is not a problem unless economic decisions of those companies were based on "*pure*" business cases, such as would be the case in private owned companies, were also considered to have distortive effects.

5.5.5. Defence Companies Perspective

The following data has been collected from interviews and the "comment box" of the questionnaire that was used for additional comments not related to question 1-16 by 10 of the 64 companies.

In most cases the comment comprised a complaint, and in some cases a recommendation to improve the situation has been included.

One type of difficulty described is caused by the framework that is based on the specific nature of the defence market, i.e. factors that have to be dealt with but where the initial cause is likely to persist:

- The existence of a naval nuclear business outside the current and future EU regulations and practices ("invalidates any attempt to reach a common level playing field").
- "One of the biggest difficulties for defence is the cyclicality of the demand." "large fixed costs of infrastructure that should be sustained".
- "Security of supply. Preserving this capability requires local maintenance capabilities that may discriminate foreign companies if they do not have a local subsidiary or do not have a local partner."
- "In addition EDTIB development is jeopardized by the unlevel playing field with the US. It should be better to study that rather than concentrating on a possible un-level playing field between EU Member States."
- "The main problem of a level playing field is that industry differs between countries. France and UK enjoy a strong position followed by Italy and Germany, whereas Spain and Sweden have a smaller role. Remaining EU countries play a lesser role still. Differences in size and capabilities of the industry create advantages that are hardly countervailed by small countries in an open market where competition and best value for money are the main criteria."

Further issues are mentioned, without comments on how to improve the situation:

- "Social reasons: Investments in defence create jobs, favour R&D activities and create industrial networks."
- The "market is fragmented due to lack of concertation between EU Member States in armament acquisitions and more generally in defence policies."
- "The code of conduct in the supply chain is seen a positive step. However, the efficiency of the system to open markets is considered low, because most of the equipment and components have a provider that has optimized the product, finding newcomers a barrier to compete."

On the "wish list" are the following changes in regulations:

- "The creation of a harmonized export policy for strategic goods."/"All rules and regulations for export to countries not belonging to the European Union should be one and the same for all member states."
- "Effective control on competition. CoC is good but just willingness, the question is by whom and how this is going to be controlled."
- "The improvement of level playing field will be clearly facilitated with policies limiting the duplication of useless technical and industrial capabilities."

  versus

  "The elimination of overcapacities in the European defence industry is seen as necessary, but it should not be done by dismantling the industry of smaller countries. In that sense, losing the capability of being a prime contractor can be a high risk for a company because the role of a subcontractor depends on remaining in the supply chain of the main supplier"

  "The main issue is not restructuring of the industry (offer side) but the organisation of a less fragmented demand side, with possible shift of priorities towards projection and the necessary equipment. Should such political changes occur, the industry will gear itself for these new market conditions."

  "As a last comment it was said that Europe needs competition within its industry if the European industry wants to be a winner in international contests. But Europe shall not permit herself the luxury of having 26 duplicated production facilities for each defence equipment. Four or five competitors on each relevant market are seen as an appropriate number in a consolidated EDEM. That requires the specialization of the industry in centres of excellence. Yet, establishing incentives, whether positive or negative to restructure the market in such direction is a complex task, and is easier said than done."

- The question of an independent European access to armaments (through a European based DTIB) is also a political one. The future existence of an independent European DTIB will not be decided by the industry, but by the policy makers."

Contrary to the above described tendency to favour new European regulations or means to supervise the execution of existing rules, it has been expressed that the possible effect of politics, laws and regulation on improving the level playing field conditions might be very limited compared to the power of the market. People sharing this view mostly agree, nevertheless that a political framework forcing the companies in all countries to become more transparent with regards to Public aid and possible ownership-based influences may prove beneficial for the EDEM (without necessarily causing any restrictions).

Companies were invited to provide suggestions on how to improve the level playing field in the EDEM in the last question of the questionnaire, yet few companies responded (mainly large ones). This may suggest that the problem of achieving a level playing field in Europe is not considered important for SMEs. This may be due to the fact that SMEs' business is still predominantly domestic (especially if compared to the market share of large companies) and the question of a successful European level playing field is not crucial for them. Additionally or alternatively, it may be that SMEs encounter fewer problems than large companies when entering into the European playing field in the defence sector (a less probable explanation) or SMEs, however, may simply prefer not to comment on encountered problems.

Annex B. List of Organisations that have Participated in the Survey.

INDEX

1. RESPONSE TO QUESTIONNAIRES B.1

2. COMPANIES THAT RESPONDED TO THE QUESTIONNAIRE B.2

3. MEETINGS HELD B.3

1. RESPONSE TO QUESTIONNAIRES

The following figure shows the answers received from each pMS

COUNTRY	COMPETITION AUTHORITIES	STATE AIDS AUTHORITIES	MOD POC	NDIA	COMPANIES		
					T	R	A
AUSTRIA				RESPONDED [*]	68	1	0
BELGIUM	RESPONDED		RESPONDED		34	2	1
BULGARIA	RESPONDED				17	0	0
CYPRUS	RESPONDED [*]	RESPONDED [*]			1	0	0
CZECH REPUBLIC		RESPONDED	RESPONDED, IVIEW.	RESPONDED, IVIEW.	114	3	0
ESTONIA	RESPONDED	RESPONDED					0
FINLAND			RESPONDED		80	4	1
FRANCE				RESPONDED (2)	150	6	1
GERMANY	RESPONDED	INTERVIEW	RESPONDED	FORWARDED (member associations)	205	11	6
GREECE				RESPONDED (1)	116	2	1
HUNGARY	RESPONDED	RESPONDED					0
IRELAND	RESPONDED		RESPONDED				0
ITALY		FORWARDED (MoD)	RESPONDED		122	7	2
LATVIA		RESPONDED [*]					0
LITHUANIA	RESPONDED	RESPONDED			1	0	0
LUXEMBOURG	RESPONDED						0
MALTA		RESPONDED [*]					0
NETHERLANDS		RESPONDED			204	6	2
POLAND		RESPONDED		INTERVIEW	98	5	1
PORTUGAL	RESPONDED	FORWARDED (MoD)			28	1	0
ROMANIA		RESPONDED [*]			78	2	0
SLOVAKIA				RESPONDED	39	3	0
SLOVENIA		RESPONDED	RESPONDED				0
SPAIN	RESPONDED	RESPONDED		RESPONDED	50	8	0
SWEDEN	RESPONDED, IVIEW.	FORWARDED (MoD)	RESPONDED, IVIEW.	INTERVIEW	46	2	1
UNITED KINGDOM			RESPONDED, IVIEW.	IVIEW (2), RESPONDED (2)	390	7	3
TOTAL	**12**	**13**	**9**	**13**	**1841**	**71**	**17**
AVERAGE (%)	**46,15**	**50,00**	**34,62**	**35,14**		**3,86**	**4,78**

[*] A response was received, but the questionnaire was not answered.

2. COMPANIES THAT RESPONDED TO THE QUESTIONNAIRE

COMPANY	COUNTRY
Empl Fahrzeugwerkt GmbH	Austria
Barco, NV	Belgium
Ilias Solutions	Belgium
INGBAU CZ s.r.o.	Czech Republic
VOP GROUP, s.r.o., Český Těšín	Czech Republic
VR Group, a.s.	Czech Republic
HIAB Oy	Finland
Jet-Tekno Oy	Finland
Oy Finnish Defence PowerSystems AB	Finland
Vaisala Oyj	Finland
Dassault Aviation	France
JOHNSON CONTROLS - York Navy Systems	France
MBDA – France	France
Panhard & Levassor	France
Safran Group	France
Thales Group	France
Dynamit Nobel Defence	Germany
ESG Elektroniksystem- & Logistik	Germany
Euro-Art	Germany
Eurofighter	Germany
Fernleitungs-Betriebsgesellschaft mbH	Germany
Hagenuk Marinekommunikation	Germany
LS Telcom	Germany
MBDA - Germany	Germany
OHB System	Germany
Selex Sistemi	Germany
Verseidag-Indutex	Germany
Zeppelin Mobile Systeme	Germany
Hellenic Vehicle Industry	Greece
MARAC ELECTRONICS S.A.	Greece
AERO SEKUR	Italy
Calzoni	Italy
Consorzio S3LOG	Italy
ISIS R&D Srl	Italy
NORTHROP GRUMMAN ITALIA	Italy
POMPE GARBARINO	Italy
Rheinmetall Nederlan BV (former Stork PWV BV)	Netherlands
Stork Aerospace BV	Netherlands
Ten Cate Advanced Composites BV	Netherlands / DK

COMPANY	COUNTRY
Thales Nederland BV	Netherlands
TNO Defensie en Veiligheid	Netherlands
Vigilance NV	Netherlands
Air Force Institute of Technology	Poland
CNPEP Radwar SA	Poland
Military Aviation Works No.3	Poland
ETC-PZL Aerospace Industries Sp. z o.o.	Poland
PZL-Swidnik	Poland
Aero Helice	Portugal
MarcTel S.I.T. S.R.L.	Romania
ROMSYS S.R.L.	Romania
Konstruka Defence, a.s.	Slovakia
PPS VEHICLES s.r.o.	Slovakia
ZVS Holding, a.s.	Slovakia
CIMSA INGENIERIA DE SISTEMAS (CIMSA)	Spain
EUROPAVIA ESPAÑA, SA	Spain
EXPLOSIVOS ALAVESES, S.A. (EXPAL)	Spain
General Dynamics Santa Bárbara Sistemas	Spain
INDRA SISTEMAS, S.A.	Spain
NAVANTIA S.A.	Spain
NEXTEL ENGINEERING SYSTEM, S.L.	Spain
OTO MELARA IBERICA, S.A.U	Spain
Condesign AB	Sweden
EuroMaint	Sweden
Avon Protection Systems	United Kingdom
BAE Systems	United Kingdom
Harmonic Ltd	United Kingdom
Logica	United Kingdom
Manroy Engineering Ltd	United Kingdom
Missiles & Space Batteries Ltd	United Kingdom
Quorum Logistic Support Ltd	United Kingdom

3. MEETINGS HELD

MEMBER TEAM	ORGANISATION	DATE
Isdefe	DG Enterprise and Industry	10/06/2008
SIPRI (E. Sköns)	Swedish NDIA (SOFF)	7/10/2008
CEIS-Strat	French DGA	21/10/08
SIPRI (E. Sköns)	Swedish Competition Authorities	5/11/08
Isdefe	Navantia	6/11/08
SIPRI (E. Sköns)	Swedish Defence Material Administration (FMV)	11/11/2008

MEMBER TEAM	ORGANISATION	DATE
Martin Trybus	Society of Bristish Aerospace Companies - SBAC	11/11/08
Isdefe	Indra	12/11/08
Martin Trybus	MoD UK	14/11/08
Fraunhofer INT	MoD GE	Mid-November
Isdefe	General Dynamics SBS	20/11/2008
SIPRI (Sam Perlo)	Czech Republic MoD	20/11/2008
Fraunhofer INT	German State aid authorities.	20/11/2008
Martin Trybus	Defence Manufacturing Association - DMA (UK).	20/11/2008
SIPRI (Sam Perlo)	Czech Defence Industry Association (AOP-CR)	21/11/2008
Isdefe	Spanish NDIA AFARMADE	24/11/2008
Fraunhofer INT - Isdefe	EADS	25/11/2008
Isdefe	EADS-CASA	27/11/2008
SIPRI (Sam Perlo)	Polish Chamber of National Defence Manufacturers	27/11/2008
SIPRI (Sam Perlo)	Polish MoD (planned meeting, lately cancelled).	27/11/2008
Fraunhofer INT - Isdefe	Aerospace and Defence Industries Association of Europe - ASD	4/12/2008
Martin Trybus	BAE Systems	8/12/2008
Fraunhofer INT	German Competition authorities	15/12/2008
Martin Trybus	UKTI	16/12/2008
Isdefe & CEIS - Strat	Thales Group	14/01/2009
Isdefe	DG Competition	02/03/2009

Fraunhofer INT Institut Naturwissenschaftlich-Technische Trendanalysen

Isdefe

Annex C. Public Ownership in the European Defence Sector.

INDEX

1. PUBLIC OWNERSHIP IN THE EUROPEAN DEFENCE SECTOR C.1

1.1. Austria C.1
1.2. Belgium C.1
1.3. Bulgaria C.1
1.4. Cyprus C.1
1.5. Czech Republic C.1
1.6. Estonia C.2
1.7. EU C.2
1.8. Finland C.2
1.9. France C.2
1.10. Germany C.3
1.11. Greece C.3
1.12. Holland C.3
1.13. Hungary C.4
1.14. Ireland C.4
1.15. Italy C.4
1.16. Latvia C.4
1.17. Lithuania C.4
1.18. Luxemburg C.4
1.19. Malta C.5
1.20. Poland C.5
1.21. Portugal C.6
1.22. Romania C.6
1.23. Slovak Republic C.6
1.24. Slovenia C.7
1.25. Spain C.7
1.26. Sweden C.7
1.27. United Kingdom C.7

1. PUBLIC OWNERSHIP IN THE EUROPEAN DEFENCE SECTOR

The following tables present a list of the main defence companies in Europe where the State has some kind of ownership. This information has been obtained from http://defence-data.com/ripley/pagerip1.htm verified with data provided by SIPRI, Fraunhofer INT and Isdefe, the own companies web page and bibliographical references 2 and 4.

1.1. AUSTRIA

COMPANY NAME	DEFENCE SECTOR	% OF PUBLIC SHARE
There is no Publicly owned defence companies.		

1.2. BELGIUM

COMPANY NAME	DEFENCE SECTOR	% OF PUBLIC SHARE
FN Herstal	Light weapons	Wallonia regional government

1.3. BULGARIA

COMPANY NAME	DEFENCE SECTOR	% OF PUBLIC SHARE
Vazovski Machinotroitelmi Zavodi – VMZ Co.	Ammunition, antitank missiles, ordnance	100
Arsenal J. S. Co.	Small arms, ammunition, artillery	100
Kintex Co.	Trading agency for defence products. Also provides technical support to army	100
Teraton Co.	Import-export agency for defence products	100

There are plans to privatize these companies.

1.4. CYPRUS

No defence industry identified.

1.5. CZECH REPUBLIC

COMPANY NAME	DEFENCE SECTOR	% OF PUBLIC SHARE
Aero Vodochody	Aerospace	Privatised (Penta)
Caliber Praha	Small arms	Privatised
Letecké Opravny Malešice (LOM), Praha a.s.	Aircraft Repair	100
Omnipol a.s.	Arms trade	Privatised (1996)
Policske Strojirny a.s.	Ammunition	Privatised

COMPANY NAME	DEFENCE SECTOR	% OF PUBLIC SHARE
PSP Bohemia	Armoured vehicle upgrading	Privatised
Ramet CHM a.s. Kunovice	Radar systems	Privatised
Synthesia a.s. Pardubice	Semtex explosives	Privatised
Tatra Koprivince	Heavy trucks	8.38
Vojenský opravárenský Podnik (VOP) 025, Nový Jičín, s.p.	Armoured vehicle upgrade and repair	100
Vojenský opravárenský Podnik (VOP) 026 Sternberk, s.p.	Armoured vehicle upgrade and repair	100

1.6. ESTONIA

COMPANY NAME	DEFENCE SECTOR	% OF PUBLIC SHARE
<none identified>		

1.7. EU

COMPANY NAME	DEFENCE SECTOR	% OF PUBLIC SHARE
Airbus Military SL	Aerospace	AIRBUS (representing EADS & BAE SYSTEMS), EADS-CASA, TAI of Turkey and FLABEL of Belgium
EADS	Aerospace	15 SOGEADE (Fr) [*] 5.49 SEPI (Sp)

[*] Reported ownership in EADS interview 25/11/2008.

1.8. FINLAND

COMPANY NAME	DEFENCE SECTOR	% OF PUBLIC SHARE
Patria Oyj	Armoured vehicle prime contractor, aircraft support, artillery, ammunition	73.2 (*)
Millog Oy	Life-cycle support services for defence material	Golden share

1.9. FRANCE

COMPANY NAME	DEFENCE SECTOR	% OF PUBLIC SHARE
AREVA	Nuclear energy and weapon related activities	78.9 CEA 5.2 State
Dassault Aviation	Aerospace	46,3 (EADS France)
Direction des Constructions Navales Services (DCN S)	Naval	75 State, 25 (Thales)
Dèfense Conseil International (DCI)	Training, technical assistance, consultancy	49.9
Nexter (formerly GIAT)	Land equipment	99.9
SAFRAN Group	Aero engines, electronic, telecommunication	State 30.5 Treasury: 1.4

COMPANY NAME	DEFENCE SECTOR	% OF PUBLIC SHARE
Sociéte Nationale de Poudres et Explosifs (Groupe SNPE)	Ammunition	99.9
Thales	Electronic	27.1 and Golden Share

1.10. GERMANY

In the German defence sector the government does not hold any kind of ownership in big primes such as Rheinmetall, Diehl, Krauss-Maffei Wegmann, ThyssenKrupp Marine Systems nor in smaller ones such as Rohde & Schwarz, Atlas Elektronik, only EADS Germany being a special case, as the whole company is. However, in recent years the German armed forces have implemented a series of outsourcing activities concerning some tasks which are no longer considered *core military services* such as:

- "white" information and communication technology, data processing centres,
- non-military automobiles and truck fleet,
- military clothing,
- army maintenance logistics.

These former military services are now outsourced and operate as a Public-Private Partnership (PPP). Examples of these companies are:

COMPANY NAME	DEFENCE SECTOR	% OF PUBLIC SHARE
Bw FuhrparkService GmbH	Car and truck fleet	75.1
BWI Informationstechnik GmbH	Information and communication technologies	49.9
Fernleitungs-Betriebsgesellschaft mbH	Operation and maintainance of the NATO pipeline	51.0
Gesellschaft für Entwicklung, Beschaffung und Betrieb mbH (g.e.b.b)	Modernisation efforts	100
HIL Heeresinstandsetzungslogistik GmbH	Army maintenance	(BMVg) 49
LHBw - LH Bundeswehr Bekleidungsgesellschaft GmbH	Clothing	g.e.b.b. 25.1

1.11. GREECE

COMPANY NAME	DEFENCE SECTOR	% OF PUBLIC SHARE
Hellenic Aerospace Industry SA	Aircraft overhaul, upgrade and assembly	100
Hellenic Defence Industry (old EBO and PYRKAL)	Light weapons ,ammunition & missiles	100
Hellenic Vehicles industry (ELVO, S.A.)	Light armoured vehicles	52.5 47.5 (Mytilineos Group)

1.12. HOLLAND

COMPANY NAME	DEFENCE SECTOR	% OF PUBLIC SHARE
<none identified>		

As far as is known TNO Defence, Security and Safety, is a division of TNO which preserves the role of State Agency, rather than Public Owned Company.

1.13. HUNGARY

COMPANY NAME	DEFENCE SECTOR	% OF PUBLIC SHARE
FEG Army Arms Manufacturing Ltd.	Small arms	unknown
Mechanical Works Co. Special Division.		unknown
MFS 2000 Ammunition Manufacturing Ltd.	Ammunition	privatised
MIKI Research and Innovation Co.	Computers	unknown
MoD "Currus" Combat Vehicle Technical Co.	Land	100
MoD Arm. Com. Communication Ltd.	Communications	100
MoD Arzenal Electromechanical Co.	Air defence	100
MoD Electronics, Logistics and Property Management Co.	Electronics	100
TKI Innovation Co.	Communications	unknown

Source: reference 19 page 160 and own web research.

1.14. IRELAND

No defence industry identified and no Public ownership.

1.15. ITALY

COMPANY NAME	DEFENCE SECTOR	% OF PUBLIC SHARE
Avio	Aircraft engines	15 of Finmeccánica
Fincantieri Spa	Naval	98.8
Finmeccánica	Guided missiles, aero engines, tilt rotors/helicopters, military, space and civil aircraft prime contractor	30.2

1.16. LATVIA

No defence industry identified.

1.17. LITHUANIA

No defence industry identified.

1.18. LUXEMBURG

No defence industry identified.

1.19. MALTA

No defence industry identified.

1.20. POLAND

COMPANY NAME	DEFENCE SECTOR	% OF PUBLIC SHARE
CENREX Sp. Z o.o.	Equipment Special Operations Forces	100 (*)
CNPEP Radwar SA	Radars	5.6 (*)
FB Lucznik Sp. Z. o.o.	Small weapons	100 (*)
FLT Krasnik	Ammunition	100 (to be privatised)
Gdanskie Zaklady Elektroniczne (GZE) Unimor (inactive)	Armour	100
Huta Stalowa Wola (HSW) SA	Mortars and artillery, optronics	100
Nitro-chem	Ammunition and explosives	100 (*)
PCO Warszawa	Optoelectronics	100 (*)
Polsky Zaklady Lotnicze (PZL) Swidnik (**)	Helicopter prime contractor	87.6%
Polsky Zaklady Lotnicze (PZL) Warsawa-Okecie	Aircraft assembly	18 (web page)
Stocznia Gdynia (**)	Shipyards	70,65 (web page)
WSK PZL Rzeszow	Aero engines	Pratt & Whitney
WSK Polsky Zaklady Lotnicze (PZL) Mielec	Jet trainer aircraft	Sold to Sikorsky
WSK Warszawa II	Electromechanical devices	100 (*)
ZM Bumar-Labedy SA	Armoured vehicles	100 (*)
ZM Dezamet	Ammunition and grenades	100 (*)
ZM Mesko SA	Explosives/ammunition	100 (*)
ZM Polsky Zaklady Lotnicze (PZL) Wola SA	Tank engines	100 (*)
ZM Tarnow SA	Guns and cannons	100 (*)
ZPS Gamrat Sp.z o.o.	Powder, propellants and pyrotechnics	100 (*)
ZTS Erg-Bierun SA	Explosives	100 (to be privatised)
ZTS Gamrat SA	Explosives	100 (to be privatised)
ZTS Nitron SA	Explosives	100

(*) Companies belonging to Bumar Group Ltd. created in 2002 as a result of the adoption of "*A strategy for Structural Transformation of the Defence Sector Capacity 2002-2005*" by the Polish Council of Ministers. The Group manages Public owned defence companies with a plan to increase its number to 36 by 2012[1]. The Group plans to float its shares (percentage is not yet known) in 2012[2].

(**) Member companies of the Aviation & Radio Electronics Capital Group are fully owned by the State Treasury. Companies supervision on behalf of the Treasury is executed by the Industrial Development Agency S.A. Other companies belonging to the Group include FTE Cenzin Co. Ltd.; Radmor S.A.; WSK PZL-Kalisz S.A. and PZL-Hydral S.A.

[1] Source: Bibliographical reference 3.

[2] Source: Bibliographical reference 26.

1.21. PORTUGAL

COMPANY NAME	DEFENCE SECTOR	% OF PUBLIC SHARE
EDISOFT - Empresa de Serviços e Desenvolvimento de Software, SA	C2 Systems, software	(*)
EID - Empresa de Investigação e Desenvolvimento de Electrónica, SA	Electronics, Communications	(*)
ENVC - Estaleiros Navais de Viana do Castelo, SA	Shipyards	(*)
IDD – Indústria de Desmilitarização e Defesa, SA	Ammunition and demilitarization	(*)
NAVALROCHA - Sociedade de Construções e Reparação Navais, SA	Shipyards	(*)
OGMA – Indústria Aeronáutica de Portugal,S.A.	Aeronautics	(*)
DEFAERLOC – Locação de Aeronaves Militares, SA	Aeronautics	(*)
DEFLOC - Locação de Equipamentos de Defesa, SA	Defence equipment location	(*)
OGMA – IMOBILIÁRIA	Real State	(*)
RIBEIRA D'ATALAIA	Civil construction	(*)

(*) Companies participated from *Empresa Portuguesa de Defesa* which is fully owned by the State.

1.22. ROMANIA

COMPANY NAME	DEFENCE SECTOR	% OF PUBLIC SHARE
Romarm (15 factories)	Manufacturer and exporter	100 (*)
IAR Brasov	Aerospace	Unknown (*)
Avioane Craiova	Aerospace	Main owner Ministry of Economy and Commerce

(*) Privatisation offer.

1.23. SLOVAK REPUBLIC

COMPANY NAME	DEFENCE SECTOR	% OF PUBLIC SHARE
Konstrukta-Industry	Large calibre ammunition, mixers and industrial explosives	(*)
Konstrukta Defence Trencin	R&D artillery, mortar and ammunition systems	(*)
PPS Detva	Infantry combat vehicles	(*)
ZTS TEES Martin	Armoured vehicles	(*)
ZTS Dubnica nad Vahom	Self propelled howitzers, rocket launchers and mortars	(*)
ZTS Research and development Institute Martin	Research on land vehicles	(*)
ZTS Elektronica	Electronic control systems for weapons. Passive observation devices	(*)
ZVS Holding, a.s. Dubnica nad Vahom	Mechanical engineering, electrotechnics, large and middle calibre ammunition	50 (*)

(*) Companies belonging to DMD Group a.s., held by the Fund of the National Property of the Slovak Republic. Source: reference 4.

1.24. SLOVENIA

COMPANY NAME	DEFENCE SECTOR	% OF PUBLIC SHARE
Fotona d.d. Ljubljana	Fire control systems	68.00
Gorenje Indop, d.o.o.	Light Armoured Vehicles	26.04

Data source: MoD questionnaire and catalogue of the Chamber of Commerce and Industry of Slovenia.

1.25. SPAIN

COMPANY NAME	DEFENCE SECTOR	% OF PUBLIC SHARE
EADS (via EADS-CASA)	Aerospace	5.5 (SEPI)
EUROCOPTER ESPAÑA (via EADS)	Helicopters	5.5 (SEPI)
Ingeniería y servicios aerospaciales S.A. (INSA)	Aerospace	100 (INTA)
Isdefe	System Engineering	100 (INTA)
Navantia	Naval systems	100 (SEPI)

1.26. SWEDEN

COMPANY NAME	DEFENCE SECTOR	% OF PUBLIC SHARE
There is no Public owned defence companies.		

1.27. UNITED KINGDOM

COMPANY NAME	DEFENCE SECTOR	% OF PUBLIC SHARE
Atomic Weapons Establishment (AWE) plc	Nuclear Weapons	Golden share
BAE Systems	Defence	Golden share
BAE Marine (Holdings) Ltd.	Full range of naval ships including nuclear submarines.	Golden share
Devonport Royal Dockyard	Defence ship	Golden share
QinetiQ Group plc	Defence research & development, training services	Golden share 18.92 (*)
Rolls-Royce Group plc	Aero engines	Golden share
Rosyth Royal Dockyard Limited	Defence ships	Golden share

(*) Value confirmed in the Company Web Page 27/06/08.

Annex D. Articles 296-298 EC Treaty.

Article 296

1. The provisions of this Treaty shall not preclude the application of the following rules:

   (a) no Member State shall be obliged to supply information the disclosure of which it considers contrary to the essential interests of its security;

   (b) any Member State may take such measures as it considers necessary for the protection of the essential interests of its security which are connected with the production of or trade in arms, munitions and war material; such measures shall not adversely affect the conditions of competition in the common market regarding products which are not intended for specifically military purposes.

2. The Council may, acting unanimously on a proposal from the Commission, make changes to the list, which it drew up on 15 April 1958, of the products to which the provisions of paragraph 1(b) apply.

Article 297

Member States shall consult each other with a view to taking together the steps needed to prevent the functioning of the common market being affected by measures which a Member State may be called upon to take in the event of serious internal disturbances affecting the maintenance of law and order, in the event of war, serious international tension constituting a threat of war, or in order to carry out obligations it has accepted for the purpose of maintaining peace and international security.

Article 298

If measures taken in the circumstances referred to in Articles 296 and 297 have the effect of distorting the conditions of competition in the common market, the Commission shall, together with the State concerned, examine how these measures can be adjusted to the rules laid down in the Treaty.

By way of derogation from the procedure laid down in Articles 226 and 227, the Commission or any Member State may bring the matter directly before the Court of Justice if it considers that another Member State is making improper use of the powers provided for in Articles 296 and 297. The Court of Justice shall give its ruling in camera.

Annex E. Acronyms and Definitions.

INDEX

1. ACRONYMS E.1

2. DEFINITIONS E.3

1. ACRONYMS

AMV	Armoured Modular Vehicle
BAE	British Aerospace
BERR	Business Enterprise and Regulatory Reform
C4ISTAR	Command, Control, Communications, Computers, Intelligence, Surveillance, Target Acquisition and Reconnaissance. Systems used to organise and manage a military operation.
CEA	Commissariat à l'Énergie Atomique
CESCE	Compañía Española de Seguros de Crédito a la Exportación
CoBPSC	Code of Best Practices within the Supply Chain
CoC	Code of Conduct
COFACE	Compagnie Francaise D'assurance Pour Le Commerce Exterieur
DCI	Defence Conseil International
DDI	Directorate for International Development. DGA France.
DERA	Defence Evaluation and Research Agency
DGA	Délégation Générale pour l'Armement.
DSO	Defence and Security Organisation
DSTL	Defence Science and Technology Laboratory
DTIB	Defence Technological and Industrial Base
EADS	European Aeronautic Defence and Space Company
EC	European Community
ECGD	Export Credit Guarantee Department
EDA	European Defence Agency
EDEM	European Defence Equipment Market.
EDTIB	European Defence Technological and Industrial Base.

ESDP	European Security and Defence Policy
ETAP	European Technology Acquisition Programme
EU	European Union
FOI	Totalförsvarets forskningsinstitut
GBER	General Block Exemption Regulation
GEC	General Electric Company
ICT	Information and Communications Technologies
INTA	Instituto Nacional de Técnica Aerospacial
JSF	Joint Strike Fighter
LoI-EDIR-FA	Letter of Intention for the European Defence Industry Restructuring Framework Agreement. Signatory countries are: France, Germany, Italy, Spain, Sweden, United Kingdom.
MBDA	Matra BAE Dynamics Alenia
MoD	Ministry of Defence
NAMSA	NATO Maintenance & Supply Agency
NDIA	National Defence Industrial Associations
NETMA	NATO Eurofighter and Tornado Management Agency
OCCAR	Organisation Conjointe de Coopération en matière d'Armement.
OECD	Organisation for Economic Co-operation and Development
OJEU	Official Journal European Union.
ONERA	Office national d'études et recherches aérospatiales
pMS	participating Member States.
R&D	Research and Development
R&D&I	Research, Development and Innovation
R&T	Research and Technology

SEPI	Sociedad Estatal de Participaciones Industriales
SIPRI	Stockholm International Peace Research Institute
SME	Small and Medium sized Enterprise. Defined in the next section.
sMS	subscribing Member States
SOGEADE	Société de gestion de l'aéronautique, de la défense et de l'espace
TNO	Nederlandse Organisatie voor Toegepast Natuurwetenschappelijk Onderzoek
UK	United Kingdom
UKTI	United Kingdom Trade and Investment
USA	United States of America
VTT	Valtion Teknillinen Tutkimuskeskus (Technical Research Centre of Finland)
WTO	World Trade Organisation

2. DEFINITIONS

Aid intensity: Means the gross aid amount expressed as a percentage of the project's eligible costs. All figures used shall be taken before any deduction of tax or other charges. Where aid is awarded in a form other than a grant, the aid amount shall be the grant equivalent of the aid. Aid payable in several instalments shall be discounted to its value at the moment of granting. The interest rate to be used for discounting purposes and for calculating the aid amount in a soft loan shall be the reference rate applicable at the time of granting. The aid intensity is calculated per beneficiary.

Asymmetric information: A situation where economic agents have different information, such as when the aid requester has more information about his company and the project than the donor.

Cēterīs paribus: is a Latin phrase, literally translated as "*with other things the same*." It is commonly used in English as "*all other things being equal*." A prediction, or a statement about causal or logical connections between two states of affairs, is qualified by ceteris paribus in order to acknowledge, and to rule out, the possibility of other factors which could override the relationship between the antecedent and the consequent.

Concentration: a term used throughout the document to refer to economic operations that reduce the number or independent industries in a certain market due to mergers, acquisitions or takeovers of companies.

Collusion: is usually a secretive agreement, amongst firms to divide the market, set prices, or limit production to gain an unfair advantage. Collusion practices are forbidden by competition laws.

Conglomerate Merger: Conglomerate mergers refer to concentrations of undertakings operating in different markets. For a detailed discussion of the different kind of mergers, cf. Phase I Final Report.

Customer foreclosure: An anti-competitive effect which arises if an integrated firm denies its non-integrated upstream competitors access to the downstream market, such that these rivals are unable to compete. This strategy is also known as "*reducing rivals' revenues*".

Dual-use: Any products, software or technology that can be used for both civil and military purposes are considered to be dual-use items.

Economies of scale: Reductions in production costs arising from expansion of output of a good.

Economies of scope: Reductions in production costs arising from parallel production of different products by a single firm.

Economies of learning: Economies of learning are reductions in production costs due to employee's improvement in manufacturing procedures. They are important in the production of moderate quantities of complex products such as defence equipment .

Experimental development: The acquiring, combining, shaping and use of existing scientific, technological, business and other relevant knowledge and skills for the purpose of producing plans and arrangements or designs for new, altered or improved products, processes or services (including the creation of a commercially usable prototype or pilot projects under certain conditions).

Externality: Benefit or adverse effect which one organisation's actions have on another organisation or its environment. For example an increase in advertising by one distributor may benefit all distributors of that good.

Foreclosure (vertical): Denying or reducing horizontal competitors' access to a vertically related good, such that they are unable to compete. This can take the form of customer or input foreclosure.

Fundamental research: Experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, without any direct practical application or use in view.

Framework agreement: an agreement between one or more contracting authorities and one or more economic operators, the purpose of which is to establish the terms governing contracts to be awarded during a given period, in particular with regard to price and, where appropriate, the quantity envisaged;

Golden share: A special share owned by the government and vested with sufficient voting rights to maintain control and thus fend-off potential predators.

Highly qualified personnel: means researchers, engineers, designers and marketing managers with tertiary education degrees and at least 5 years of relevant professional experience. Doctoral training may count as relevant professional experience.

Horizontal merger: Horizontal merger refers to concentrations of companies producing the same type of equipment.

Input foreclosure: An increase in the price of inputs by a vertically integrated firm, such that the downstream rivals are put at a disadvantage and are unable to compete. This strategy is also described in the literature as "*raising rival's costs*". Complete input foreclosure is realised when the integrated firm refuses to supply the good to independent firms.

Industrial research: Planned research or critical investigation aimed at the acquisition of new knowledge or skills for developing new products, processes or services or bringing about a significant improvement in existing products, processes or services.

Intermediate good: A good that is used as an input in production and is not a final good.

Joint venture: Joint ventures are entities formed between two or more parties to undertake economic activity together. The parties agree to create a new entity by both contributing equity, and then share the revenues, expenses, and control of the enterprise. The venture can be for one specific project only, or a continuing business relationship such as MBDA joint venture. It may be implemented as a corporation, limited liability company, partnership or other legal structure, depending on any number of considerations.

Market power: Is defined as the ability of one or more firms profitably (i.e. without suffering an appreciable reduction in its demand) to maintain prices above the level corresponding to perfect competition for a significant period of time.

Marginal cost: the additional cost of producing an extra unit of good.

National champion: refers to a national leading company. The term comes from the sports world where national contest determines the best team in a particular field.

Negotiated procedure: Those procedures in which the contracting authority consults the economic operators of its choice and negotiates the terms of the contract with them.

Non recurring costs: Non-recurring refers to the one-time cost of Research and Development.

Process innovation: An innovation leading to a more efficient production of the same good.

Product innovation: An innovation leading to a new product, or a quality improvement of an existing product.

Public choice: In economic theory it is the use of modern economic tools to study problems that are traditionally in the province of political science. In particular, it studies the behaviour of politicians and government officials as mostly self-interested agents and their interactions in the social system either as such or under alternative laws and rules. These can be represented in a number of ways, including standard constrained utility maximization, game theory, or decision theory. Public choice analysis has roots in positive analysis ("what is") but is often used for normative purposes ("what ought to be"), to identify a problem or suggest how a system could be improved by changes in laws and rules. A key formulation of public choice theory is in terms of rational choice, the agent-based proportioning of scarce means to given ends.

Public contracts: contracts for pecuniary interest concluded in writing between one or more economic operators and one or more contracting authorities and having as their object the execution of works, the supply of products or the provision of services.

Publicly owned company: See State owned company.

Relevant Market: In competition law the relevant market defines the market in which one or more goods compete. Therefore, the relevant market defines whether two or more products can be considered substitute goods and whether they constitute a particular and separate market for competition analysis. An accurate and detailed definition of this term can be found in the Commission Notice on the definition of relevant market for the purposes of Community competition law Official Journal C 372, 09/12/1997 P. 0005 – 0013.

Rent: in economics, a payment to a factor of production in excess of that which is needed to keep it employed in its current use.

Rent seeking: In economics, rent seeking occurs when an individual, organization or firm seeks to make money by manipulating the economic and/or legal environment rather than by trade and production of wealth. The term comes from the notion of economic rent, but in modern use of the term, rent seeking is more often associated with government regulation and misuse of governmental authority than with land rents as defined by David Ricardo.

Restricted procedures: those procedures in which any economic operator may ask to participate and where only those economic operators invited by the contracting authority may submit a tender.

State owned company: A state-owned enterprise or corporation is a legal entity created by a government to undertake commercial or business activities on behalf of an owner government. The defining characteristics are that they have a distinct legal form and are established to operate in commercial affairs. While they may also have public policy objectives, they should be differentiated from other forms of government corporation or entity established to pursue purely non-financial objectives that have no need or goal in satisfying the shareholders with return on their investment through price increase or dividends. They can be fully owned or partially owned by government. As a definitional issue, it is difficult to determine categorically what level of state ownership would qualify an entity to be considered as "*state-owned*", since governments can also own regular stock, without implying any special interference.

Services of general economic interest: (or SGEI) mean economic activities that public authorities identify as being of particular importance to citizens and that would not be supplied (or would be supplied under different conditions) if there was no public intervention.

Small and medium-sized enterprises: or '*SMEs*', '*small enterprises*' and '*medium-sized enterprises*' means such undertakings within the meaning of Regulation (EC) No 70/2001, or any regulation replacing that regulation.

Substitutes: Two products are termed substitutes if a rise in the price of one good induces an increase in the demand of other. For example, butter and margarine.

Sunken costs: Costs which cannot be recovered if a firm ceases to operate in a certain business.

Tacit collusion: Seemingly independent, but parallel actions between competing firms (mostly oligopolistic firms) in an industry that achieves higher prices and profits, much as if guided by an explicit collusion agreement. Also termed implicit collusion, the distinguishing feature of tacit collusion is the lack of any explicit agreement. They key is that each firm seems to be acting independently, perhaps each responding to the same market conditions, but the end result is the same as an explicit agreement. This should be contrasted with explicit or overt collusion that does involve a formal, explicit agreement.

Undertaking: In EU English, it refers to any kind of organisation that supplies goods or services to the market. It includes private firms and also public organisations, for example those that provide services of general economic interest.

Vertical merger: Concentrations involving companies that act at different levels of the supply chain. Common examples are mergers between a manufacturer and its input supplier.

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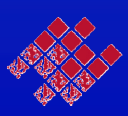

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