PESCO Armament Cooperation: Prospects and Fault Lines

An increasingly complex security environment, strained national resources, and centrifugal tendencies on the federal level motivate EU member states and institutions to deepen their defense cooperation. The framework provided by the Permanent Structured Cooperation (PESCO) can serve this purpose – as long as its priorities focus on practical synergies instead of political symbolism.

By Amos Dossi

The vision of a European defense union emerged in the aftermath of the Second World War and is rooted in the Franco-German reconciliation effort. The first and to date most promising attempt to realize it was the European Defense Community (EDC). The EDC's political momentum, however, was ephemeral. It failed in 1954 due to resistance in the French National Assembly and the general strategic situation in Europe. The NATO framework, already established at that time and generally regarded as more solid, prevailed. Conceived as a transatlantic concern ever since, collective security could therefore no longer serve as a catalyst of European integration. Instead, collective prosperity emerged as the basic rationale behind the unification project. This focus on economic policy persisted well after the end of the Cold War – despite the new latitude for security policy integration.

The Franco-German anti-tank missile system MILAN is an example of successful European arms cooperation. It has been produced since 1972 and is currently used by 30 states. *MBDA*

Particularly since the confrontational NATO summit of July 2018, however, the political debate on European emancipation in security matters has picked up pace. An increasing number of senior European politicians, noting the shift in US geopolitical interests as well as their own countries' increasingly complex security environments, are calling for joint defense capabilities to be strengthened under the aegis of the EU. Undoubtedly, there are deficiencies – both conceptual and material – to European countries' military postures. This particular approach towards their improvement, however, is informed not only by foreign policy issues, but also by dynamics within Europe. These should be seen in the general context of the EU's finality debate, in which the proponents of a federal *United States of Europe* are pitted against the advocates of an intergovernmental *Europe of Nations*. The European integration process has stalled since the financial crisis of 2008 and especially since the Brexit vote in 2016. Sovereignists opposed to the dogma of *Ever Closer Union* are closing ranks, including at the government level. To federalists, a partial switch to a new line of argument – from the economic rationale to the currently less controversial logic of security policy integration – is thus a welcome development.

The institutional framework for this scheme is PESCO. This permanent structured cooperation of 25 EU members – all

save the UK, Denmark, and Malta – aims at transnationally harmonizing military equipment and organization, promoting joint procurement, exercises, and deployments, and creating a single European armament market. The agenda is not a static one; its aims and use of resources are to develop dynamically. Inevitably, to some extent, incongruous technological, institutional, and political rationales collide. The mere question of how the technical vs. diplomatic aspects of armament vs. alliance policy should be weighted hierarchically – which is the end, which is the means? – is a source of controversy. According to views propagated in the EU Commission and the European Parliament as well as in Germany and France, the long-term purpose of PESCO is to lay the groundwork for a security and defense union. Northern and Eastern European decision-makers, on the other hand, are very skeptical about the relinquishment of national authority and the potential rivalry to NATO implicit to this idea.

Inevitably, incongruous technological, institutional, and political rationales collide.

Objectives and Membership

The purpose of PESCO is to advance the strategic autonomy of Europe. Strategic autonomy can be conceived absolutely (as a condition) or relatively (as a process); as such it is an abstract concept. There is, however, no ambiguity regarding the demarcation towards the outside world implicit to this objective. In this respect, it constitutes a break with the globalization-friendly approaches thus far prevalent in EU foreign policy. In practice, strategic autonomy is to be promoted through constant deepening of technological and institutional interoperability amongst heretofore predominantly nationally organized armament markets and armed forces. In principle, both dimensions of interoperability can be conceived as practical-technical issues, to be managed at the interdepartmental and industrial level. The more ambitious the entire project becomes, however, the more political significance it acquires. While changing the logics of decision-making, this shift into the political arena in no way changes the specific functional logics of both dimensions, which will be outlined in the following.

Technological (armament policy) interoperability is to be promoted by means of cooperative procurement programs and the development of common technological standards within the framework provided by the European Defense Agency (EDA). The ultimate goal is to reduce the multiplicity of complex weapon systems currently in use throughout Europe from roughly 180 to about 30. The logical consequence would be a standardized European arsenal, a centralized procurement process, and a number of transnationally consolidated defense-industrial general contractors (systems integrators). While this target is not explicitly stated in the treaty, it is regularly put forward as a grand vision in order to illustrate the real or supposed redundancy of European armament industries, procurement processes, and armed forces structures.

Institutional (alliance policy) interoperability is to be promoted by means of structural harmonization amongst national military organizations, joint exercises and deployments. The aim, therefore, is transnational standardization at the levels of organization, doctrine, and training. Technological and institutional interoperability are interdependent: while technological standardization without institutional standardization is only achievable to a limited degree, the opposite course of action would appear inconsistent. In contrast to the clearly defined ambition in terms of armament policy, the end goal of PESCO's alliance policy dimension remains nebulous: should it become a European NATO (an intergovernmental integration of national armed forces) or a unified European army? At this critical juncture, the preferences endorsed by the various PESCO members diverge considerably.

Currently, EU membership is a precondition for admission to PESCO. Further, the prospective member state will have to commit to 20 defense policy goals defined by the EU Council of Ministers. All relate to the abovementioned dimensions of interoperability; amongst the central requirements are participation in EU battlegroups, the EDA, and the European Defense Fund (EDF), as well as the rather vague stipulation that each member should make credible efforts to reach defense expenditures at a level of two per cent of GDP. 20 per cent of these funds are to be spent on military equipment, and out of that sum, 10 per cent should be funneled to technology research. The quota on procurement spending is broadly in line with current figures in Europe; more relevant in this context is the 2 per cent share of GDP. PESCO presently does not provide for the regular participation of non-members. Whether this is possible is to be decided on a project-to-project basis and only at the initiative of a PESCO member state involved in the respective project. On the industrial side, accession criteria are even more complex. It remains unclear, for example, whether and under which conditions EU subsidiaries of companies domiciled outside the EU such as RUAG Germany or, conversely, MOWAG as the Swiss subsidiary of the US-European corporation GDELS will be treated equally.

Organization, Projects, and Finances

Due to the multiplicity of actors involved, the organizational basis of PESCO is quite complex. The EU Council of Ministers defines technological and operative parameters and compiles corresponding lists of projects; the EU Commission selects individual projects from these lists for EDF funding, thus prioritizing some and curbing others; the EU Parliament approves the budget and oversees fiscal compliance; industrial actors are consulted throughout the preparatory stages of projects and implement them if applicable. Finally, the individual PESCO member state decides to participate in projects according to requirements. In this multi-level process, the key phase is the transition between the Council level and the project level. Coordination at this stage is the responsibility of the PESCO Secretariat, which is subordinate to the EU High Representative for Foreign Affairs and Security Policy and supported by the EU Military Staff, the EU External Action Service, and the EU Military Committee.

The basic idea of PESCO – to foster synergies in areas where individual states would spend funds anyway – should in principle be achievable with relatively little spending. However, the inertial persistence of national procurement processes is strong. The EDF provides the financial incentives to overcome this hurdle. Provided the EU Parliament approves the budget and legal concerns on the part of the Party of the European Left can be dispelled, the EDF should contribute 13 billion euros for the advancement of cooperative projects over the 2021–27 period. The total contribution from the EU budget to this sum stands at 4.1 billion euros, while the states contribute 8.9 billion euros. Projects are considered worthy of funding if at least two PESCO states and three companies domiciled in the EU take part. If these criteria are met, the EDF contributes up to

PESCO Projects

The list of current projects – thus far merely declarations of intent by the countries listed – is structured into seven categories: training and infrastructure; land forces; navy; air force; command and control; military logistics; space. The following projects deserve special acknowledgement (lead nations in bold, as of 19 November 2018):

- "Schengen Area" for military mobility (**DE, NL** + remaining members)
- European medical command (**DE**, ES, FR, IT, NL, CZ, RO, SK, SE)
- Joint use of military bases both within Europe and overseas (**FR**, BE, DE, ES, NL, CZ)
- Development of an unmanned land vehicle (**EE**, BE, CZ, ES, FR, LV, HU, NL, PL, FI)
- Development of a beyond line of sight (BLOS) battlefield missile system (**FR**, BE, CY)
- Development of an intelligent artillery system including precision ammunition (**IT**, SK)
- Development of a modular armored fighting vehicle (**IT**, GR, SK)
- Development of a medium-altitude drone and anti-drone capabilities (**DE**, FR, ES, **IT,** CZ)
- Further development of the Tiger/Eurocopter attack helicopter (**FR**, DE, ES)
- Further development of the Galileo satellite navigation system for military applications (**FR**, BE, ES, DE, IT)

20 per cent of the project costs, with the remaining 80 per cent coming from national procurement budgets. This fourfold leverage allows for a total investment volume of 65 billion euros. That figure is roughly equivalent to the German share of the Eurofighter project: The lifetime cost of the 140 aircraft purchased by Germany are likely to exceed 60 billion euros, according to the country's Federal Court of Auditors.

Political Trade-Offs

PESCO members enjoy equal rights to the extent that all of them have veto power. However, there are significant differences in terms of political, military, financial, and industrial capital – that is, in terms of individual freedom of action. Germany and France are the "core states" of the project. While German security policy is fundamentally regional, reactive, and consensus-oriented, the opposite is true for the French. These predispositions are reflected in respective preferences in European policy. Equally important in practice are "frontline states" that are challenged by concrete and often unique military threats. As illustrated by the cases of Italy and Poland, there is a basic dilemma between the converse requirements of robust expeditionary intervention and credible territorial defense. Besides the Western European "free riders", there are the "outsiders" in Northern and Eastern Europe, which are non-aligned, integration-skeptic, or both. The direction of PESCO's political development and its chances of success largely depend on whether these heterogeneous actors can develop compatible conceptions regarding the nature and focus of this project. Here, the key question is whether the objectives and operational conditions of the national, NATO, and EU frameworks are conceived as contradictory, complementary, or as a zero-sum game.

At the EU level, respective positions are juxtaposed in a more abstract fashion. The Council of Ministers, like the majority of the member states, tends to prioritize practical, short- and medium-term advances in technological and military capabilities. A purpose thus defined, in turn, determines the choice of means – that is, the design of the institutional framework – while also restricting the project's political horizon. Conversely, the EU Commission and Parliament as well as senior German and French politicians appear to have adopted the reverse perspective: here, the impression is that political integration is in fact the real long-term purpose of a project that only pretends to be motivated by practical military considerations. PESCO's stance towards the UK – which will remain a major European security actor, irrespective of the decision to leave the EU – will be a suitable indicator of which of these two viewpoints ultimately prevails.

Technological Trade-Offs

PESCO's armament policy approach can already be assessed in more concrete terms. Its basic assumption is that national armament industries and procurement processes in Europe are redundant because their technological and economic performance is structurally inferior to what can be achieved through joint efforts. Accordingly, the aim is transnational consolidation or centralization, respectively, on the supply and demand sides of the European armament market, as well as standardization of military equipment. The arguments in favor of such an approach include a weakening of national protectionism and the creation of a coordination and incentive structure for exploiting cooperative synergies – as well as the basic insight that certain technology projects require a financial and industrial "critical mass" that exceeds the capabilities of most individual states. There are, however, also a number of fundamental counter-arguments.

In principle, political, conceptual, and structural obstacles to cooperation can be overcome if governments, armed forces, and corporations decide to play along. There is, however, a vast abyss between reaching an agreement on standardization and putting it into practice in an effective and efficient fashion. For this to be the case, two critical dynamics must converge. On the one hand, objectively distinct operational requirements must be fully satisfiable by a universal system; on the other, the cost increase resulting from the higher complexity of such as system must be lower than the scale and scope effects of mass production. Before asking whether the consolidation, centralization, and standardization approach propagated by PESCO can be feasible in the individual case, we must first determine whether it can serve as a sustainable organizational and conceptual framework for technological innovation in the long term. As in civilian enterprise, the military technology sector is characterized by a fundamental trade-off between maximizing efficiency and maximizing effectivity. This *productivity dilemma* permeates all aspects of the industrial innovation process: different measures of success call for different modes of innovation, result in different organizational necessities, and correspond with different ways problems are conceived and solved. Internally consistent but mutually contradictory, these two basic approaches have several advantages and disadvantages.

> Can PESCO serve as a sustainable organizational and conceptual framework for technological innovation in the long term?

Focusing on efficiency gains through economies of scale and scope requires organizational concentration and technological standardization. Such a *process-oriented approach* implies a static, potentially stagnant understanding of technology – and thus risks being ineffective. Furthermore, this approach implies the formation of monop-

PESCO and Switzerland

The tighter PESCO's technological and diplomatic dimensions are interlinked, the stronger the inward and outward pressure to conform. Switzerland, focused on Europe as both an importer and an exporter of advanced military technology, , has a strong interest in maintaining good relations with its preferential trading partners. The **interdependency** resulting from this reciprocal flow of goods and expertise **is asymmetrical**; its disruption would be considerably more problematic for Switzerland than for the EU. The situation, however, is different when it comes to the relationship between the EU and the remainder of the Western industrialized states. Provided PESCO acts pragmatically in terms of both arms and alliance policy and grants industrially capable non-members like Switzerland an **associate status involving no or only moderate political commitments**, the result could be advantageous to all parties concerned. If, however, the long-term purpose of PESCO is to provide leverage for political integration, **integration-averse or non-members might at some point become excluded from a future common arms market**. Despite being extremely risky for the EU, such a radical development cannot be ruled out categorically.

Depending on the general security environment as well as the technological and political performance of the PESCO framework, **such a scenario would leave Switzerland with the following options**: 1) Seeking full PESCO membership (which would amount to EU membership and the end of neutrality); 2) becoming a passive consumer of PESCO or overseas suppliers (which implies relinquishing industrial capabilities, and susceptibility to political blackmail); 3) pursuing a higher degree of industrial autonomy (at least in the field of core military requirements); 4) entering long-term cooperation agreements with friendly non-members (such as the UK or Norway). Options 3 and 4 would have to be pursued in parallel.

olies, which tend to be inefficient. Conversely, *focusing on effectivity gains* by optimizing product-related adaptability requires organizational subsidiarity and technological specialization. Such a *product-centered approach,* in turn, implies fragmentation and the risk of economic and institutional overload – in other words, inefficiency. Besides this, weapon systems designed according to a purist approach are likely to become ineffective in case of fundamental changes to operative circumstances. Excessive emphasis on one measure of success therefore automatically risks poor performance along the other scale – and in extreme cases may cause failure along both dimensions.

> Not only are PESCO's objectives ambitious, ambiguously defined, and partly contradictory – actors also tend to interpret and prioritize them as they please.

In order to be successful, armament policy must reconcile the dynamics of product and process innovation and consider that *doing the right thing* comes before *doing the thing right*. The specific equilibrium of effectivity and efficiency depends on numerous, only partly controllable factors. Key factors include the complexity of the desired product and the development dynamics of the underlying threat scenarios and technology fields. So far, experience in armament cooperation has shown that in contexts that are basal, static, or both there is potential for standardization. This potential, however, decreases with increasing complexity and dynamics. Even in the planned economy of the Soviet Union, this nexus between competition, technology, and innovation was acknowledged. In major procurement projects, calls for tenders were advanced to several competing design bureaus. Europe, too, will have to find a compromise that is sustainable across the broadest possible spectrum of technology.

Fault Lines

PESCO is a balancing act between divergent European policy visions, security policy necessities, and alliance policy preferences. Not only are PESCO's objectives ambitious, ambiguously defined, and partly contradictory – actors also tend to interpret and prioritize them as they please. PESCO's basic approach, however, suffers not only from lack of coherence, but also from a fundamental innovation theory insight: even if it were possible to fully abridge the disconnect between individual interest and collective action, a single solution for the pan-European reorganization of the defense sector would remain unlikely. The resulting fault lines can be outlined by means of the following juxtaposition:

- Strategic horizon: PESCO aims to be both goal-oriented *and* open-ended;
- Ends and means: PESCO aims to prioritize practical-technical goals over political ones – *and* vice versa;
- Alliance politics: PESCO aims to be both complement *and* alternative to NATO;
- Operative priorities: PESCO aims for both robust intervention *and* credible territorial defense;
- Market: PESCO seeks both competition *and* consolidation;
- Technology: PESCO aims for both radical innovation *and* the (smallest) common denominator.

By all indications, there are "natural" limitations to the technological and political scope of PESCO – and armament cooperation in general – that cannot be overcome by collective will and action alone. This insight confronts EU member states and institutions with a fundamental question: to which extent is institutionalization required, and to which extent can it be sustainable? In respective deliberations, the maxim *form follows function* could be a suitable guideline.

Amos Dossi is Researcher at the Center for Security Studies (CSS) at ETH Zurich. His areas of interest include the innovation dynamics of conventional military technology.

CSS Analyses is edited by the Center for Security Studies (CSS) at ETH Zurich. Each month, two analyses are published in German, French, and English. The CSS is a center of competence for Swiss and international security policy.

Editors: Lisa Watanabe, Fabien Merz, Benno Zogg;
Translation: Chris Findlay; Layout and graphics: Miriam Dahinden-Ganzoni
ISSN: 2296-0244; DOI: 10.3929/ethz-b-000329145

Feedback and comments: analysen@sipo.gess.ethz.ch
More issues and free online subscription:
www.css.ethz.ch/en/publications/css-analyses-in-security-policy