Converge military requirements into a force system

G2S File No. 24

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Published on 14/08/2019

Relations internationales

For Lt-Gen (2S) Jean-Tristan VERNA, the acquisition of common equipment may come up against the need to preserve some of the sovereignty that is essential for defence. In addition to industrialists, it is up to the military to come closer together to ensure that their force system requirements converge.

European Army: the way to sovereignty through equipment?

"European defence", "defence of Europe" or, even more so, "European army": whatever the breadth and depth of the debates, opinions and comments, they always lead at one time or another to the question of equipping the forces and the organisation of the defence industry.

How many times have there been complaints at the highest levels about the aberration represented by the number of different types of armoured vehicles, combat aircraft and frigates that equip the continent's armies? And the injunctions to create naval and armoured "Airbuses", etc. are easily derived from this.

This is to forget that this situation is the result of several centuries of intra-European wars, which only ended two generations ago! National defence industrial bases are the imprint left by the need for most European states to ensure their industrial autonomy in order to preserve their territorial integrity, realise their ambitions and even guarantee their neutrality, in complete sovereignty.

This article is intended to make a contribution to defining the contours of sovereignty in the area of equipment for the armed forces. Such a definition could both provide a real inventory of national sovereignty and pave the way that could one day make it possible to display this sovereignty at a supranational level.

In this area, the first foundation of sovereignty is the freedom to design materials [50]. It

stems from the freedom to develop a military and capability requirement.

In our happy era of "Pax Europea", even before industrial dispersion, it is often the lack of sharing of this need that leads to the great diversity of materials from one country to another. Rather, what some see as a matter of mere habit or conservatism reflects the strong cultural character of national armies due to their role as a source of defence.What some consider to be a matter of habit or conservatism rather reflects the strong cultural character of national armies because of their role in national strategy, the history of their wars, the nature of their recruitment, and the sometimes very old organizational choices rooted in national culture.

This leads to lines of force that are not easy to change: peoples of the sea and old tribes in the hinterland, central European nations and conquerors of forgotten empires, all do not spontaneously share the same conception of their military needs, despite seven decades of NATO standardization. One will place its transport helicopters in the air forces, the other in the land forces, with notable differences in implementation, theOne will target the multi-purpose fighter aircraft while others will still form diversified fleets, one will swear by the caterpillar when the wheel is in the neighbour's favour. Let us not forget not the long debates between infantrymen about the number of fighters in the basic combat cell, which ultimately determines the architecture of the vehicle that takes it on board!

This need to master the initial design of the equipment is complemented by the need to be able to make it evolve according to operational lessons, the choice of integrating new technologies, etc. Rapidly, a piece of equipment can quickly take on a configuration that is very different from the original one. A good example is the gradual divergence in configuration of French and German TRANSALLs, which have been used very differently over time.

Finally, a piece of equipment cannot be designed without its support system, i.e. the way in which it will be maintained in operational conditions. The vision of support has a strong impact on the initial design of the equipment: should the engine of an armoured vehicle be rapidly exchangeable in the field, or will industrial-type support on a logistic base be chosen, with technical solutions closer to those used for civilian equipment? Will integrated sensors be used or not for all types of equipment? Here again, European military cultures are frequently incompatible. Some armies still favour support as close to the combat zone as possible, while others consider that this approach no longer corresponds to operational and technical realities.

Remaining in control of the choice of the operational functionalities of equipment and the technical solutions for achieving them, having the freedom to do so is a key factor in the choice of equipment.s operational capabilities and the technical solutions to achieve them, the freedom to develop them, the freedom to decide how to support them during the period of use, this is the first foundation of sovereignty in the field of military equipment.

A second foundation of sovereignty, on which it is not useful to go on at length, as it is obvious, is the freedom to use equipment. A sovereign political entity, whether national or supranational, must be able to deploy and use its military means freely wherever the need arises, and without restrictions other than those imposed by international law. We are well aware of the limitations placed on the deployment and operational use of equipment procured from the United States under the FMS [51]. Even France has experimented with JAVELIN missiles, and buys, and will soon arm, REAPER drones despite these obstacles to its freedom of action.

Should freedom to export be made another basis for sovereignty?

There is a debate on the reality of the economic imperative of export, which would make it possible to contain the cost of acquiring equipment and compensate for the low volume of "national" series. A harmonization of requirements at the supranational level would perhaps be an argument for overcoming this imperative.

But export is not only an economic lever. It is also an instrument of foreign policy, of influence on the geopolitical scene, of consolidation of links with allies. Being able to export or distribute military equipment according to strategic interests is thus linked to the notion of sovereignty, and it is relevant to systematically ask the question of its "exportability" when equipment is designed and then produced.

Freedom of design, support and development, freedom of operational use, freedom to export - these are the foundations that theThese are the foundations that can be used to define the sovereignty applied to an army's equipment, whether national or supranational.

Of course, each type of equipment raises specific issues and difficulties that would be difficult to develop: not to mention the means of nuclear deterrence, conventional equipment, which can be counted, does not raise the same questions as integrated command and information systems, or complex systems of systems, which are very much in vogue in the restricted club of techno-connected nations.

But there are subsequent capabilities common to all types of equipment: human skills, research and technology policies and resources, now strongly linked to civilian R&T, control of intellectual property rights, autonomy of research and development, and the ability to develop new technologies.These include human skills, research and technology policies and resources, which are now closely linked to civilian R&T, control of intellectual property rights, autonomy in the regulation and setting of technical and environmental standards, political investment decision-making processes and administrative procedures for allocating budgets and controlling armaments programmes, etc., all areas of which the global effort implemented a few decades ago to build the means of autonomous French deterrence is a good historical example. The change in strategic culture that was imposed on the French armies at that time is one of them.

Acceptance of these foundations leads, in principle, to their being taken into consideration when defining equipment acquisition and manufacturing policy, whether this policy is global or applies to a family of equipment, or even to individual pieces of equipment.

France has tried out this exercise with the three-circle theory, which was taken up in its 2008 and 2013 White Papers.

In addition to the first circle, called "sovereignty", which defines the critical capabilities to be mastered at national level, there is also a circle of "European interdependence", which presupposes a convergence of technical and operational specifications and balanced industrial sharing. Finally, there is the circle of "recourse to the world market" for resources whose supply can be guaranteed without disruption or restriction.

The difficulties raised by this categorization of acquisitions are well known.

The ambition of sovereignty in the "first circle" depends on the ability to free up the human and economic resources needed to implement it. If we consider that these sovereignty capabilities include nuclear power and the complex platforms that go with it,

space, intelligence systems, the field of "..." and the field of "...", we can see that there is a need for the necessary human and economic resources. If one considers that these sovereignty capabilities include nuclear power and the complex platforms associated with it, space, intelligence systems, the cyber domain and certain highly sophisticated weapons such as missiles, the technological skills to be gathered and the budgets to be mobilised saturate national capabilities fairly rapidly.

Over and above the procedural provisions it entails (e.g. specific procurement procedures), the interdependence (European, national and international) of national capabilities is also a major factor.enne) defined through the second circle, is all the more critical to realise as it tackles two positions that are difficult to start from: military cultures and industrial interests, with their social component. It is clear that these realities impose themselves on past and present desires for harmonization and cooperation.

As for recourse to the world market, beware not to consider it as an absolute guarantee. The unfortunate episode of small-calibre ammunition experienced by France a few years ago should not be forgotten. And what happens when a widespread crisis precipitates all the poor customers to a limited number of producers? The rapid saturation of strategic transport capacities during the ramp-up or termination of major operations is an example of these potential bottlenecks.

Translating into common equipment the desire to build operationally effective supranational forces that are within the reach of financial capabilities therefore requires overcoming these procurement difficulties: towards what strategic and sovereign ambition should the definition of critical capabilities be directed? What shared corpus of military doctrines should serve as a reference for the technical definition of equipment, its configuration management and its support system? How should industrial manufacturing and support activities be organised by service? On what political basis can flows with the rest of the world be built, both for supply and for export?

Watch out! Lack of a European foreign policy and chain of command imposed on member countries, the appetite of some member countries for major equipment of American origin, recurring difficulties in organising the European Union's foreign policy and the European chain of command, the lack of a European policy on the supply of equipment to the rest of the world, and the lack of a common European policy on the export of equipment to the rest of the world.The lack of a foreign policy and a European chain of command for member states, the appetite of some member states for major US-origin equipment and the recurrent difficulties in organising a largely privately owned and partly US-funded armaments industry on a continental scale are all issues that need to be addressed at a political level prior to the launch of any major ideas in the military field proper!

As for the military, what can they do?

First of all, recall the imperative of realism: at the national level, by ensuring that we do not let go of existing sovereign capabilities for the shadow of the constitution of common capabilities with poorly defined or ill-defined outlines and modalities of action. Then, insofar as a political process is initiated to bring about this "European army" which periodically returns to the agenda, it should claim an important place on the agenda in order to highlight the precautions to be taken in the technical area of equipment, a subject that is readily absent from the concerns of diplomats.

A second possible action would be to propose transitional and reliable technical solutions based on what already exists. This action can be based on an old practice, that of the

cohabitation of national armies within NATO, even when their integration is not total, as was the case with the French armies for some 40 years. And examples already exist within Europe, such as the European Air Transport Command (EATC) created in 2010.

Finally, without denying the strong cultural roots of each national army and without underestimating the impact of the specific strategic interests of certain nations, the military will have an interest in developing the sharing of their technical, tactical and logistic approaches.

Each nation makes a specific mark on its militaries, depending on whether it chooses to build a complete, autonomous army model, or whether it is satisfied with a few "niches of excellence", depending on whether or not it asks them to preserve a "framework nation" capability. An army's culture is also strongly influenced by the timeframes for engagement set by political decision-making processes, its approach to relations with populations in distant theatres of operation, its ability to operations, the level of integration of human factors in the development and use of its equipment.

Having a realistic and shared vision of these cultural aspects is the only way to achieve convergent technical-operational specifications. There is therefore a need for an official forum for exchange and reflection on these subjects, which may seem technical and military-oriented. Indeed, while the military have their rightful place in European debates at the politico-military and strategic level, it will be equally important to provide them with a formal framework for reflection and discussion on the preparation of force systems shared between nations.

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50 The term "materials" is convenient to use but is reductive. It should be borne in mind that it covers both countless items of equipment of varying degrees of complexity, weapons systems whose effectiveness is only realised through their connections with their environment, information systems, etc., and also equipment that is not yet fully operational.

51 Foreign Military Sales

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Release date 12/02/2021