

A Primer to Collaborative Defence Procurement in Europe: Troubles, Achievements and Prospects

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1. Introduction

For their defence procurement, States sometimes resort to collaborative programmes, whereby they agree to procure defence equipment and fund its development and/or production in common. In addition to the aim of reducing costs, collaborative defence procurement is expected to allow States to procure military equipment that they would not be able to develop on their own because of lack of budget and technical or industrial capability, and is often assumed to increase interoperability of defence forces.¹ European armaments cooperation started as early as the 1950s, and went through different incarnations, within and outside NATO, with what some consider a mixed record of success.²

In a previous article, we introduced recent initiatives of the European Defence Agency (EDA) and the European Commission that have the potential to lead to a coherent European defence procurement legal regime.³ However, we saw that the EDA defence procurement Code of Conduct is specifically said not to apply to collaborative procurement. Moreover, for the procurement of major weapon systems, European Union (EU) Member States routinely invoke the Art.296 exemption of the European Community (EC) Treaty that allows a Member State to avoid complying with EC Law (including any future EC Defence Procurement

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¹ Flournoy M., Smith J. et.al., 'European Defense Integration: Bridging the Gap between Strategy and Capabilities', Center for Strategic and International Studies (CSIS), Washington D.C. (USA), October 2005, pp.18 et.seq.; Schmitt B., 'The European Union and Armaments – Getting a Bigger Bang for the Euro', Chaillot Paper No 63, Institute for Security Studies, European Union, Paris, 2003

² Mawdsley J., Quille G. et.al., 'Equipping the Rapid Reaction Force – Options for and Constraints on a European Defence Equipment Strategy', Paper 33, Bonn International Centre for Conversion (BICC), 2003, pp.29-30

³ Heuinckx B., 'Towards a Coherent European Defence Procurement Regime? European Defence Agency and European Commission Initiatives' (2008) 17(1) PPLR 1

Directive) in order to protect the essential interests of its security.⁴ Therefore, most collaborative defence procurement is arguably not covered by this budding defence procurement regime.

What are the characteristics of collaborative defence procurement in Europe, and how successful has it been in achieving its objectives? Is there any coherent legal regime that applies to it? Even though some dedicated studies have been performed on the subject over the years, procurement practitioners and academics should be provided with an updated and more integrated view of what collaborative defence procurement entails, and this is the aim of this article. Moreover, the lessons of collaborative defence procurement could be useful for collaborative procurement initiatives in other fields.

Therefore, after going into more details on the expected benefits and scope of collaborative defence procurement, this article will describe its management and organisational difficulties, before analysing its record in terms of actual achievement of its expected benefits, introducing the legal aspects of collaborative defence procurement, and presenting briefly some ideas to improve collaborative defence procurement in Europe.

2. Expected Benefits of Collaborative Defence Procurement

Collaborative procurement is sometimes considered as a panacea to resolve the issues plaguing European defence procurement. Some have even made a case for a centralised European collaborative procurement agency.⁵ Specifically, collaborative procurement is expected to have the following benefits⁶:

⁴ Consolidated Version of the Treaty Establishing the European Community (EC Treaty), [2006] OJ C321/37, Art.296; Maulny J-P. et.al., 'Cooperative Lessons Learned: How to Launch a Successful Co-Operative Programme', Final Report for Study 06-EDA-008, IRIS/CER/DGAP/IAI, 30 November 2006, pp.18-19

⁵ Cox A., 'The Future of European Defence Policy: The Case for a Centralised Procurement Agency' (1994) 3(2) PPLR 65

⁶ See further: Maulny J-P. et.al., 'Cooperative Lessons Learned: How to Launch a Successful Co-Operative Programme', above fn.4, p.8; Flournoy M., Smith J. et.al., 'European Defense Integration: Bridging the Gap between Strategy and Capabilities', above fn.1, p.27; Fraser S., 'European Defence Equipment Collaboration: A View from the UK Ministry of Defence' (2004) 7(1) RUSI Defence Systems, p.16; Hayward K., 'Towards a European Weapons Procurement Process – The shaping of common European requirements for new arms programmes', Chaillot Paper No 27, WEU Institute for Security Study, June 1997; Lorell M. and Lowell J., 'Pros and Cons of International Weapons Procurement Collaboration', RAND, Santa Monica (USA), 1995, pp.7 et.seq.; Bourn J., 'Ministry of Defence: Collaborative Projects', UK National Audit Office, House of Commons document 1990/91 HC 247, 22 February 1991, §1.1

- It can allow the development costs of complex defence equipment to be shared among the participating States;
- It can allow economies of scale to be secured during the production of the equipment because of higher quantities;
- It can allow the participating States to procure military equipment that they would otherwise not be able to develop on their own because of lack of funds and technical or industrial capability;
- It can bring operational benefits because of interoperability and standardisation, as the participating States would use the same equipment;
- It can be used to implement common foreign policy goals, such as enhancing the cohesion of alliances;
- It can bring stability to weapons development, because participating States are under peer pressure not to alter their orders or to withdraw from the programme, whereas national programmes are more easily cancelled by the State;
- It can allow participating States to improve or sustain their defence technological and industrial base through technology transfer and a share of the work.

Amongst these expected benefits, it seems that political and economical motives (especially cost reduction and industrial return) are usually the driving factors of collaborative procurement in Europe.⁷ However, the most important factor encouraging collaborative procurement is likely to be the inability of most European States to procure complex military equipment otherwise than either by buying it from the United States or by sharing its costs with other European States. For the most expensive weapons systems such as fighter aircraft, collaborative procurement is in the end the only procurement option that allows the participating States both to influence the development of the system on the basis of their own requirements, and to actually afford the resulting equipment. Of course, collaborative

⁷ Mawdsey J., 'The Gap Between Rhetoric and Reality: Weapons Acquisition and ESDP', Bonn International Centre for Conversion (BICC), 2002, p.5; UK House of Commons Public Accounts Committee, 'Ministry of Defence: Maximising the Benefits of Defence Equipment Co-Operation', House of Commons document number 2001/02 HC 586, London, 30 January 2002, §§40 et.seq.

procurement is less critical for less expensive weapon systems such as medium-sized armoured vehicles.⁸

However, there is a contrary view arguing forcefully that collaborative defence procurement is a waste of time and money, is unable to deliver the required capability on time and on cost, and should be avoided as much as possible.⁹

This article will present some of the available evidence that could shed some light on these drastically opposing views.

3. The Scope of Collaborative Defence Procurement

3.1. Typology

Collaborative procurement programmes can be subdivided into three types, each of which have significantly different characteristics and consequences in terms of harmonisation of requirements, integration of the defence industry and technology transfer¹⁰:

- *Reciprocal trade*, whereby each partner country agrees to procure complementary equipment or systems developed and produced by the other partner(s), sometimes in a ‘family-of-weapons’ concept;
- *Cooperative production or coproduction*, whereby contractors from one or more partner countries produce (often under license) a weapon system developed by firms of one other partner, mostly on the basis of the individual requirements of the latter;
- *Codevelopment*, whereby defence contractors from the partner countries jointly develop, and usually produce, a weapon system, and the partner countries therefore have to harmonise their military requirements.

⁸ Maulny J-P. et.al., ‘Cooperative Lessons Learned: How to Launch a Successful Co-Operative Programme’, above fn.4, pp.6-7; Creasey P. and May S., ‘The Political and Economic Background’, in Creasey P. and May S. (Eds.), *The European Armaments Market and Procurement Cooperation* (New York: St.Martin’s Press, 1988), p.17

⁹ Kinkaid B., ‘We Can’t Do Collaborative Projects!’ (2004) 7(1) RUSI Defence Systems, p.12

¹⁰ See further: Lorell M. and Lowell J., ‘Pros and Cons of International Weapons Procurement Collaboration’, above fn.6, Table 1.1

The first two types have usually been used in collaborative procurement involving the United States and other countries, with the United States almost always playing the ‘senior partner’ role, whilst the third type is mostly used among European countries.¹¹

The main issue with the family-of-weapons concept is to actually find weapons produced in different States that might be grouped into a family to meet each State’s requirements. So far, this has only been successful for missiles.¹² Even though, in this type of programme, the industries of the participating States work together, there is only limited industry integration.

Coproduction has many similarities with offsets, but with the difference that it is based on an intergovernmental agreement.¹³ It relies on a centralised development effort, but still implies a duplication of production facilities, and development costs are usually not directly shared among the participating States. Its main advantage is clearly the preservation or creation of a defence production capability within the ‘junior partner’ States, which can in turn be used later for export purposes or to maintain the equipment they have produced. In that sense, it can contribute to security of supply over the life of the equipment. However, the technology transfer in the case of coproduction remains limited, as the Research and Development (R&D) work is mostly completed before the coproduction arrangement is agreed.

Codevelopment is what is often thought of as ‘collaborative procurement *stricto sensu*’ and is the most complex type of collaborative procurement, but has potentially the biggest scope for overall economic gains by sharing development costs as well as achieving economies of scale in production. Such arrangement also allows technology transfer during R&D activities between the industries of the participating States.¹⁴ However, these benefits are not always

¹¹ Lorell M., ‘Multinational Development of Large Aircraft: The European Experience’, RAND Paper R-2596, Santa Monica (USA), July 1980, p.v

¹² Covington T., Brendley K. and Chenoweth M., ‘A Review of European Arms Collaboration and Prospects for its Expansion under the Independent European Programme Group’, RAND Note N-2638-ACQ, Santa Monica (USA), July 1987, p.28

¹³ Rich M., Stanley W., Birkler J., and Hesse M., ‘Multinational Coproduction of Military Aerospace Systems’, RAND Paper R-2861, Santa Monica (USA), October 1981, p.72; for more on offsets in Europe, see Eriksson E.A. et.al., ‘Study on the effects of offsets on the Development of a European Defence Industry and Market’, Final Report of 06-DIM-022, FOI and SCS, 12 July 2007

¹⁴ Covington T., Brendley K. and Chenoweth M., ‘A Review of European Arms Collaboration and Prospects for its Expansion under the Independent European Programme Group’, above fn.12, p.30

achieved, especially in the production phase, as participating States sometimes require that the equipment manufactured for their armed forces be at least partially produced in-country.¹⁵

In addition, the in-service support of equipment developed and/or produced through collaborative procurement programmes may also be performed collaboratively. Additional benefits can be gained from collaborative in-service support, which amounts to about 50% or more of the total cost of ownership of a weapon system, and studies have shown that, for a major weapon system, common in-service support could save the participating States up to 15% of their support costs.¹⁶

The defence industry of different States can also collaborate by creating joint ventures or mergers.¹⁷ Even though this process is not necessarily related to collaborative procurement, it is often used on the industrial side to meet the needs of the States participating in a collaborative programme. This is discussed further below.

3.2. Quantitative Scope

Collaborative procurement constitutes an important part of the EU defence expenditures. An estimate of about 19.9% of the defence equipment procurement and R&D expenditures within the EU (€7.0 billion) was spent through collaborative efforts in 2005, and a significant portion of these activities (about 88%) was performed by States that were in majority EU Members, as shown on Figure 1. However, European collaborative procurement is still considered by some as insufficient.¹⁸

Between the end of World War II and the Twenty-first Century, it has been estimated that a total of 59 collaborative defence procurement programmes were launched in Europe, including 24 for aircraft or helicopters, 16 for missiles, 3 in the naval sector, 1 for an

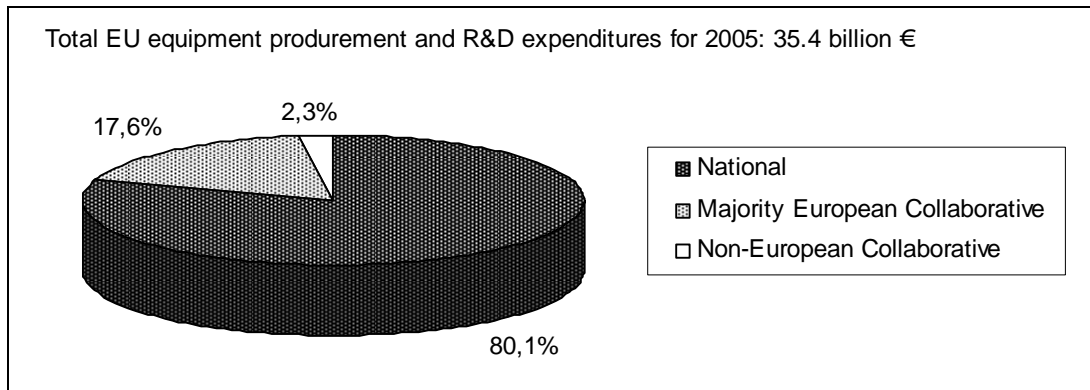
¹⁵ Bourn J, 'Ministry of Defence: Collaborative Projects', above fn.6

¹⁶ Heuninckx B., 'Accommodating Effective Logistic Support into Current and Future Defence Acquisition Projects', presentation at the Defence Logistic 2006 conference, Brussels, June 2006

¹⁷ Georgopoulos A., *European Defence Procurement Integration: Proposals for Action within the European Union*, PhD thesis, University of Nottingham, 2004, §2.4; Jones S., 'The Rise of a European Defense' (2006) 121 PSQ 241, p.245; Creasey P., 'European Defence Firms in Cooperation Agreements', in Creasey P. and May S. (Eds.), *The European Armaments Market and Procurement Cooperation*, above fn.8, pp.89 et.seq.

¹⁸ Maulny J-P. et.al., 'Cooperative Lessons Learned: How to Launch a Successful Co-Operative Programme', above fn.4, pp.14-15

armoured vehicle, and 11 for other land systems.¹⁹ At least 30 to 40 major collaborative programmes were ongoing in Europe at the time of writing.²⁰ Even though different sources cite significantly different figures, the trends remain similar, with the most collaborative programmes occurring in the aerospace and missile sectors.



Source: European Defence Agency, adjusted by the author

Figure 1: EU Defence Equipment and R&D Expenditures in 2005²¹

For the period 1995-1997, the percentage of the total number of ongoing major procurement programmes for the main EU Member States was estimated as show in Table 1. This table shows clear differences between EU Member States in their use of collaborative procurement. At that time, Germany and Italy extensively relied on collaboration, whilst France, Sweden and the United Kingdom used more national programmes.

Country	Exclusively national programmes	Collaborative programmes	Imported equipment
France	81%	15%	4%
Germany	10%	75%	15%
Italy	30%	50%	20%

¹⁹ Andresson J.J., 'Cold War Dinosaurs or High-Tech Arms Providers? The West European Land Armaments Industry at the Turn of the Millennium', Occasional Paper No 23, Institute for Security Study, WEU, February 2001, p.3

²⁰ Unisys study, 'Intra-Community Transfers of Defence Products', Brussels, February 2005, §2.8; UK House of Commons Public Accounts Committee, 'Ministry of Defence: Maximising the Benefits of Defence Equipment Co-Operation', above fn.7, p.5

²¹ European Defence Agency, 'European Defence Expenditures in 2005', 20 November 2006, pp.9-10, – the EDA figures have been adjusted by the author to estimate the data for States that did not provide inputs and to account for collaborative R&D different from R&T. Yet, as only a limited number of EU Member States contributed data, the contribution of collaborative procurement could be up to 25%

<i>Country</i>	<i>Exclusively national programmes</i>	<i>Collaborative programmes</i>	<i>Imported equipment</i>
Spain	55%	12%	33%
Sweden	70%	15%	15%
United Kingdom	80.6%	10.5%	8.9%

Source: EU Institute for Security Studies

*Table 1: Proportion of Type of Defence Procurement, 1995-1997*²²

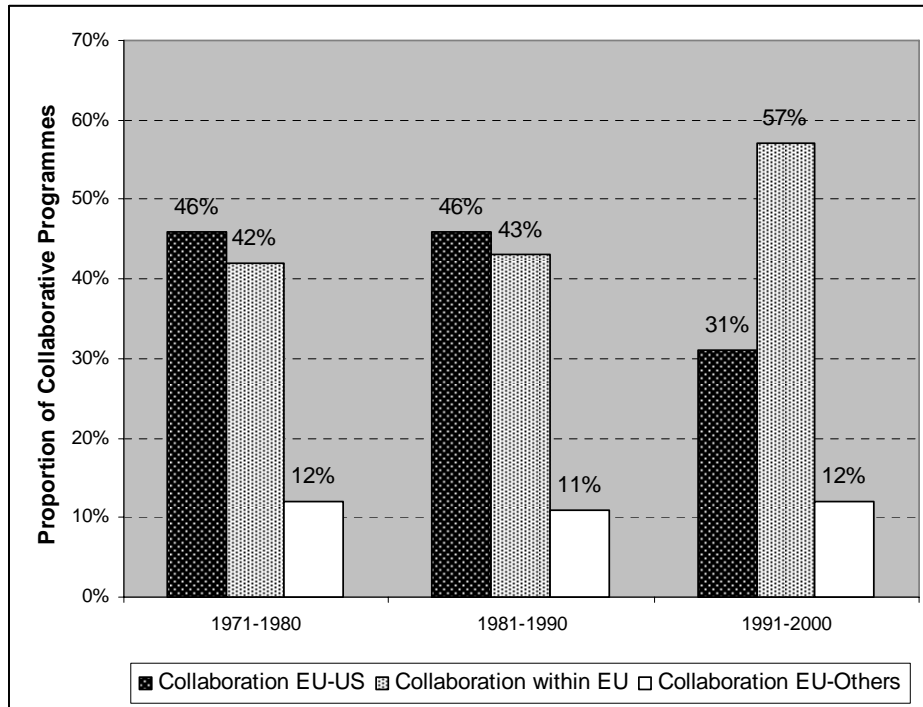
However, since that time, France has evolved towards more collaborative procurement (almost exclusively with other European countries), which now represent about 48% of its defence procurement programmes, whilst the United Kingdom used collaborative procurement for 19% of its defence procurement programmes (in majority with other European countries), but imported 20% of its major defence equipment from the United States.²³ Therefore, even though differences between EU Member States remain, the use of collaborative defence procurement has significantly increased in Europe since the 1990s.²⁴

Moreover, there is now a clear trend towards more European collaborative programmes and less collaboration with the United States (even though, again, there are differences between individual EU Member States). This trend is shown on Figure 2, which shows the percentage of the number of collaborative procurement performed by European States over time in terms of with whom the collaboration took place.

²² Vlachos K., ‘Safeguarding European Competitiveness – Strategies for the Future European Arms Production and Procurement’, Occasional Paper No 4, Institute for Security Studies, WEU, January 1998, Chapter 3.A.I and Appendix, Table 7

²³ Howe J., ‘The French and British Customers for Defence’ (2004) 7(2) RUSI Defence Systems, p.20

²⁴ Howorth J., ‘European Integration and Defence: The Ultimate Challenge’, Chaillot Paper No 43, Institute for Security Studies, WEU, November 2000, p.83



Source: US Defense Budget Project Globalization Database

Figure 2: Geographic Pattern of Collaborative Procurement in Europe²⁵

This figure shows that, even though the pattern of collaboration during the Cold War was roughly equal between purely European programmes and programmes involving the United States and European States (with a slight preference for the latter), this changed dramatically after the Cold War in favour of purely European collaborative programmes. This trend is also visible in the defence equipment trade patterns of EU Member States.²⁶

4. Management of Collaborative Procurement

4.1. Intergovernmental Cooperation

On the side of the participating States, older European codevelopment programmes were usually managed either through a ‘lead nation’ (often France), who would place contracts and manage the programme for the benefit of, and in collaboration with, the other participating States (among them very often Germany), or through a very informal and weak intergovernmental decision-making structure. More recently, the participating States in

²⁵ Jones S., ‘The Rise of a European Defense’, above fn.17, pp.251 and 256, from the US Defense Budget Project Globalization Database (this shows only coproduction and codevelopment programmes)

²⁶ Eriksson E.A. et.al., ‘Study on the effects of offsets on the Development of a European Defence Industry and Market’, above fn.13, p.21

European programmes have opted for a more balanced and slightly stronger management structure based on the allocation of the programme management responsibility to an international agency or organisation.²⁷

These management structures are generally seen as being heavier than that of a national programme, in particular because of the need to harmonise diverging national positions. Especially, the more recent structures are seen as adding an additional administrative burden and cost to collaborative programmes, even though it is recognised as being most likely fairer and more efficient than previous structures.²⁸ However, some of this administrative burden could be alleviated if the participating States would delegate more management and decision-making authority to the administration managing the programme, as this would in turn allow reduction in the administrative burden *within* the participating States, potentially leading to an overall reduction of overheads. Unfortunately, national administrations have up to now been rather unwilling to delegate such power, preferring instead to closely direct the entity managing the programme. It has even been argued that international organisations managing collaborative defence procurement were not procurement agencies, as they do not make procurement decision on behalf of the programme participating States.²⁹

In addition, the allocation of collaborative programme management to one or the other international organisation has very often been performed spontaneously on an ad-hoc basis, sometimes for political reasons, but also because no body upstream in the procurement cycle at the European level could develop a common coherent policy on this topic. Some hope that the EDA could fill that gap.³⁰

²⁷ Maulny J-P. et.al., 'Cooperative Lessons Learned: How to Launch a Successful Co-Operative Programme', above fn.4, pp.19-20; See the detailed organisation description in Covington T., Brendley K. and Chenoweth M., 'A Review of European Arms Collaboration and Prospects for its Expansion under the Independent European Programme Group', above fn.12, pp.30 et.seq.; As advocated in Creasey P., 'The Options and Prospects for Defence Procurement Collaboration', in Creasey P. and May S. (Eds.), *The European Armaments Market and Procurement Cooperation*, above fn.8, p.186

²⁸ Covington T., Brendley K. and Chenoweth M., 'A Review of European Arms Collaboration and Prospects for its Expansion under the Independent European Programme Group', above fn.12, p.58

²⁹ Taylor C., 'UK Defence Procurement Policy', House of Commons Research Paper 03/78, London, 20 October 2003, pp.28-30

³⁰ Kuechle H., 'The cost of non-Europe in the area of security and defence', European Parliament, DG External Policies, DGEExPo/B/PolDep/2005/13, 19 June 2006, §3.3; Schmitt B., 'The European Union and Armaments – Getting a Bigger Bang for the Euro', above fn.1, pp.25 and 40

4.2. Industrial Structure

Like for the organisational structure on the side of the participating States, the organisation of industry for collaborative programmes was originally often fairly informal, and the participating States' management entity sometimes had to manage an important number of contracts to cover the whole programme work scope.³¹ This increased dramatically the administrative burden, whilst at the same time shifting the risk of inadequate industrial coordination towards the participating States.

Following the evolutions in the intergovernmental management of collaborative procurement, for newer collaborative programmes, the European industry now usually creates an ad-hoc consortium or joint venture of which the participating national industries are both shareholders and subcontractors for the development and production of the equipment.³² Despite the fact that this usually increases the industrial cohesion and facilitates programme management, this also leads to a heavier structure involving sometimes competing industries, and to a related increase in costs and delays.³³ Harmonising the positions of the participating national industries can be as difficult as for the positions of the participating States.

Moreover, work allocation principles at the subcontractor level are often defined by the participating States, usually on the basis of *juste retour* (see below), which can dramatically reduce the efficiency of the supply chain.³⁴ Participating States are often more interested in reinforcing their national industrial structure, maintaining employment, and keeping their technological independence than in rendering the European industry as a whole more efficient.³⁵

However, we saw above in our quantification of collaborative procurement that collaboration in aeronautical and missile programmes had been substantially higher than for major

³¹ Covington T., Brendley K. and Chenoweth M., 'A Review of European Arms Collaboration and Prospects for its Expansion under the Independent European Programme Group', above fn.12, pp.30 et.seq.

³² Bourn J., 'Ministry of Defence: Collaborative Projects', above fn.6, §§4.27 and 4.28

³³ Fraser S., 'European Defence Equipment Collaboration: A View from the UK Ministry of Defence', above fn.6, page 17; Kuechle H., 'The cost of non-Europe in the area of security and defence', above fn.30, §3.3

³⁴ Commission Green Paper on Defence procurement, COM(2004) 608 final, 23 September 2004, §1; Rich M., Stanley W., Birkler J., and Hesse M., 'Multinational Coproduction of Military Aerospace Systems', above fn.13, p.5

³⁵ Lorell M., 'Multinational Development of Large Aircraft: The European Experience', above fn.11, pp.7 et.seq.; Covington T., Brendley K. and Chenoweth M., 'A Review of European Arms Collaboration and Prospects for its Expansion under the Independent European Programme Group', above fn.12, pp.59-60

armoured vehicles and battleships. Combined with the facts that the defence equipment market is demand-driven and that the European aeronautical and missiles sectors have now become more integrated than other defence sectors,³⁶ this could be evidence that collaborative procurement actually favours defence industry consolidation and has the potential to reduce the current fragmentation of the European defence industry.³⁷ This could also show that collaborative procurement, by reducing the number of buyers, drives the defence equipment market more towards a monopsony, reducing prices closer to the costs of production and forcing the least efficient suppliers out of business or into mergers to form stronger and more efficient companies to compensate this monopsony power with a monopoly or oligopoly.³⁸

The most successful collaborative programmes have been those where the industrial partners were complementary, not competitors, where the work allocation was performed on a cost-effectiveness basis, and where duplication was avoided as much as possible, especially in the production chains.³⁹ Also, a clear allocation of the risks and responsibilities between the participating States and the industry can improve greatly the management of collaborative programmes.⁴⁰

5. The Actual Record of Collaborative Procurement

5.1. Achievement of Operational Benefits

Two of the main challenges of collaborative procurement are the harmonisation of operational requirements between the participating States, and the agreement on common timescales for the programme (e.g. delivery schedule of the equipment), as has been shown in various past

³⁶ Communication from the Commission: 'European defence – industrial and market issues – Towards an EU Defence Equipment Policy', COM(2003) 113 final, 11 March 2003, p.10; Neuman S., 'Defense Industries and Dependency: Current and Future Trends in the Global Defense Sector', International Relations and Security Network (ISN), 2006, p.19

³⁷ On the defence industry fragmentation, see e.g. Schmitt B., 'The European Union and Armaments – Getting a Bigger Bang for the Euro', above fn.1, page 10; Georgopoulos A., 'The Commission's Green Paper on Defence Procurement' (2005) 14(2) PPLR NA34

³⁸ An oligopsony is a market form with a limited number of buyers and a potentially high number of sellers. Buyers with oligopsony power can drive the market prices down close to the cost of production. Trybus M., *European Defence Procurement Law – International and National Procurement Systems as Models for a Liberalised Defence Procurement Market in Europe*, Kluwer Law International, 1999, p.24

³⁹ Lorell M. and Lowell J., 'Pros and Cons of International Weapons Procurement Collaboration', above fn.6, p.37

⁴⁰ Maulny J-P. et.al., 'Cooperative Lessons Learned: How to Launch a Successful Co-Operative Programme', above fn.4, p.21

programmes.⁴¹ It has been argued, and it would seem obvious, that this problem would increase with the number of States participating in the programme but, surprisingly, there seems to be little evidence to confirm this trend.⁴²

The compromises required by such harmonisation usually lead to increased costs and delays, especially at the start of a programme, when its specifications are drawn-up and its budget defined, or even to the termination of the programme before its actual launch if no agreement can be reached among the participating States.⁴³ All participating States must be willing and able to decide the same thing at the same time.⁴⁴

Moreover, such harmonisation is not always efficient, sometimes leading to national variants of the same equipment that differ significantly from each other. In addition, if the defence equipment of each State originally participating in the collaborative procurement evolve and are supported entirely independently during their service life (e.g. through modifications or upgrades), the national versions, even if similar when they entered into service, will soon become very different, leading to the loss of economies of scale during the in-service phase and of most of the benefit to be gained from common in-service support.⁴⁵ Continued collaboration for the modifications of defence equipment procured collaboratively is therefore essential throughout its service life.

We saw above that one of the expected operational benefits from collaboration was interoperability through standardisation of the equipment, which is critical in an alliance such as NATO. However, this objective can only be achieved efficiently if most or all Member States of the alliance actually participate in the same collaborative procurement programmes. This has rarely been the case, with groups of countries launching different collaborative programmes, procuring off-the-shelf products from other sources, or developing national

⁴¹ Hayward K., 'Towards a European Weapons Procurement Process – The shaping of common European requirements for new arms programmes', above fn.6; Rich M., Stanley W., Birkler J., and Hesse M., 'Multinational Coproduction of Military Aerospace Systems', above fn.13, p.41

⁴² Bourn J, 'Ministry of Defence: Collaborative Projects', above fn.6, §§4.29 and 4.30

⁴³ Kuechle H., 'The cost of non-Europe in the area of security and defence', above fn.30, §3.3, and especially p.34; Rich M., Stanley W., Birkler J. and Vaiana M., 'Cost and Schedule Implications of Multinational Coproduction', RAND Paper P-6998, Santa Monica (USA), July 1984, p.6

⁴⁴ Maulny J-P. et.al., 'Cooperative Lessons Learned: How to Launch a Successful Co-Operative Programme', above fn.4, pp.12 et.seq.; Bourn J, 'Ministry of Defence: Collaborative Projects', above fn.6, §2.13

⁴⁵ Lorell M. and Lowell J., 'Pros and Cons of International Weapons Procurement Collaboration', above fn.6, pp.22 et.seq.; UK House of Commons Public Accounts Committee, 'Ministry of Defence: Maximising the Benefits of Defence Equipment Co-Operation', above fn.7, §§9-11

systems. In this view, it has been argued that collaborative programmes could actually reduce the potential for standardisation in comparison with other alternatives such as the procurement of the same existing equipment by all NATO Member States,⁴⁶ even though the latter option is not necessarily more likely.

As most European States now do not have the possibility to launch national programmes that match exactly their operational requirements, the only remaining alternatives to a codevelopment programme are either a coproduction agreement or the procurement of an off-the-shelf weapon system. In both of these alternatives, the weapon system has been designed based on the requirement of another user, with only limited possibilities of customisation, and in many cases such customisation is often technologically risky. Moreover, considering the existing landscape of the worldwide defence equipment market, this would in practice often mean procuring from the United States,⁴⁷ which might not be acceptable for all European States, as some may prefer a situation of mutual dependency between European States where their national industry may still have a role.

5.2. Programme Delays

Collaborative defence procurement programmes often incur long delays, both before the actual start of the programme and during the development process, thereby providing the required capability much later than expected. These delays are often considered as one of the main problems of collaborative programmes.⁴⁸

Delays in the launch of the programme are usually due to the time needed for setting-up the programme arrangement, harmonising the differing requirements and delivery schedules of the participating States, slow decision-making (all participating States must agree and secure the necessary funding⁴⁹), accommodating differing national procurement procedures, and

⁴⁶ Lorell M., 'Multinational Development of Large Aircraft: The European Experience', above fn.11, pp.13-30 and 73

⁴⁷ Cardinali N., 'Is Europe a Help or a Hindrance in National Defence Acquisition Strategies?' (2007) 10(1) RUSI Defence Systems 38

⁴⁸ Lorell M., 'Multinational Development of Large Aircraft: The European Experience', above fn.11, p.5

⁴⁹ Lord Garden, 'We Need Capability Integration – Not Equipment Cooperation', (2004) 7(1) RUSI Defence Systems 13; Hartley K., 'The Industrial and Economic Benefits of Eurofighter Typhoon', University of York, 16 June 2006, p.24

agreeing work allocation among the industry of the participating States.⁵⁰ These delays can indeed be significant.⁵¹

Moreover, the development phase of collaborative programmes is often contracted separately from production, which is in turn sometimes contracted in ‘tranches’ or phases, and the quantity of weapon systems actually required by each participating State can usually be modified at each ‘tranche’ of production. This can lead to very complex negotiations of work share revision, which in turn lead to delays in the launch of the next programme phase.⁵²

On the other hand, research tends to show that the delays incurred during development or within one phase of a collaborative programme are only marginally longer, if at all, than those of national programmes for similar equipment.⁵³ As an illustration, Figure 3 shows that there does not seem to be a correlation between the duration of the development phase of European programmes and whether or not they were performed collaboratively. Even though Figure 3 refers to fairly old programmes, the current situation is similar, as shown also on Figure 4 below in the case of the UK.⁵⁴

Nevertheless, for some reason pundits still often claim that collaborative programmes incur longer delays during development than national programmes.⁵⁵ It seems that these statements are often due to unrealistic expectations. Schedule slippages seem to be more closely

⁵⁰ Rich M., Stanley W., Birkler J., and Hesse M., ‘Multinational Coproduction of Military Aerospace Systems’, above fn.13, pp.41 et.seq.

⁵¹ Kirat T. and Bayon D., *Les Marchés Publics de la Défense – Droit du Contrat Public, Pratique Administrative et Enjeux Economiques*, Bruylants, Brussels, 2006, p.115; see also Hartley K., ‘The Industrial and Economic Benefits of Eurofighter Typhoon’, above fn.49; Bourn J., ‘Ministry of Defence: Collaborative Projects’, above fn.6, §§3.20-3.22

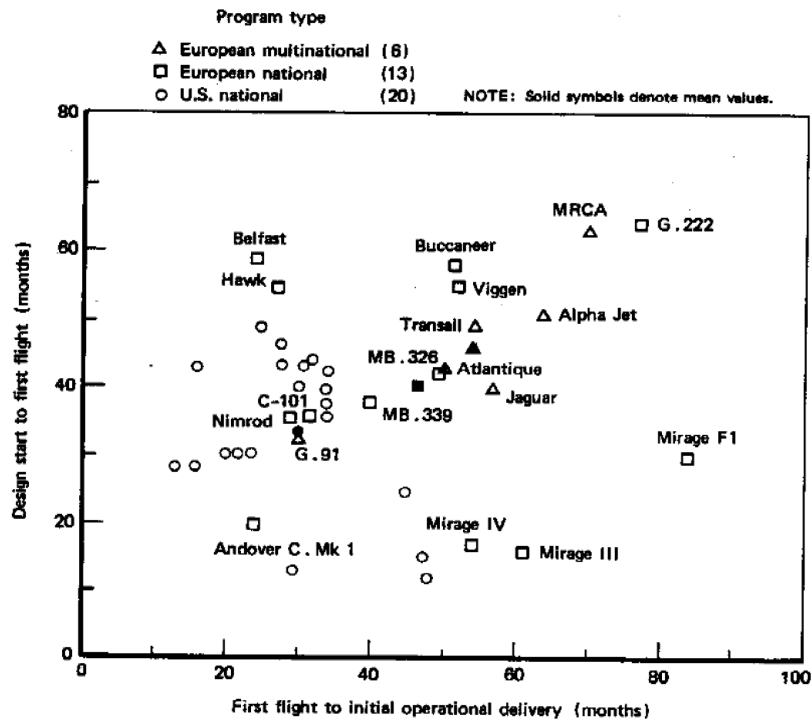
⁵² UK House of Commons Public Accounts Committee, ‘Ministry of Defence: Maximising the Benefits of Defence Equipment Co-Operation’, above fn.7, §17

⁵³ Lorell M. and Lowell J., ‘Pros and Cons of International Weapons Procurement Collaboration’, above fn.6, pages 15-16; Bourn J., ‘Ministry of Defence: Collaborative Projects’, above fn.6, §3.20

⁵⁴ Bourn J., ‘Ministry of Defence – Major Projects Report 2005’, UK National Audit Office, 15 November 2005, p.2; Hartley K., ‘The Industrial and Economic Benefits of Eurofighter Typhoon’, above fn.49, Table 4; Dubey G. and Moricot C., ‘La Polyvalence du Rafale ou l’Objet Total – La Relation entre une Technologie Nouvelle et ses Utilisateurs’, Centre d’Etude en Sciences Sociales de la Défense, Paris, 2006, p.5; Weston J. et.al., ‘Why Does It All Take So Long?’ (2007) 10(1) RUSI Defence Systems 32

⁵⁵ As explained in Lorell M., ‘Multinational Development of Large Aircraft: The European Experience’, above fn.11, pp.74-75; Keohane D., ‘Why Collaborate in Europe?’ (2004) 7(1) RUSI Defence Systems 14

correlated with the technical complexity of the programme that whether or not it was performed collaboratively.⁵⁶



Source: RAND Corp.

Figure 3: Comparison of Delays in Aerospace Development Programmes⁵⁷

However, Figure 3 also shows that European military development programmes, collaborative or not, seem to take significantly longer than similar programmes in the United States.⁵⁸ It has been argued that this is a consequence of the inefficient industrial structure set-up by sometimes competing European companies in order to be able to deliver a European programme.⁵⁹ This would then be another harmful consequence of the fragmentation of the European defence industry, but also indirectly of the use of the *juste retour* principle.

⁵⁶ Rich M., Stanley W., Birkler J., and Hesse M., 'Multinational Coproduction of Military Aerospace Systems', above fn.13, p.53; Bourn J., 'Ministry of Defence – Major Projects Report 2006', UK National Audit Office, 21 November 2006, p.10

⁵⁷ Rich M., Stanley W., Birkler J., and Hesse M., 'Multinational Coproduction of Military Aerospace Systems', above fn.13, p.30

⁵⁸ See also Lorell M., 'Multinational Development of Large Aircraft: The European Experience', above fn.11, p.74

⁵⁹ UK House of Commons Public Accounts Committee, 'Ministry of Defence: Maximising the Benefits of Defence Equipment Co-Operation', above fn.7, §25

Moreover, short development times are no indication of a product that fully meets its specification, and any programme delay is to be seen in the light of all other parameters of the programme (performance and costs).⁶⁰

Successful collaborative programmes unsurprisingly exhibited a genuine interest from all participating military services, as well as similar operational requirements and timelines for each participating States at the beginning of the programme.⁶¹

5.3. Achievement of Cost Benefits

5.3.1. *A Mixed Record?*

It is often argued that collaborative defence procurement programmes have not always been very successful at increasing the cost-effectiveness of defence procurement, and that the savings to be had have often been less than expected, sometimes much less.⁶²

Many reasons have been proposed for these lower-than-expected achievements, such as a complex procurement process that leads to delays and inadequate compromises because of heavy decision-making structures, and especially an inefficient allocation of money and industrial resources because of the use of so-called *juste retour* principle, whereby the economic value of the work allocated to the industry of a participating State (work share) has to match that State's financial contribution to the programme (cost share) rather than solely technological or economic criteria.⁶³

This *juste retour* principle is not actually defined in any overarching document, and its application can be subject to many variations, because the work allocation rules of each programme are usually defined on a case-by-case basis in the legal instruments creating the

⁶⁰ Rich M., Stanley W., Birkler J., and Hesse M., 'Multinational Coproduction of Military Aerospace Systems', above fn.13, p.29

⁶¹ Lorell M. and Lowell J., 'Pros and Cons of International Weapons Procurement Collaboration', above fn.6, pp.35-36; UK House of Commons Public Accounts Committee, 'Ministry of Defence: Maximising the Benefits of Defence Equipment Co-Operation', above fn 7, §33

⁶² European Parliament Resolution on the Commission communication on the challenges facing the European defence-related industry, a contribution for action at European level (COM(96)0010 C4- 0093/96), Document A4-0076/97, [1997] OJ C167/137, at [2]; Lorell M. and Lowell J., 'Pros and Cons of International Weapons Procurement Collaboration', above fn.6, pp.14 et.seq.

⁶³ Bourn, J., 'Maximizing the Benefits of Defence Equipment Co-Operation', UK National Audit Office, HC 300 Session 2000-2001, pp.20-26; Schmitt B., 'The European Union and Armaments – Getting a Bigger Bang for the Euro', above fn.1, pp.10-11; COM(2004) 608, above fn.34, §1; Flournoy M., Smith J. et.al., 'European Defense Integration: Bridging the Gap between Strategy and Capabilities', above fn.1, p.74

programme. The way this principle is applied for a programme can drastically affect its actual cost-effectiveness.

For instance, *juste retour* could have to be complied with for each phase of the programme individually (e.g. for the work share for development, and separately for the work share for production), or globally for the whole programme, with work allocated for development in one country being compensated by production work in another. Unfortunately, the latter approach, even though more flexible, is difficult to implement if development and production are contracted separately.

Additionally, the rules could be different for each phase of the programme. Work allocation for system development could be exempted from compliance with *juste retour*, but the selection of the components to be part of the weapon system could be subject to the principle, and so could production (multiple production lines).

The strength with which *juste retour* is mandated on industry can also vary: it might have to be applied strictly, or only by using reasonable endeavours to do so (allowing some work share deviations from cost share).

A specific and modern approach to work share is the *global balance* principle applied by the Joint Organisation for Armaments Cooperation (OCCAR) for the programmes it manages, whereby work allocation has to match cost share globally over all programmes managed by OCCAR over the whole life of such programmes, and not on a programme by programme basis or for each programme phase individually.⁶⁴

The use of the *juste retour* principle can result in cost increases that can reach 33 to 100% of a collaborative programme's potential cost.⁶⁵ It seems clear that these cost increases should be lower when the principle is applied more flexibly. However, despite the fact that some EU Member States recognise that the use of this principle should remain limited in favour of

⁶⁴ Convention on the Establishment of the Organisation for Joint Armament Cooperation (Organisation Conjointe de Coopération en matière d'Armement) – OCCAR, done at Farnborough on 9 September 1998, JORF N° 69 of 22 March 2001, p.4468 (*OCCAR Convention*), Art.5; Cardinali N., 'Is Europe a Help or a Hindrance in National Defence Acquisition Strategies?' (2007) 10(1) RUSI Defence Systems 38; Trybus M., 'Defence Procurement: The New Public Sector Directive and Beyond' (2004) 4(4) PPLR 198, p.207; Maulny J-P. et.al., 'Cooperative Lessons Learned: How to Launch a Successful Co-Operative Programme', above fn.4, pp.22-23

⁶⁵ Unisys study, 'Intra-Community Transfers of Defence Products', Brussels, above fn.21, §§2.8 and 6.7; Marsia J., 'La Base Légale des Accords de Coopération Internationale pour l'Acquisition de Matériel Militaire' (2002) Bulletin des Anciens N° 3, p.8

more efficiency (securing ‘best value for money’), some others still dogmatically advocate *juste retour*.⁶⁶

However, this should not hide the fact that the additional amount paid creates or strengthens industrial capacity within the participating State and ensures some technology transfer.⁶⁷ In that sense, these cost increases could be somehow compensated by an enhanced security of supply for the receiving State. Assessing the actual overall economic cost-benefit of collaborative procurement is therefore complex, but it is arguably more and more difficult to justify security of supply requirements within the EU following the end of the Cold War.

We will in turn analyse the actual record of development costs, production costs and cost overruns after programme launch of collaborative defence procurement.

5.3.2. *Development Costs*

As discussed above, the harmonisation of differing national requirements often leads to equipment that is more complex than it would have been for a purely national programme. This is because the resulting product attempts to meet as many as possible of the requirements of each participant.⁶⁸ This clearly leads to increased development costs and sometimes, by implication, unit price of the equipment.

The second factor that leads to increased development costs is of course the *juste retour* principle. In addition to the non-economical award of contracts, as we saw above, *juste retour* is complicated by the complexity of defining the actual total cost share of a participating State. Development is often contracted separately from production, and the quantity of weapon systems actually required by each participating State can therefore be modified unilaterally. This can lead to very complex negotiations of work share revision.⁶⁹

⁶⁶ Michel J. and Rivière J., rapporteurs, ‘Rapport d’Information sur les nouveaux défis de la construction de l’Europe de la défense’, Commission de la Défense Nationale et des Forces Armées, French National Assembly, N° 2531, 27 September 2005, pp.46-47; UK House of Commons Public Accounts Committee, ‘Ministry of Defence: Maximising the Benefits of Defence Equipment Co-Operation’, above fn.7, §§13-15

⁶⁷ Hartley K., ‘The Industrial and Economic Benefits of Eurofighter Typhoon’, above fn.49, p.25; Rich M., Stanley W., Birkler J. and Vaiana M., ‘Cost and Schedule Implications of Multinational Coproduction’, above fn.43, pp.8-10

⁶⁸ Kuechle H., ‘The cost of non-Europe in the area of security and defence’, above fn.30, page 34; Rich M., Stanley W., Birkler J. and Vaiana M., ‘Cost and Schedule Implications of Multinational Coproduction’, above fn.43, p.6

⁶⁹ Bourn J., ‘Ministry of Defence: Collaborative Projects’, above fn.6, §§3-26, 3.27 and 3.32 et.seq.

Empirical studies have attempted to estimate the cost of a codevelopment programme compared to that of a purely national programme. Such studies have shown that a reasonably good estimation of the total R&D costs of codevelopment is approximately equal to the cost for the same national programme multiplied by the square root of the number of participating States.⁷⁰ Therefore, even though the total R&D costs of a codevelopment programme are often higher than an equivalent national programme, what each participating State has to pay usually still remains about 70 to 75% of what it would have had to pay for a similar national programme.⁷¹

On the other hand, opponents of collaborative programmes estimate such gain as only about 5%, taking into account the additional indirect costs of keeping existing equipment in service whilst the new system is delayed.⁷² However, such statement can be misleading, as we saw that some delays of national programmes are similar to those of collaborative programmes.

If development costs of collaborative defence procurement were to be further reduced, the main areas to focus on would be the harmonisation of requirements and the contracting and work allocation principles.

5.3.3. Production Costs

There is a wide agreement that economies of scale can be achieved by integrating final assembly of equipment procured collaboratively.⁷³ Studies confirmed this potential: empirical evidence shows that an increase of 1% in the quantity produced leads to a total production cost increase of only 0.86%. This means that if two States procure collaboratively the same quantity of military equipment, the production cost per unit would fall by 9%. For three States, this reduction would be 14%.⁷⁴

⁷⁰ Lorell M., 'Multinational Development of Large Aircraft: The European Experience', above fn.11, p.5, which also mentions other possible formulas

⁷¹ Mawdsley J., 'The Gap Between Rhetoric and Reality: Weapons Acquisition and ESDP', above fn.7, p.6; Fraser S., 'European Defence Equipment Collaboration: A View from the UK Ministry of Defence', above fn.6, p.17

⁷² Kinkaïd B., 'We Can't Do Collaborative Projects!', above fn.9, p.12

⁷³ See the discussion in Bourn J., 'Ministry of Defence: Collaborative Projects', above fn.6, §§3.29 and 3.30; UK House of Commons Public Accounts Committee, 'Ministry of Defence: Maximising the Benefits of Defence Equipment Co-Operation', above fn.7, §7

⁷⁴ Dautremont S., 'Econométrie des Contrats de Défense', (2006) 40 ECODEF 5, p.6 (this study concerns the French defence industry); Heartley K., 'The European Defence Market and Industry', in Creasey P. and May S. (Eds.), *The European Armaments Market and Procurement Cooperation*, above fn.8, p.48, estimates that every

However, the use of the *juste retour* principle to duplicate production lines with the aim of ensuring security of supply and protecting employment has the effect of dramatically increasing production costs because of reduced economies of scale and duplication of the required investments, even though multiple assembly lines could provide for flexibility when one of them experiences difficulties.⁷⁵ Despite the fact that this practice could have been justifiable in the past on the grounds of security of supply, it is questionable if that argument still holds any measure of validity within the EU. Coproduction agreements have increased the costs of some military equipment by as much as 34%.⁷⁶ This figure is comparable to the cost increases coming from direct offsets, which were estimated in some cases at about 30%.⁷⁷ Despite that fact, many smaller Member States still almost systematically require offsets for their defence procurement.⁷⁸

The cost increases of such duplication are obviously difficult to share among the participating States, as they relate directly to each of the States relying on such duplicate production chains. In codevelopment programmes, these cost increases could be compensated by the gains in development costs,⁷⁹ even though the harmonisation of national requirements can lead to higher production costs because the resulting equipment is more complex than it would have to be in a national programme. Of course, such compensation is not possible for coproduction programmes, which therefore almost always show higher costs compared with off-the-shelf procurement.

As for development costs, production costs of collaborative procurement programmes could be reduced through improved work allocation and contracting principles. In addition,

doubling of cumulative output leads to a reduction of about 20% of labour costs (about 10% of total average production cost) per unit; Similar conclusions are reached in Newhouse J., *The Sporty Game: The High-Risk Competitive Business of Making and Selling Commercial Airlines* (New York: Alfred A. Knopf, 1982)

⁷⁵ See the detailed economic analysis in Rich M., Stanley W., Birkler J., and Hesse M., 'Multinational Coproduction of Military Aerospace Systems', above fn.13, pp.60 et.seq.; Bourn J, 'Ministry of Defence: Collaborative Projects', above fn.6, §3.5

⁷⁶ Rich M., Stanley W., Birkler J. and Vaiana M., 'Cost and Schedule Implications of Multinational Coproduction', above fn.43, pp.8-10

⁷⁷ Georgopoulos A., *European Defence Procurement Integration: Proposals for Action within the European Union*, above fn.17, footnote 705; Marsia J., 'La Base Légale des Accords de Coopération Internationale pour l'Acquisition de Matériel Militaire', above fn.55, p.8; Eriksson E.A. et.al., 'Study on the effects of offsets on the Development of a European Defence Industry and Market', above fn.13, pp.38 et.seq.

⁷⁸ Michel J. and Rivière J., rapporteurs, 'Rapport d'Information sur les nouveaux défis de la construction de l'Europe de la défense', above fn.66, pp.46-47

⁷⁹ Bourn J, 'Ministry of Defence: Collaborative Projects', above fn.6, §3.5

harmonisation and simplification of national regulations of intra-community movement of defence goods would also likely help reduce such costs (see below).⁸⁰

5.3.4. *Costs Overruns after Programme Launch*

As far as cost overruns during the programme itself are concerned, the first potential cause is linked to reductions of orders by the participating States, which on the one hand reduce the expected benefits of stability,⁸¹ and on the other hand can lead to increases in costs and delays in delivery.⁸² These reductions are usually due to unilateral cuts in defence budget. Other sources of cost overruns are increased development costs for technical reasons that are passed on to the participating States because of pricing arrangements such as ‘cost plus’.⁸³

However, just like delays, the cost increases of collaborative programmes after their launch are not very different from similar national programmes.⁸⁴ Even though this is sometimes disputed by opponents of collaborative defence procurement,⁸⁵ empirical evidence confirms the similarity between the cost overruns of national and multinational programmes.⁸⁶

As an example, Figure 4 shows the status of the major defence procurement programmes in the UK at the end of 2006 in terms of schedule slippages and cost overrun since internal UK approval. This figure tends to confirm that, as a general rule, the schedule slippages and cost overruns of collaborative programmes in which the UK participates are not significantly above those of national programmes. If anything, many major collaborative programmes have been more ‘on cost’ than purely UK programmes. Just like schedule slippages, cost overruns

⁸⁰ Communication from the Commission: ‘The Challenges Facing the European Defence-Related Industry, a Contribution for Action at the European Level’, COM(96) 10 final, 24 January 1996, p.29; Unisys study, ‘Intra-Community Transfers of Defence Products’, above fn.21

⁸¹ Hayward K., ‘Towards a European Weapons Procurement Process – The shaping of common European requirements for new arms programmes’, above fn.6; Lorell M., ‘Multinational Development of Large Aircraft: The European Experience’, above fn.11, p.5

⁸² Kuechle H., ‘The cost of non-Europe in the area of security and defence’, above fn.30, p.4; Rich M., Stanley W., Birkler J. and Vaiana M., ‘Cost and Schedule Implications of Multinational Coproduction’, above fn.43

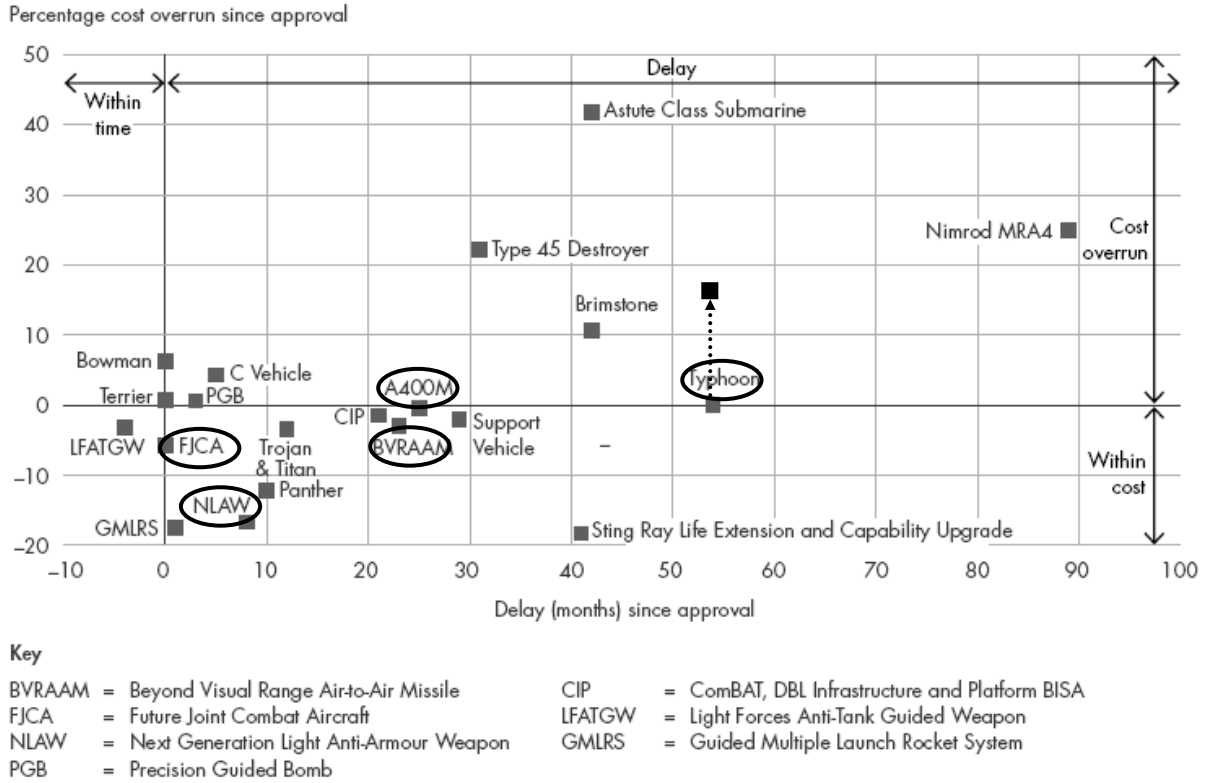
⁸³ A comparison of different types of pricing can be found in Dautremont S., ‘Econométrie des Contrats de Défense’ (2006) 40 ECODEF 5; Hartley K., ‘Competition in defence contracting in the United Kingdom’ (1992) 1(6) PPLR 440

⁸⁴ Rich M. and Dews E., ‘Improving the Military Acquisition Process, Lessons from RAND Research’, RAND Paper R-3373, Santa Monica (USA), February 1986, pp.5 et.seq.

⁸⁵ See the discussion in Lorell M., ‘Multinational Development of Large Aircraft: The European Experience’, above fn.11, pp.75-76; Kinkaid B., ‘We Can’t Do Collaborative Projects!’, above fn.9, p.12

⁸⁶ Bourn J., ‘Ministry of Defence: Collaborative Projects’, above fn.6, §§3.8 and 3.9, and Figure 3

seem to be more related to the technical complexity of the programme than to the fact that it is performed in cooperation. The pricing mechanism of the contract can also be a driving factor of cost overruns.



Source: UK National Audit Office

Figure 4: Status of Major UK Procurement Programmes at the End of 2006⁸⁷

In addition, in an opposite trend to the one we mentioned on schedule slippages, it seems that European programmes (collaborative or not) outperform United States programme in terms of cost overruns,⁸⁸ even though of course costs overruns are never a good thing.

5.4. Achievement of Political Benefits

There seems to be a general agreement that the political benefits expected from collaborative procurement programmes, such as strengthening alliances and fostering a better

⁸⁷ Bourn J., 'Ministry of Defence – Major Projects Report 2006', above fn.57, p.6, collaborative programmes highlight added, and cost variation of the Eurofighter Typhoon (commercially sensitive) estimated by the author on the basis of Hartley K., 'The Industrial and Economic Benefits of Eurofighter Typhoon', above fn.49, Table 4; The delays in the A400M and Eurofighter Typhoon programmes are a combination of initial delays in the launch of the programme and the schedule slippages incurred during development

⁸⁸ Dowdy J. and Gebicke S., 'A Closer Look at Acquisition Performance' (2007) 10(2) RUSI Defence Systems 68

understanding among the military forces, civil administrations and governments of the participating States, are generally met.⁸⁹ In addition, by helping to build a more integrated European defence industry (as long as the use of *juste retour* remains limited), collaborative procurement creates economic dependencies between the participating States, thereby helping to reduce the risks of future conflict in a similar way as the European Coal and Steel Community. This in turn should transform security of supply from a national to a European issue and reduce the need to rely on the *juste retour* principle.

However, there could also be political risks when collaborative programmes experience sharp cost increases or delays, or when the participating States fail to agree on requirements.⁹⁰ Delays, lack of funding and long procurement processes can lead States to withdraw from a collaborative project before its launch, or even after that, which can render their partner States wary of further cooperation, and lead to a continuous monitoring of the positions of each State participating in a collaborative project by the others.⁹¹ This creates an attitude of suspicion that is not very constructive.

6. Legal Aspects of Collaborative Procurement

Little has been written on collaborative defence procurement from a legal point of view. It is striking to notice that, within the bibliography used to write this article, there is very little reference to legal issues. These have been touched in some articles and books on public procurement law,⁹² but no exhaustive research has yet been performed specifically on collaborative defence procurement law. The most discussed issue is generally the compatibility of the *juste retour* principle within EC law. The author's doctoral research attempts to bridge that gap.

⁸⁹ As discussed in Rich M., Stanley W., Birkler J., and Hesse M., 'Multinational Coproduction of Military Aerospace Systems', above fn.13, p.4, but see also Kinkaid B., 'We Can't Do Collaborative Projects!', above fn.9, p.12

⁹⁰ Lorell M. and Lowell J., 'Pros and Cons of International Weapons Procurement Collaboration', above fn.6, pp.27 et seq.

⁹¹ Bourn J., 'Ministry of Defence: Collaborative Projects', above fn.6, p.5

⁹² For instance in Arrowsmith S., *The Law of Public and Utilities Procurement*, Second Edition, Sweet and Maxwell, London, 2005, §§6.101 et seq.; Trybus M., *European Defence Procurement Law*, above fn.38, pp.16 et seq. and 31 et seq.; Cox A., 'The Future of European Defence Policy: The Case for a Centralised Procurement Agency', above fn.5; Trybus M., 'Procurement for the Armed Forces: Balancing Security and the Internal Market' (2002) 27 EL Rev 692; Trybus M., 'Defence Procurement: The New Public Sector Directive and Beyond' (2004) 13(4) PPLR 198; Georgopoulos A., 'The New European Defence Agency: Major Development or Fig Leaf' (2005) 14(2) PPLR 103

For the collaborative procurement of major weapon systems, EU Member States routinely invoke the Art.296 EC exemption that, in some circumstances, allows a Member State to avoid complying with EC law in order to protect the essential interests of its security.⁹³ If that exemption is successfully invoked, the Member State may derogate from all provisions of EC law, including the EC Treaty principles applying to public procurement⁹⁴ as well as the EC Public Sector Directive and related national implementing measures.⁹⁵ It has been convincingly argued that, when defence procurement cannot be excluded from the scope of the EC Treaty though the use of the Art.296 or another exemption, the use of *juste retour* would be *prima facie* in breach of the EC Treaty as a measure having equivalent effect to quantitative restrictions on imports, and would also breach the right of establishment and the freedom to provide services.⁹⁶

Likewise, the EDA non-binding intergovernmental regime for defence procurement, which the EDA subscribing Member States may apply when they invoke Art.296 EC, does not apply to collaborative procurement.⁹⁷

Even when the Art.296 EC exemption is not invoked, the Public Sector Directive is said not to apply to contracts awarded pursuant to the procedure of an international organisation.⁹⁸ Arguably, this would exempt collaborative procurement performed through an international organisation from complying with the Directive,⁹⁹ even though this broad interpretation is

⁹³ Maulny J-P. et.al., 'Cooperative Lessons Learned: How to Launch a Successful Co-Operative Programme', above fn.4, pp.18-19

⁹⁴ Case T-26/01, *Fiocchi munizioni SpA v Commission* [2003] ECR II-3951 at [58]-[59]; Case C-414/97, *Commission v Spain* [1999] ECR I-5585; See further Heuninckx B., 'Defence Procurement in the EU: Time to Listen to the Wake-up Calls' (2006) 7(2) BLI 208; Georgopoulos A., 'Defence Procurement and EU Law', (2005) 30 EL Rev 559; Trybus M., 'Procurement for the Armed Forces: Balancing Security and the Internal Market', above fn.92

⁹⁵ Directive 2004/18/EC of the European Parliament and of the Council of 31 March 2004 on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts, [2004] OJ L134/114, as amended, Art.10

⁹⁶ Trybus M., *European Defence Procurement Law*, above fn.38, p.40, on the basis of Case 21/88, *Du Pont de Nemours Italiana S.p.A. v Unità Sanitaria Locale No. 2 di Carrara* [1990] ECR I-889

⁹⁷ EDA Steering Board Decision on an Intergovernmental Regime to Encourage Competition in the European Defence Equipment Market, Brussels, November 21, 2005: see Heuninckx B., 'Towards a Coherent European Defence Procurement Regime? European Defence Agency and European Commission Initiatives', above fn.3, p.6

⁹⁸ Directive 2004/18/EC, above fn.95, Art.15(c)

⁹⁹ EU Institute for Security Studies, 'Contribution to the Consultation 'Green Paper on Defence Procurement', Answers and Comments made by the EU ISS Task Force on the establishment of a European Defence

disputed.¹⁰⁰ Some go even further, and question the very applicability of EU law to international organisations in general.¹⁰¹

European collaborative defence procurement programmes therefore seem to arise in a legal void to which no overarching rules, except public international law, would apply.

The legal basis of each collaborative defence procurement programme is often an ad-hoc Memorandum of Understanding (MOU) among the participating States. Such MOU usually defines the phases and schedule of the programme, its objectives, its organisational and management framework, the cost share of each participating State, and the work share rules to be applied to the work allocation to and/or by the defence industry (often based on a variation of the *juste retour* principle).¹⁰²

These MOUs do not always cover the whole programme scope, and therefore require multiple MOUs for development, production (sometimes in different ‘tranches’) and in-service support.¹⁰³ This means that the actual overall commitment of each participating State is not known from the start, and that each phase of the programme has to be preceded by negotiations leading to the signature of the new MOU or an amendment to the previous one. By implication, the industry is contracted only for the phase covered by the current MOU, and new contracts have to be negotiated for each separate phase. This obviously increases overall programme delays and complexity. OCCAR attempts to resolve these issues by promoting the use of one single MOU per programme, covering development, production and initial support. In addition, the legal status of an MOU can vary from State to State, and the strength of the obligations incurred by each participating State through such MOU is not necessarily clear.¹⁰⁴

Equipment Market”, 15 February 2005, p.9; United Kingdom Permanent Representation to the European Union, ‘UK Government Response to the Commission Green Paper on Defence Procurement’, 15 February 2005, p.7

¹⁰⁰ Trybus M., ‘Procurement for the Armed Forces: Balancing Security and the Internal Market’, above fn.92, pp.709-711

¹⁰¹ This seems to be the position of France: Représentation Permanente de la France Auprès de l’Union Européenne, ‘Livre Vert sur les Marchés Publics de Défense’, No JMD/jf/544, MICA/182/2005, 25 February 2005, pp.4-5; It has also been used as an argument by international organisations such as Eurocontrol: Case T-155/04, *SELEX Sistemi Integrati SpA v Commission*, judgement of 12 December 2006, not yet published, at [41]

¹⁰² Bourn J, ‘Ministry of Defence: Collaborative Projects’, above fn.6, §§3.32-3.34

¹⁰³ Maulny J-P. et.al., ‘Cooperative Lessons Learned: How to Launch a Successful Co-Operative Programme’, above fn.4, p.9

¹⁰⁴ Marsia J., ‘La Base Légale des Accords de Coopération Internationale pour l’Acquisition de Matériel Militaire’, above fn.55, p.9; Bourn J, ‘Ministry of Defence: Collaborative Projects’, above fn.6, §§3.32-3.34

These MOUs usually allocate on an ad-hoc basis the management of the collaborative procurement programme to a specific international actor, sometimes a lead nation but now more often an international organisation.¹⁰⁵ Such organisations apply differing procurement rules that can deviate from the EC public procurement regime, which means that the procurement rules of collaborative programmes often vary from programme to programme. Likewise, the national rules applicable to the approval of collaborative procurement are not harmonised.

Last but not least, the intra-community transfer of defence products is currently ruled by national law, which leads to an extremely fragmented system. The ministries responsible for national export licenses are often different in each country, the types of licenses vary and have different scopes, and the processes used by each Member State for granting these licenses are quite different.¹⁰⁶ This puts a major administrative burden on collaborative programmes, which imply by definition the movement of defence equipment across borders. The European Commission recently took initiatives to simplify these national laws,¹⁰⁷ but it is expected that the process of harmonisation will take time.

This short overview of the legal framework of collaborative defence procurement shows that it is ill-defined, unclear and complex. This of course does not improve the legal certainty of collaborative programmes, and incidentally does not facilitate their comparison.

7. Improving Collaborative Procurement

Even though European collaborative defence procurement suffers from a number of shortfalls, we also saw that these are not necessarily those that conventional wisdom attributes to it. In summary, these shortfalls are:

- Difficulties in harmonising operational requirements and timelines among the participating States, which tend to delay the start of the programme and to increase the costs of the resulting weapon system;

¹⁰⁵ Schmitt B., 'The European Union and Armaments – Getting a Bigger Bang for the Euro', above fn.1, page 25; COM(2004) 608, above fn.34, §3.3

¹⁰⁶ Unisys study, 'Intra-Community Transfers of Defence Products', above fn.21, §§2.3-2.6

¹⁰⁷ Proposal for a Directive of the European Parliament and of the Council on simplifying terms and conditions of transfers of defence-related products within the Community, COM(2007) 765, 5 December 2007

- A complex or inefficient decision-making structure, both on the side of the participating States and on the side of the European defence industry, which can cause delays, especially at the launch of the programme and at the start of a new programme phase;
- The use of the *juste retour* principle, or variations thereof, leading to inefficient work allocation and duplication of resources, and in turn to increased development and production costs.

On the other hand, we saw that, once a collaborative defence procurement programme has been launched, the schedule slippages and cost overruns that it incurs are generally comparable to those of similar national programmes. This is especially the case if the intergovernmental agreements and contracts setting-up the collaborative programme include demanding withdrawal clauses, and cover both the development and production phases.¹⁰⁸ Collaborative defence procurement does deliver cost benefits, even though these benefits are reduced by the use of *juste retour*.

The main shortfalls of collaborative defence procurement programmes seem therefore to be due, not to an inefficient management of the programmes after their launch, but to the actual collaborative procurement process in its broader sense, including its legal framework, its multinational decision-making process, the agreement on multinational requirements, and the award principles for the relevant contracts.

For one, the processes for the harmonisation of the participating States' military doctrine and requirements (operational, temporal and budgetary) and for the drafting of technical specifications have to be improved. For instance, it has been argued that drafting technical specifications in functional terms would avoid the risk of States using the latter to indirectly favour their national industry and reduce the time required for harmonising such specifications across participating States.¹⁰⁹ Up to the creation of the EDA, the forums where such harmonisation took place have not been very efficient, as we will explain below, and it remains to be seen how successful the EDA will be in this area.

¹⁰⁸ Bourn J, 'Ministry of Defence: Collaborative Projects', above fn.6, §§3.32-3.34

¹⁰⁹ Maulny J-P. et.al., 'Cooperative Lessons Learned: How to Launch a Successful Co-Operative Programme', above fn.4, pp.16 and 26-31

It has been argued that the best way to increase the efficiency of collaborative procurement would be to move as much decision-making as possible to the industry, especially for work allocation and in-service support, and maybe even the harmonisation of requirements, and to guarantee competition based on merit in the selection of the contractors.¹¹⁰ Even though there is lots of merit in this line of argument, to be really effective, this solution would require the European defence industry to become more integrated in all sectors to improve its own decision-making process. Moreover, the European industry is usually not really willing to take over the harmonisation of national requirements, which is a usually thankless and treacherous process. However, granting a bigger say to the European defence industry in the definition of technical requirements, providing it with a better visibility of procurement planning to allow it to optimise its production schedules, and agreeing an equitable risk-sharing would help reduce the negative effects of the monopsony power inherent in collaborative procurement. The European defence industry has therefore a role to play early in the improvement of collaborative defence procurement.¹¹¹

Likewise, the procurement rules, intergovernmental decision-making process and organisational structure of collaborative procurement should be streamlined. This could be done by appointing multinational project management teams sufficiently empowered, adopting a through life approach (abandoning the use of different phases), and gradually moving away from the *juste retour* principle in contract award.¹¹² Moreover, the legal framework of collaborative defence procurement should be clarified and harmonised.

Many attempts have been made to rationalise European collaborative defence procurement and make it more efficient. As early as 1976, European States created the Independent European Programme Group (IEPG), which in 1993 became the Western European Armaments Group (WEAG) and part of the Western European Union (WEU).¹¹³ Within

¹¹⁰ Hartley K., 'The Industrial and Economic Benefits of Eurofighter Typhoon', above fn.49, p.24; Lord Garden, 'We Need Capability Integration – Not Equipment Cooperation', above fn.49, p.13; Birkler J., Lorell M., Rich M., 'Formulating Strategies for International Collaboration in Developing and Producing Defense Systems', RAND Issue Paper, 1997

¹¹¹ Giovachini L., 'Can European Co-operation Deliver Competitive, Cutting-edge Defence Equipment?' (2007) 10(1) RUSI Defence Systems 42; Maulny J-P. et.al., 'Cooperative Lessons Learned: How to Launch a Successful Co-Operative Programme', above fn.4, p.26

¹¹² Maulny J-P. et.al., 'Cooperative Lessons Learned: How to Launch a Successful Co-Operative Programme', above fn.4, pp.27-31

¹¹³ Covington T., Brendley K. and Chenoweth M., 'A Review of European Arms Collaboration and Prospects for its Expansion under the Independent European Programme Group', above fn.12; Bourn J., 'Ministry of Defence:

NATO, the Conference of National Armaments Directors (CNAD) aims to identify collaboration opportunities and to plan for standardisation in the research, development and production of military equipment.¹¹⁴ More recently, in order to compensate for the slow process of the activities of the WEAG, four major EU Member States founded OCCAR to manage more efficiently collaborative armaments development and procurement programmes and to strengthen the competitiveness of the European defence technological and industrial base,¹¹⁵ and the Council of the EU created the EDA to support the improvement the EU defence crisis management capabilities and to sustain the European Security and Defence Policy (ESDP).¹¹⁶

However, the overall achievements of these initiatives to date have remained limited.¹¹⁷ OCCAR is quite successful at managing collaborative programmes, but its role is currently limited to the management of the programmes allocated to it, and does not cover the definition of the defence procurement policy of its Member States.¹¹⁸ Conversely, the EDA supports the definition of the armaments policy of its participating Member States, but is not currently managing any collaborative programme.

It has been suggested that, to become more efficient, collaborative programmes should be selected on the basis of the mutuality and equivalence of interests of all participating States (strategic objectives, specifications and timelines). It seems clear that, before collaborative procurement is initiated, a common vision must be developed and the required capabilities clearly defined and harmonised. Within the EU, only the EDA can facilitate these tasks. Some have even argued that the complete management of the collaborative procurement process

Collaborative Projects’, above fn.6, §§2.25-2.27; Creasey P., ‘The Options and Prospects for Defence Procurement Collaboration’, in Creasey P. and May S. (Eds.), *The European Armaments Market and Procurement Cooperation*, above fn.8, pp.166 et.seq

¹¹⁴ *Manuel de l’OTAN*, NATO, Brussels, 1998, pages 195 et.seq.; Bourn J., ‘Ministry of Defence: Collaborative Projects’, above fn.6, §§2.21-2.24

¹¹⁵ OCCAR is the acronym of *Organisation Conjointe de Coopération en matière d’Armements*: see OCCAR Convention, above fn.64; Cardinali N., ‘L’OCCAR, un Outil pour les Coopérations Futures en Europe’ (2004) 75 CAIA Bulletin 26

¹¹⁶ Council Joint Action 2004/551/CFSP of 12 July 2004 on the establishment of the European Defence Agency, [2004] OJ L245/17, Art.2 and 5; Cardinali N., ‘Collaboration in European Defence Acquisition: Improved Outcomes’ (2005) 8(1) RUSI Defence Systems 26; Maffert N., ‘Bridging the Capability Gap’ (2004) 7(1) RUSI Defence Systems 34

¹¹⁷ Cox A., ‘The Future of European Defence Policy: The Case for a Centralised Procurement Agency’, above fn.5, pp.68 et.seq.; Mawdsey J., ‘The Gap Between Rhetoric and Reality: Weapons Acquisition and ESDP’, above fn.7, pp.6 et.seq.

¹¹⁸ Taylor C., ‘UK Defence Procurement Policy’, above fn.29, pp.28 et.seq.

(including logistic support) should be delegated to the EDA, and that the applicability of the EDA intergovernmental defence procurement regime should be extended to collaborative procurement.¹¹⁹ However, even though the latter proposal would probably somewhat enhance collaborative procurement, it would likely not resolve the issue of *juste retour*, as the EDA intergovernmental regime still allows the use of offsets.

8. Conclusions: Actions Needed Upstream

In a world of drastically reduced defence budgets and increasingly costly and complex military equipment, collaborative defence procurement is, for most European States, if not the perfect option, at least the most adequate compromise between an often impossible national development and an off-the-shelf purchase from another country, practically the United States. Collaborative procurement therefore plays an increasingly important role in the landscape of European defence procurement, as European States tend to reconfigure their cooperation more towards other European States since the end of the Cold War. The use of collaborative procurement also seems to reduce the fragmentation of the related industry area and to increase the cohesion of the participating States.

The costs of collaborative programmes could be reduced by recognising that security of supply has now to be ensured, not at the national, but at the European level, therefore allowing a move away from work allocation methods based on the *juste retour* principle and from licensed production. This move would probably also contribute to the necessary integration of the European defence industry, which is a precondition if the latter wants to be reborn as a major player on the international stage. However, this would require the European States to stop considering collaborative defence procurement as a vessel for ensuring the growth, or more often the survival, of their national defence industry.

Likewise, delays in collaborative programmes are often longer than those of national programmes, but only before actual programme launch or at the time of transition to a new programme phase. These delays are caused by the difficulty of harmonising national requirements and schedules, a complex decision-making process on the side of the participating States and of industry, and the contract and sub-contract award processes.

¹¹⁹ Flournoy M., Smith J. et.al., 'European Defense Integration: Bridging the Gap between Strategy and Capabilities', above fn.1, Chapter 4; Kuechle H., 'The cost of non-Europe in the area of security and defence', above fn.30, p.36; Maulny J-P. et.al., 'Cooperative Lessons Learned: How to Launch a Successful Co-Operative Programme', above fn.4, pp.26-29

Conversely, schedule slippages and cost increases after programme (or phase) launch are comparable to those of similar national programmes, and seem more related to the technical complexity of the programme.

Therefore, efforts to improve collaborative procurement should focus, not on the management of the programme itself, but on the improvement of the applicable procurement process in its broader sense, upstream of programme launch, including its confused legal basis.

However, this is not necessarily an easy task. A rapid survey of the legal framework of collaborative defence procurement at first can make one feel like entering the quasi-lawlessness of the Wild West. The author's research has passed this settled frontier and in the coming future will attempt to chart these untamed territories.