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Weimar Defence Cooperation – Projects to Respond to the European Imperative
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Austerity-driven reforms of armed forces and defence budgets are currently under way in many EU Member States. The Council conclusions of December 9, 2010, are full of good intentions to foster enhanced cooperation among Member States. Four elements were meant to turning the vision of “the Hour of Europe”, proclaimed by then German Defence Minister zu Guttenberg, into reality: first, the so-called Gent process, launched by Sweden and Germany in September 2010 and geared towards a systematic analysis of options for pooling and sharing national capabilities in the interest of common security and defence; second, the Franco-British cooperation agreement of November 2010, which includes practical examples of enhancing interoperability, logistical pooling and sharing arrangements for air refuelling capacities; third, the increased responsibility of the European Defence Agency for the identification and coordination of concrete steps towards more efficient cooperation; finally, the Lisbon-treaty instrument of Permanent Structured Cooperation that is considered to become, step by step, the predominant tool of promoting the strengths of European capacities whilst preserving the freedom of Member States to choose their own way and pace of integration into the collective endeavour of CSDP. As recent initiatives on defence reform are mainly driven by austerity in national budgets, they primarily focus on preserving or abolishing national military capabilities. Yet, scarcity of resources requires a common European planning of capabilities. You save better if you save together.

A nucleus for such permanent, well-structured and practical cooperation can be the Weimar context. It may serve – if some conditions are met – as an example of how smaller groups can open the way to broader EU efforts encompassing more Member States than just the avant-garde: three countries are not too many to work on common projects – experience with the efforts of 26 EDA Member States suggests this assessment; three are not too few either since they are not in danger to raise suspicion of an exclusive bilateralism; last, but not least, the Weimar triangle has been and still is an important symbol of the post-cold-war re-organisation of the European order. The Weimar triangle brings together three countries with complementary visions towards European integration but different approaches with regard to practical steps. Military cooperation has been already in place on a bilateral basis. Now, a trilateral EU Battle Group (Weimar BG) is foreseen in 2013. Cooperation beyond this Weimar BG on a bilateral or trilateral scale has so far been hampered by different strategic cultures and heterogeneous strategies for the defence industrial base. Whilst differing national orientations in industrial matters will persist for some time intensified military cooperation would be a powerful signal of political and practical integration.

A word of caution, however: Armed forces have their histories and traditions; they are still symbols of national identity. Any “European” effort needs to recognize that. There should be no illusion of a reconstruction of European forces or even a European Army from zero. Instead, building on existing assets, structures and capabilities is required. The situation is similar in the industrial sphere, in particular regarding the armaments industries. Just as an EU army will not be put together without respecting the existing national elements, a European armaments industry will not consolidate from a theoretical blueprint of an efficient, wasteless and premeditated division-of-labour industrial complex. It can only be approximated by an arduous process of adapting to the challenges of the era – in our case the era of fiscal constraints and austerity.

Therefore, we ask the question how to react to the European Imperative in times of austerity? This study takes a practical approach, characterized by a degree of realism and is based on existing concepts and already established forms of cooperation – cooperation that entails options to go further and gradually to extend the reach and the benefits of close cooperation. Thus, we have chosen one example of such cooperative projects for each of the timelines of ambition: a short-term option (about a 2-year plus horizon) “Permanent and Pooled Battlegroup Capabilities”, a medium-term option (roughly 5 to 10 years horizon) “Towards a Common UAV Platform for Civil and Military Monitoring”, and a long-term option (10 to 20 years) “Industrial Cooperation on Protected and Armoured Vehicles”. In all three cases, however, the time to decide and act is now – not
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later. We will analyse the selected three individual cases, explore a possible cooperation model, discuss and assess its potential benefits and indicate, in our conclusions, the necessary courses of action.

The detailed discussion of the three proposals will reveal that they all have an important civilian dimension: defence cooperation as suggested here is part of and contributes to the wider foreign and security policies of the Weimar partners and the European Union at large.
The Short Term Cooperation Case: Reviving the EU Battle Group Concept – Towards Permanent Weimar Capabilities

Given scarce financial resources and a compelling need to do away with costly duplications of capabilities in the Member States’ militaries, the idea of EU Battle Groups (BG) is more important than it is usually acknowledged. Though several BGs have been established from scratch – for instance the Nordic Battle Group under Swedish command, the HELBROC Battle Group commanded by Greece, or the Czech-Slovak BG – this effort may be lost if there is no continuity in cooperation and no institutional memory is allowed to develop. In times of cuts in defence budgets and increasing pressure to maximize the utility of existing capabilities, the EU cannot afford to lose either the experience or the potential of BG-focused cooperation. Thus, not only has the EU to revise scenarios for BG engagement to empower CSDP with credible and accessible assets, but also – and maybe even more importantly – it has to exploit the potential of BGs as the enabler of capability-oriented cooperation amongst EU Member States.

Already in 2006 the Weimar states declared willingness to jointly contribute to the BG system by a “Weimar Battle Group”. The Battle Group, which will enter standby in 2013, is the first common military endeavour of France, Germany and Poland of this size. All three countries have already taken part in EU BGs, most notably Germany and Poland, which provided the back bone of the Polish-German-Lithuanian-Latvian-Slovak Battle Group in 2010. France has contributed to several Battle Groups as well. Therefore, all three partners have gathered significant experience with regard to this particular type of capability. The initiative to create a Polish-German-French Battle Group was accompanied by a discussion whether the concept of BGs could be enhanced. The idea has been, that the BG could evolve into a standing, larger and more flexible force, comprising both military and civilian capabilities. Nicknamed by some “BG plus”, the concept has unfortunately not been implemented so. Yet, it does have significant potential to both revive the system of Battle Groups, which suffers from routine and apparent operational irrelevance, and boost Member States capability-oriented cooperation. It is worth, re-considering it seriously.

The Weimar states should declare that the prepared Battle Group would be gradually transformed into a standing “BG plus” and become a hub for their cooperation in the capability domain. Assuming that the novel BG is both permanent and beefed-up with further military and civilian capabilities, a number of opportunities to initiate capability-oriented projects would clearly appear. A standing multinational force would require from all three states a joint effort with regard to at least logistics, medical support, and the command and control system. Within these capability areas multiple projects of different character could be undertaken. The first two initiatives build on the already agreed role specialization within the Group. Hence, they would conform with pooling and sharing proposals discussed within the Ghent initiative.

As Germany is the most likely leader with regard to deployable logistics for the planned BG, some additional national elements might be pooled around a German-provided framework. Those could involve, for instance, means of in-theatre, non-combat transport, both land and air. This way a common deployable logistics capability could be established. Not only could it be used when the BG itself is activated, but it could also be deployed, if they all agree, independently of the Weimar BG. In such crisis management operations, which particularly require logistical support (e.g. evacuation missions), the joint capability could – at some point in the future – become a Weimar-provided nucleus of a standing deployable logistics support for CSDP operations. Other Member States could join or copy such a scheme.

France will most likely take responsibility for medical support in the Weimar Battle Group. Such standing joint capability could be developed as the next step of the Weimar trio cooperation. Upgraded by adding e.g. a common field hospital or MEDEVAC capacity, such capability could also be used as a support element for both, operations involving the BG and other CSDP missions of non-combat character (e.g. humanitarian relief operations or rescue missions). Both joint capabilities – the logistics and the medical support – could include a significant number of civilian elements and could be designed to allow their use also for civilian CSDP operations. It would allow their
use in case of operations requiring neither the use of force nor the deployment of the BG. The non-military character of deployed assets could make governments and public opinion more willing to accept the engagement. Finally, using such civilian or civilian-military assets would require a Weimar agreement on the rules of providing such assistance in combat and non-combat conditions.

The third capability area, the C3 (command, control and communications) system of the Weimar BG will probably not benefit from a lead nation but will have to be tackled in a cooperative form. The Member States would envisage employing some common hardware elements, which would further increase interoperability and strengthen the battlefield awareness at all levels, from individual units to the force- and operations headquarters. The aim of the Weimar trio could be to move on with integrating common elements in existent systems and gradually build a unified C3 architecture for the “BG plus”. Doubtlessly, this would be a step-by-step process requiring new procurement; though it could be facilitated by turning to Commercial and Military Off-The-Shelf (COTS/MOTS) solutions and assuring modularity. Elements of C3 national systems could be upgraded to be capable of plugging-in to the common C3 architecture of the “BG plus”. Eventually, such capability would surely allow greater operational efficiency than using three parallel systems, as it is the case in the current Battle Groups.

All proposed capability projects could be financed from a common budget, agreed on an intergovernmental level, according to the level of ambition expressed by the Weimar trio. To be eventually developed, such capabilities would definitely require stable financing to be implemented, and an honest approach of all Weimar partners, which have to acknowledge the need to take on an equitable burden in the initiative.

Initiating capability-oriented cooperation of the Weimar states and focusing it around the implementation of the “Battle Group plus” concept offers tangible advantages. The key benefit may be the value of Weimar cooperation as a role model for developing capability-oriented cooperation in the EU and moving forward with pooling and sharing. Member States, that engaged or plan to engage in Battle Groups system may copy Weimar initiatives and e.g. establish further standing capabilities, particularly within the domains of deployable logistics, maintenance and support, engineering or medical support. If such a process started it would underpin CSDP with a whole array of shared capabilities, which could be easier to use for operations, both civilian and military. Thus, Weimar cooperation oriented at developing and implementing the “BG plus” concept could be an inspiration and a guidance for the entire EU.

What may help Weimar to draw attention of the Member States to its cooperation is a current drive within the EU to establish regional defence cooperation initiatives, which would save money through creating joint capabilities and role specialization. Further, there is a broad interest in detailing the Ghent initiative on pooling and sharing to make it ripe enough to be implemented. Last but not least, the discussion on Battle Groups – though inconclusive so far – is sustained on the agenda of some Member States which believe that the current system has to be altered. The Weimar trio also reveals some coherence with regards to preferred direction of developing EU’s CSDP (it is best epitomized by the joint initiative to establish Brussels-based EU Operational Headquarters). Poland is now seeking a more prominent role in CSDP, following re-orientation of its security policy more towards European pillar. Germany may be interested in developing a comprehensive civ-mil tool, which would be easier to deploy than a “classic”, combat-oriented Battle Group; an attractive option given the country’s reluctance to engage militarily. Finally France, which has been criticized for some time now for its exclusive military cooperation deal with the United Kingdom, may be willing to show that it is still committed to the idea of l’Europe de la defense, which it once heavily endorsed.
The Mid Term Cooperation Case: Towards a Common MALE UAV Platform for Civil and Military Monitoring

There is a general trend in the evolution of military technology towards more automatic and autonomous operations. UAVs (Unmanned Aerial Vehicles) are not yet there. Whilst they are for the time being remotely piloted in most they can only be used in restricted and cleared airspace with given air superiority. Dedicated UAVs deal with monitoring and surveillance in missions where long endurance is needed for recurring duties. Depending on their size and capabilities UAV systems (platform, ground control station, sensor analysis) can be less expensive than piloted platforms. Due to the necessary data control links they fly much slower and are widely unprotected against surface- or air-to-air attacks.

Because of the lessons learnt in the Kosovo operation and an increasing and asymmetric military engagement in Afghanistan, some EU member states have procured MOTS UAV platforms in small numbers to support reconnaissance and surveillance for large areas of operation. Besides small tactical UAV platforms, the predominant type used in these specific conflict scenarios (low- to mid-intensity counterinsurgency) is called MALE UAV (Medium Altitude, Long Endurance). They are characterized by velocities below 800 km/h, a payload between 150 and 1500 kg, a cruising altitude of around 10 to 20 km and a typical in-area operation time of 24 to 36 hours. While the U.S. have already armed such platforms (i.e. Predator B) with missiles or smart bombs, European armed forces, in particular France and Germany, have only used MALE UAVs as intelligence gathering platforms. However, both armed forces consider procuring armed-capable platforms in the future, too.

While armed MALE UAVs are to some extent of bigger size, therefore heavier and more costly, MALE UAVs for purely reconnaissance missions are not only cheaper but capable of conducting both civil and military operations. With more flexible platforms procurement lots increase and the price per unit decreases. However, the trend of uncoordinated procurement of MALE UAVs for military purpose amongst EU member states continues with the orders of second generation interim solutions and several development programs in Europe.

In the heavy MALE UAV domain a joint development program between France and the U.K. (Dassault and BAE will propose a common solution) as envisaged by the Franco-British defence cooperation agreement of 2010 reduces the likelihood of success for the EADS Talarion program, initially supported by Germany, France, and Spain. While using interim solutions from IAI (France: Harfang and a solution based on Heron TP for the 2nd generation interim solutions, Germany: Heron) and General Atomics (U.K.: Predator B) at the moment, a common platform on a mid-term timeframe is unlikely due to differing strategic and industrial interests of EU member states.

In the domain of unarmed smaller MALE UAV platforms a different picture can be drawn. At the time being, the market for UAVs is essentially military; however, civilian demand in the field of security is expected to grow over the coming years. Missions in the area of security require similar functions as those in the area of defence. Sensors in the infrared or visible spectrum can be used to detect fire outbreak, to monitor agricultural productions and to observe major public events. Radar sensors are capable to detect moving objects and can be used for border and maritime security. However, military, and even more so, security applications of UAVs require flight certification for regulated airspace on a European scale, representing a key regulatory challenge.

As UAVs are modular systems (platforms, sensor packages, communication links for flight control and data transmission, a ground station and analysis workstations), a variety of cooperation models from development over procurement to operation and servicing are possible. The modularity approach enables even those EU member states with little but specialized industrial or SME capabilities to contribute to the overall system. However, the multiple developments of platforms in Europe would gobble up vast financial and industrial resources that cannot be recovered by European demand. Global export is not likely to help because multiple European platforms would compete against each.

It remains a political decision to steer research and technology development for a dual-use capable MALE UAV platform towards a joint endeavour amongst EU
member states. Considering the existence of several COTS and MOTS solutions from non-EU countries, a European program must not need to be justified by reasons of technological independence alone but also by required capabilities, interoperability considerations, and future integration of UAVs in regulated airspace. Beyond the special case of Afghanistan, and the Western counter-insurgency approach, and crisis management operations as envisaged by the EU, MALE UAVS have a broader spectrum of applications that calls for an inexpensive flexible platform and functional modularity of plug-ins for both, civilian and military applications.

Recently we have witnessed several (military) multilateral procurement programs with overambitious requirements which have ultimately led to incompatible national versions of equipment. It is, therefore, indispensable to have a sound definition of requirements and a commitment to avoid overcharging technological projects. The Weimar framework can offer a political forum where core interests of member states meet wider European acceptance to later joining such a program. The European Defence Agency (EDA) can hold the institutional framework where France, Poland, and Germany initiate a joint technology project (Category B project; opt-in procedure). It must be the aim of such an endeavour to be able to choose from demonstrators developed under a tendering procedure co-funded by industry and participating states in the EDA project. It is obvious that such a platform needs to provide open architecture interfaces for modules (sensor packages etc) in order to give European customers the choice of components they want to plug on to. Through the Weimar framework, a political dialogue can be initiated with an option to also develop a common industry policy in the UAV sector.
Main Battle Tanks (MBTs) have for decades been the strongest symbols of land forces firepower and remain in the arsenal of Poland, France, and Germany. Their relative significance, however, has sharply diminished. While 20 years ago the German Army alone operated more than 4000 Leopard I and Leopard II tanks today only a fraction of less than 10 per cent is left. A similar situation is found in France and Poland. No new acquisitions are planned – only some modernization of existing systems is foreseen. Other, lighter armoured or protected vehicles are a different matter. Armoured fighting vehicles (AFVs) are in greater demand. Germany will procure PUMA, France has developed the VCBI, Poland intends to replace the post-Soviet BMP-1 with a new AFV, possibly provided by national industry alone, or in cooperation with international partners. The envisioned numbers, however, are much smaller than during the Cold War. Industry is active in promoting its capacity to deliver up-to-date technology for vehicles that provide a wide spectrum of protection for transport and fighting purposes. For example, the two major German companies in this area, KMW and Rheinmetall, offer a range of protected vehicles reaching from modernized versions of the Leopard II tank and the heavily protected PUMA AFV down to lighter vehicles like Boxer or Dingo.

An early EDA analysis in 2005 identified, at that time, 23 different armoured or protected vehicle projects in its 26 Member States – an example of the market and demand fragmentation that does not allow for an efficient use of European development and production capacities. In addition, demand fragmentation meets with fragmentation of the supply side. In France, UK, Sweden, Finland, Poland, Germany, Italy, Spain, Austria and Switzerland one would find research, technology, development, and manufacturing capacities for protected and armoured vehicles. With the exception of the Leopard II, which is part of the army arsenals in all of the abovementioned countries except France and UK, the main procurement feature everywhere is still to buy predominantly national. A mixture of security of supply considerations, arguments of preserving national technological and industrial capacities, and feelings of military tradition, style and culture is conducive to keeping cross-border procurement or extensive cooperation projects at a minimum.

A major economic drawback of this situation is the fact that the multiplicity of systems complicates export efforts. Again with the exception of MBTs lighter protected vehicles are seldom crossing national borders. Were it not for urgent operational needs in specific actual combat zones Germany, for example, would hardly have considered buying from Swedish (Bv 206) and Swiss (Eagle IV, Yak) providers. (Poland has, however, decided against national lobbies and is procuring Finnish 8x8 APCs, which are produced under license in Poland). The other effect of the multiplicity is the enormous burden on the allied logistical systems: every type of protected or armoured vehicles needs its own supporting line of spare parts, maintenance procedures and training. Multinational contingents in operations can rarely help each other out on such needs.

What could be a long-term cooperation model for the industrial structures in the AV/PV area? The case seems clear: There needs to be cross-border consolidation – in the demand sphere under the control of the military establishments, in the supply sphere under the control of industry itself. As to the latter, an all-European view of the required capacities needs to develop. European industry does have an excellent position in the global market, but there are too many players competing for national funds and export markets. Production lots are too small to sustain all existing capacities. NEXTER, Rheinmetall, KMW, and Bumar are currently working on state-of-the-art AFVs and APCs, all based on national requirements. Only BOXER is a bi-national project (Germany and the Netherlands – after French and British retreat from the programme). Numbers are in the hundreds, no longer in thousands. Exports will fight each other, producing few winners, more losers and might also include unwanted technology transfer. Long-term industrial interest should recognize that in 10 years from now austerity defence budgets of most European countries will not allow sustaining the fragmented supply landscape. Thus, the question arises whether the demand side – governments and their requirements – can help.
Here, the easiest and obvious way forward would be to establish common multinational programmes. Recent historical examples of such demand consolidation are spectacularly visible in the area of combat and transport aircraft: Eurofighter, NH 90, Tiger, A400M. These projects have all helped to build up transnational industrial capacities and a strong European network of intra-community transfers in research, development and production - not, unfortunately, in logistics and training - of sophisticated and up-to-date systems. There is, however, a marked difference with regard to the situation in the area of land systems, in particular protected and armoured vehicles: a huge increase in industrial capacities has accompanied the realization of those flying systems whereas land system capacities had gradually to be built down over a period of 20 to 30 years. This is mainly due to the relative decrease of the importance of armoured vehicles in the post-cold-war military environment. But today, the situation is changing again. All land forces need to adapt to the new challenges of preparing for non-conventional, asymmetrical warfare and the needs of stabilization operations where lighter and air-transportable systems will represent a new balance between firepower and protection.

What does this mean for the industrial landscape in France, Germany and Poland? In a mid- and long-term perspective the industrial players in those countries need to cooperate much more closely lest competition destroy parts of this industry in an unforeseeable way. In dialogue with – not under the control of – governments in Paris, Berlin and Warsaw the technological and market potentials of the “core of four” (Nexter, KMW, Rheinmetall and Bumar), but also of a few smaller companies like Panhard, Renault Trucks and WZM Siemonowice, should be analysed, compared and rebalanced with a view to maximizing the sustainable industrial potential and its future geographical distribution. The leading idea is to strengthen the strengths and cut the weaker parts: to make the ensemble of this sector of the European Defence Technological and Industrial Base (EDTIB) more efficient, e.g. by sharing test and evaluation installations, establishing single sources for maintenance and training, or coordinating procurement cycles. As to this last example: Such coordination may well start with a multinationally negotiated plan to share the first lot of a new system in order to create favourable conditions for early parallel (or even simultaneous) tactical and logistical training, preferably in jointly funded and jointly run training facilities. In addition, coordinating procure-
Conclusion

The Weimar Group of EU Member States is called to proceed on the avenue towards structured cooperation and to exploit possibilities to pool capabilities. It has the potential of acting as an avant-garde of shared projects ranging from operational capacities to Research and Technology developments to industrial coordination. We have, therefore, selected areas of common interest that do not start from revolutionary novel ideas, but rather take existing initiatives as a basis for extending their cooperative scope. With this pragmatic rationale in mind we offer the following three cases for consideration and action of the Weimar nations.

Case I
Reviving the EU Battle Group Concept – Towards Permanent Weimar Capabilities

The political impetus of the Weimar cooperation should be supported by a small Secretariat – not necessarily with many physical meetings – that prepares higher-level decisions based on proposals from a tri-lateral group of civilian and military background. A first proposal is, as explained in Section II of this paper, to turn the scheduled Weimar Battlegroup step-by-step into an example of pooling much needed resources in support of military and civilian operations under CFSP. Main areas of common effort are deployable logistics, medical capacities, and the C3 system. With such a permanent capability pool a wide range of not only military tasks can be fulfilled, the usability of the Weimar Battlegroup enhanced and the Battlegroup concept legitimately sustained.

Case II
Towards a Common MALE UAV Platform for Civil and Military Monitoring

The Weimar countries should introduce a common R&T proposal in the EDA portfolio. It would be a tri-lateral ad-hoc-project of Category B where scope and conditions of the project are determined by the contributing Member States France, Poland and Germany.

The project aims at a feasibility study and technology demonstration of a common surveillance UAV platform that does not compete with the US Predator/Reaper armed UAV system nor with the heavier Talion concept of EADS nor with the UK-FR UAV technology program (TELEMOS). Rather, it is intended to be smaller, cheaper and open for different payloads of modular sub-systems. From the beginning it is designed to be operated in regulated airspace and offering civilian and military applications alike.

Case III
Industrial Cooperation on Armoured Vehicles

The Weimar governments should – supported by the Polish Presidency remit – propose the establishment of an “AV Strategic Coordination Group”. It would be managed by the European Defence Agency as a three-party ad-hoc-project in the existing framework of its efforts to promote a viable EDTIB for the long term.

The specific task of the Group would be two-fold:

First, an EDA-managed ad-hoc-project on the future of Armoured and Protected Vehicles should have an R+T focus less on possible platforms, but rather on common components and sub-systems. The Weimar countries would concentrate on possibilities for bundling (or “pooling”) their demand for the 2020 to 2030 timeframe. Such classical R+T effort (which may well include robotic platforms or systems) would be open for dialogue with and participation of additional EDA Member States as soon as the three avant-garde ad-hoc-project participants France, Poland and Germany see fit.

Second, the Coordination Group should deal with the long-term objective of formulating an “Armoured Vehicles Industrial Headline Goal 2030”. This effort should include all interested EDA Member States, benefit from the ad-hoc-project of the Weimar countries and assemble around the table Industry (individual companies as well as associations), EU Commission, governments and some knowledgeable consultants.