

Food for Thought Paper on European Defence Cooperative Programmes

Introduction

It is arguable that cooperative programmes for the development of defence systems can offer numerous and important benefits:

- 1) From a political perspective, they strengthen the ties between Member States and promote a common European security and defence approach;
- 2) From a military perspective, they contribute to the standardisation of equipment and foster interoperability between Member States' armed forces. This increases the effectiveness and efficiency of joint military operations and opens the path to cost-saving common arrangements for maintenance and in-service support;
- 3) From an economic perspective, they allow for risk- and cost-sharing, increased production volumes and economies of scale. This is particularly important for complex systems and core defence capabilities, which are often too costly for Member States to develop individually;
- 4) From an industrial perspective, they help develop core technological know-how and skills. At the same time, they offer opportunities and incentives to restructure industrial capacities and build integrated and competitive cross-border supply chains;
- 5) From an innovation perspective, R&D is crucial for improving existing military capabilities and developing new ones. Non-recurring costs are significant, regardless of future acquisition volumes. Cooperation in R&D thus contributes disproportionately to improving overall efficiency of defence programmes.

At the same time, Europe's defence cooperation record is rather mixed. Some cooperative programmes have clearly delivered the expected benefits, others have led to cost-overruns, delays and unnecessary duplications. Unfortunately, these negative examples have spoiled the general perception of cooperation, which is today often considered too cumbersome and complicated.

To foster cooperation, it is therefore necessary to both show that cooperation can work and to draw the lessons from past mistakes. This necessitates a sound assessment of obstacles and problems, which can then help to identify ingredients for success. This paper is a first contribution to this task.

1. Why is it so hard to get big defence development cooperation going among Member States? What are the obstacles that prevent cooperation?

- Diverging strategic ambitions persist, which leads to different interpretations of the appropriate level of strategic autonomy and different national capability priorities;
- Diverging threat assessments exist, which leads to different operational needs and different national capability priorities;
- In cooperative programmes, decision making and partnering arrangements between governments and industries are inevitably complex. Negotiation and preparation of these arrangements are therefore time-consuming and can fail;
- The definition of military requirements at the national level is already a complex exercise; this makes Ministries of Defence and military services even more reluctant to compromise on these requirements to achieve agreement with other Member States;
- Depending on the size, status and competences of their national defence industries, Member States have different and sometimes non-complementary defence industrial priorities and objectives. This can make it difficult to agree on workshare arrangements;
- Defence and procurement planning of Member States are not sufficiently synchronised, which creates difficulties to match timings of national capability requirements;
- Member States' budget cycles are not synchronised, which makes it difficult to ensure the various national budgetary and parliamentary approvals in time;
- Bad examples of the past have led to a negative narrative around “failed” and overly complex cooperation. This can easily undermine the political support for cooperative programmes and reinforce the temptation to opt for supposedly safer and cheaper alternatives (off-the-shelf or minor role participation in U.S. programmes).

2. Why do cooperative programs go wrong once they are launched? What are the specific difficulties causing delays, cost overruns, etc.?

- When governance structures lack clear leadership and include multiple veto-rights, they become inflexible and inefficient;
- When programme requirements are too complicated with too many national variants, they lead to technical problems, delays and cost increases;
- Initially agreed requirements may evolve over time, also unilaterally, and question key parameters of the programme;
- Work share agreements that are too rigid and based on considerations other than technological excellence can create problems of efficiency and quality;

- Insufficient risk- and cost-share arrangements may incentivise contractors to transfer risks to the overall programme level;
- The mismatch between long development and production phases and relatively short national budget cycles can undermine the financial stability of the programme;
- Political changes in participating Member States may lead to unilateral withdrawal or reduction of initial orders, impacting negatively on cost-and workshare agreements of the programme.

3. Ingredients for success: Characteristics of cooperative programmes that have worked well

- Share a common vision on the strategic importance of the capability and the importance of sourcing the underpinning technology in Europe (ideally enduring beyond the specific programme);
- Achieve a genuine harmonization and coordination of operational and military requirements from the outset, and wherever possible avoid the temptation to add national specifications or over-specify requirements;
- Introduce an upstream phase allowing for the maturing of technologies and the reduction of risks;
- Align associated activities (doctrine, testing and training, standards, qualification and certification logistics, maintenance...);
- Establish simple and robust governance structures: Ideally one lead-nation or one fully empowered European procurement agency (such as OCCAR) and one prime-contractor empowered to lead the endeavour. Not more than two Member States holding a veto power, and not more than three first tier industrial partners or a widely integrated European company;
- Establish a strong, reactive and efficient customer organisation with clear rules of programme governance; go for a single (joint) empowered management programme office with minimal duplication at the national level; no political micro-management of the industrial organisation;
- Adopt a truly collaborative industrial approach that capitalises on synergies across the industrial base, utilising existing skills and limiting duplication;
- Base industrial cooperation on competence, seek complementarity and avoid duplicating industrial capabilities (at least on high cost elements), limit juste retour requirements;
- Use a simple contractual scheme (one global contract or a series of strongly coordinated contracts covering all the phases of the programme: development, industrialisation, production, maintenance, systems environment ...);
- Introduce strong contractual commitments to remain a member of the cooperation and stick to intended off-take requirements.

4. Examples of successful cooperative programmes

- Missiles: SCALP-EG/Storm Shadow (FR, UK, IT); Meteor (UK, FR, DE, IT, ES, SE); IRIS-T (DE, EL, IT, ES, NO, CAN);
- Combat aircraft: Tornado (DE, IT, UK), Jaguar (UK, FR), Eurofighter (UK, DE, IT, ES), Alpha jet (FR, DE);
- Combat drone demonstrator nEUROn (FR, IT, SE, ES, EL, CH);
- Horizon Frigate (FR, IT);
- Boxer combat armoured vehicle (DE, NL).

Conclusion

It is clear that defence cooperation between Member States faces systemic challenges. Even between partners that have similar strategic cultures and a trustful relationship, it remains an inherently complex task in a politically sensitive domain. It is therefore not surprising that cooperative programmes face important obstacles and high risks.

To mitigate these risks and enhance the chance for success requires improvements in inter alia: more systematic common capability planning and translation into common priorities with agreed and harmonised requirements and specifications. A concise and robust governance framework, with management and decision-making procedures kept as simple and effective as possible. This includes intelligent workshare distribution and limited, flexible juste retour arrangements. Financial stability of the programme is crucial.

Signed by Jan Pie, ASD Secretary General, on 22 March 2017
