ABSTRACT

Despite the willingness of countries like France to maintain strategic autonomy across the full spectrum of military capacities, international cooperation has in fact become a prerequisite for the conduct of contemporary Western military operations. On the other hand, the "RETour d’EXPérience" (RETEX), or more generally the identification of lessons ("lessons identified" and "lessons learned" LL) has become an increasingly institutionalized practice in Western defense ministries over the past fifteen years.

These two topics are generally discussed separately in the literature in strategic studies, international relations or military sociology. However, there are actually a variety of channels, levels and forms of cooperation around lessons, as well as mechanisms to "learn" cooperation, which aim to improve and conduct effective multinational operations. The intention here is to highlight the diversity of these practices, while at the same time highlighting the limits. Without claiming to be exhaustive, this Research Paper first reviews recent academic publications in a growing field, and then presents current empirical examples, drawn mainly from the French, British and NATO cases.

CONTENT

Lessons and Cooperation: Emerging Conceptual Links Regarding the Notion of Learning Lessons and Cooperation... 2
Variety of Links Between Operational Lessons and Allied Cooperation........................................................ 4
  1. Exchanges between National Organizations ................................................................. 4
  2. Multinational Corps .............................................................................................. 4
  3. NATO ................................................................................................................. 5
  4. Bilateral or Minilateral Cooperation Initiatives ......................................................... 6
The Main Limits to Learning ..................................................................................... 7
Bibliography ........................................................................................................ 10
The subject of this paper starts from a double observation. On the one hand, despite the willingness of countries like France to maintain strategic autonomy across the full spectrum of military capacities, international cooperation has in fact become a prerequisite for the conduct of contemporary Western military operations. It can take the form of a formal alliance or multilateral institution, a coalition, ad hoc support, loans or the sharing of equipment, or the presence of liaison officers or foreign soldiers in military staffs and regiments deployed. Interoperability has therefore become a central criterion for the success of these operations¹. On the other hand, the "RETour d’EXPérience" (RETEX), or more generally the identification of lessons ("lessons identified" and "lessons learned" LL) has become an increasingly institutionalized practice in Western defense ministries over the past fifteen years².

These two topics, RETEX, or more generally the question of learning, and military cooperation - notably operational cooperation in the context of coalitions or alliances - are generally discussed separately in the literature in strategic studies, international relations or military sociology. It is true that, as Corentin Brustlein notes, if "the idea of international cooperation on RETEX is intrinsically attractive [...] in reality, cooperation in this field is still at an early stage"³. This observation can be made about learning process in the armed forces beyond Lessons Learned. However, there are actually a variety of channels, levels and forms of cooperation around lessons, as well as mechanisms to "learn" cooperation, which aim to improve and conduct effective multinational operations. The intention here is to highlight the diversity of these practices, while at the same time highlighting the limits. Without claiming to be exhaustive, this Research Paper first reviews recent academic publications in a growing field, and then presents current empirical examples, drawn mainly from the French, British and NATO cases.

**LESSONS AND COOPERATION: EMERGING CONCEPTUAL LINKS REGARDING THE NOTION OF LEARNING LESSONS AND COOPERATION**

The French "RETEX" is defined as a "process aimed at improving the effectiveness of the armed forces by collecting and analyzing information on the use of units during operations or exercises, the formulation of potential corrective measures and their implementation, evaluation and dissemination within the institution"⁴. The question is therefore intimately linked to that of learning – hence the phrase in English. International cooperation is also defined as a learning process⁵. It is interesting to address the links between lessons and cooperation through the concept of learning.

A logical starting point is the literature in strategic studies on military adaptation and innovation. Although contemporary Western interventions almost consistently involve cooperation among allied forces, much of the work in strategic studies focuses on operational and tactical learning at the national level, including when this occurs in the context of a coalition. Recently, the war in Afghanistan has been the main case for empirical study⁶. Operational learning channels have been studied in national contexts by authors such as Catignani, who explores the limits of organizational learning in the British Army⁷, and Haaland, who concludes on the effectiveness of "bottom-up" adaptation practiced by the Norwegian army in Afghanistan⁸. A conclusion common to both authors is that military organizations adapt rather than learn, resulting in limited changes rather than an institutional revamp. In this field of study, the cooperative dimension of military adaptation and innovation has been considered through the phenomenon of "emulation": cooperation is thus addressed by considering the effects of the coalition and/or NATO on national practices, norms or equipment⁹. While Farrell, Osinga and Russell show that concrete examples of emulation have actually been rare

3. See this publication for a thorough study of the process of "lessons learned" (LL) in France, UK, USA and Canada. In this paper we will use the term "lessons", more inclusive than the formal process of "RETEX" ("RETour d’EXPérience") in French.
4. Ibid., p. 48.
6. This assumption is shared by both rationalist and constructivist authors.
10. Elie Tenenbaum, Une odyssée subversive: la circulation des savoirs stratégiques irréguliers en Occident (France, Grande-Bretagne, États-
in Afghanistan, Coticchia and Moro show in a recent article that, with regards to Italy, the learning of NATO and US practices in Afghanistan has had significant and lasting effects on the forces and institutions of this secondary power. It can be noted, then, that there are variations in the scope and effects of learning from multinational operations on the concerned military institutions. In the case of Italy, the reason for an effective emulation seems to be the absence of national solutions (knowledge and resources) available prior to the deployment, and thus a greater openness to adaptation. In a similar fashion, Olivier Schmitt explains, through a French and German case study, that such an emulation is necessarily selective, as it is filtered by strategic cultures, national political contexts, or the presence of a strong national defense industry.

The other way to address the subject is to examine international cooperation in operations. Joseph Soeters, Delphine Resteigne and Philippe Manigart analyze how national military forces adapt in contexts of multinational interventions. Emphasis is placed on differences between cultures and practices; by doing this, the literature reveals local cultural adaptations that facilitate cooperation. Internationalists and sociologists have also been interested in cooperation within NATO-type international organizations (IOs) and multinational corps affiliated with the EU or NATO. Anthony King and Frédéric Mérand in particular showed how the practices and representations of the European armed forces can converge, even among actors who are not located in the permanent headquarters of IOs. This convergence occurs through two axes: on the one hand, common operational experiences, necessarily ad hoc, and on the other hand, the existence of shared norms, notably thanks to NATO. Finally, learning, relative to operational cooperation, is closely linked to the analysis of information, its dissemination and its retention at all levels; a problem which affects all organizations and not only military institutions. Regarding retention of knowledge, the recent work of Heidi Hardt shows that the presence of formal learning processes within NATO does not necessarily entail that the lessons are learned, nor that actors effectively or solely learn through these formal mechanisms.

This overview of arguments put forward in the literature suggests that we should not expect a priori that RETEX on cooperation and in cooperation with allies produces decisive effects on national organizations and promotes interoperability. However, it is interesting to note empirically the variety of forms of exchanges within and between national bodies, multinational bodies, bi- or trilateral initiatives, and international organizations. These exchanges are aimed at improving national or multinational operational efficiency and/or the interoperability of Western forces.

VARIETY OF LINKS BETWEEN OPERATIONAL LESSONS AND ALLIED COOPERATION

1. Exchanges between National Organizations

There are a variety of practices and degrees of formalization in inter-agency exchanges at the national level concerned both with the question of lessons and the question of cooperation. Army and joint-level RETEX cells, as well as agencies charged with doctrine or exchange and liaison officers are mainly involved. Between institutions, exchanges take the form of more or less formal visits, as well as briefings from deployments, while liaison and exchange officers provide a permanent link. Some doctrine and national RETEX documents are translated in order to be shared among allied national agencies, and/or with NATO. In a more elaborate version, national organizations may be merged as in the case of Sweden, whose doctrine team was completely assimilated within the British Defense Concepts and Doctrine Center (DCDC).

Exchanges between national agencies allow, firstly, to promote good practices, and adopt mechanisms and procedures that have proved their worth elsewhere. This ultimately implies a partial convergence of practices: US practices in particular tend to be taken up by their allies. This includes, for example, the use of easily accessible and usable databases. Nevertheless, there are differences between national organizations, which constrain exchanges and borrowing. For example, in France, the joint RETEX is, since 2014, under the responsibility of the Joint Center for Concepts, Doctrines and Experiments (Centre interarmée de concept, de doctrines et d’expérimentations, CICDE); while in the United States and Great Britain, J7 is in charge.

In substance, exchanges between organisms may take the form of briefings drawing lessons on national deployments and relevant for allies. As explained by a British DCDC officer, Operation Serval, for example, was presented to the British team by the French; the operation contained useful lessons for the British, including risk management, medical support, planning, and the role of pre-positioned forces - issues that the British must work on as part of their post-Afghanistan transition and to carry out shorter and lighter operations. Today, the British and French explore lessons that they may be able to draw from their joint deployment, under British command, in Estonia within NATO’s “Enhanced Forward Presence”. However, in practice, it is rare for RETEX documents to be drafted jointly. In addition, these exchanges are generally bilateral, and not between several allies at the same time, as the level of trust and sharing is never the same among all allies.

2. Multinational Corps

Multinational bodies are military staffs with or without assigned forces, composed of soldiers and officers from several European nations, and made available to NATO, the host nation, and/or for EU deployments, as for example, the NATO High Readiness Forces or the European forces such as EUROMARFOR.

Within these multinational corps, the norms of international organizations apply - mainly NATO’s, with its doctrines, standardization agreements and procedures – in such a way that a prior convergence of knowledge and practices of officers assigned to multinational corps can be observed. In terms of operational learning, multinational bodies function formally as conventional bodies: they have internal learning mechanisms linked to training thanks to the presence of a "lessons learned" cell within the J7. For a multinational body, cooperation on knowledge exchange is done daily, in particular through the "mutual training support", that is to say, the "lending" of personnel between NATO bodies to

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17. Interview, Army Lessons Team, April 2017; Centre de Doctrine et d’Enseignement du Commandement (CDEC) de l’armée de Terre, May 2017; and CICDE, June 2017.
18. Interview, Defence Concept and Doctrine Centre (DCDC), May 2017.
20. Note that the EU doctrines are essentially based on NATO doctrines. See CICDE, Doctrine d’emploi des forces, document cited, p. 23.
carry out the exercises\textsuperscript{21}. Learning can then be done in two ways: a body can send "specialists", who will disseminate knowledge and skills that the multinational body hosting the exercise does not possess; or on the contrary, the body can send elements to another body in order to learn from it\textsuperscript{22}. Indeed, not all bodies have the same seniority, nor the same skills.

As part of the J7 activities, the exercises make it possible to identify problems which are reported, by the participants, to an internal database within each body. Most of the lessons learned from the exercises can lead to improvements within the body, as they relate to the functioning of the military staff and its ability to carry out training.

However, other lessons may concern the doctrine: to achieve the evolution of the NATO doctrine (and/or the national doctrines concerned) is considered as a "must ";a sign that the LL mechanisms are functioning effectively in a multinational context\textsuperscript{23}. For example, a series of drills led by submarine minehunters, allowed, after several failures due to differing definitions of "mine burial", to change the doctrine of NATO for submarine mine removal. This example is cited for reference in the NATO Lessons Learned Handbook\textsuperscript{24}.

In practice, however, it is not always easy, in multinational contexts, to openly agree on the problems encountered or on the need for improvements: "The problem with exercises with allies is that, during LL processes, we cannot single out countries, point out the failings of allies..."\textsuperscript{25}. Reporting errors must therefore be imprecise, thus also less effective.

3. NATO

As we have already noted, NATO is present at several levels of the exchanges between the people responsible for Lessons Learned in its member-states and within the multinational corps that can be attached to it. It also has its own LL mechanisms, of which four can be noted: Centers of Excellence, exchanges within the Joint Analysis and Lessons Learned Center (JALLC), the International Staff, and the working groups in charge of drafting the doctrine.

NATO Centers of Excellence, coordinated by Allied Command Transformation (ACT), share knowledge and best practice in specific areas (cyberdefense for example) and aim to improve interoperability during exercises and training. They are located in the alliance's member states according to their expertise ("framework nations"), who provide allies with the necessary human resources, budgets and infrastructure. Created as of 2005 (following the Prague Summit in 2002), with a notable increase in establishments since 2010, there are now 23 accredited centers.

NATO also has procedures to collect lessons learned from exercises and deployments: we have mentioned the Lessons Learned Handbook, which is written by JALCC. The JALLC is located in Lisbon, Portugal, and maintains an online database, the NATO Lessons Learned Portal. NATO practitioners are supposed to "upload" lessons towards this allied structure. In practice, however, there are several obstacles to the effective use of these procedures: actors are not necessarily aware of its existence and are not always trained to use it\textsuperscript{26}. In addition, the difficulty mentioned above can also be found in the JALLC: it is impossible to "point out" and name the actors or allies responsible for an error. Next, reporting one’s own mistakes also carries important reputational costs for the actor that follows this practice. Moreover, the JALLC produces strategic-level concept notes - particularly for SHAPE – through the merge of several empirical examples stripped of details. One consequence is that the practical utility of these lessons is limited\textsuperscript{27}. Another actor pointed out, that up to now, NATO’s RETEX has almost only examples from Afghanistan, the main campaign. Yet, this is a form of intervention which Western armies seek to distance themselves from today\textsuperscript{28}. Finally, there is a lack of dissemination of JALLC findings to the national doctrine and LL centers, as well as to the multinational units mentioned above.

As always, if formal procedures can easily be criticized as inappropriate, other informal or alternative channels, in which NATO allows for a more effective exchange of lessons, exist. First, personnel from NATO headquarters exchange

\textsuperscript{21} Interview, French officer serving in a multinational body of NATO, April 2017.
\textsuperscript{22} Ibid.
\textsuperscript{23} Ibid.
\textsuperscript{24} North Atlantic Treaty Organization (NATO), NATO Lessons Learned Handbook, 3\textsuperscript{rd} edition, 2016, Appendix C, p. 2.
\textsuperscript{25} Interview, French officer serving in a multinational body of NATO, April 2017.
\textsuperscript{26} Hardt, op. cit.
\textsuperscript{27} Interview, French officer serving in a multinational body of NATO, April 2017; DCDC, May 2017; CICDE, June 2017.
\textsuperscript{28} Interview, DCDC, May 2017.
informally. This is particularly the case between International Staff employees and representatives of national delegations: the sharing of "strategic errors" is mainly achieved through the exchange of stories from personal experiences, both in discussions or by the circulation of personal written documents. These can serve as guidance to less experienced personnel. In addition, NATO allows the exchange of lessons among the participants of the working groups responsible for the drafting or updating of the doctrine. This work takes about two years and takes into account lessons from deployments or ongoing training exercises throughout the whole process. Also, members of these groups meet several times a year and contribute to doctrinal work by bringing their lessons from national exercises, doctrines and deployments. In addition to the exchange of knowledge, it also allows contributors to influence the doctrine of the alliance for it to reflect national practices.

4. Bilateral or Minilateral Cooperation Initiatives

Finally, we will examine operational cooperation initiatives launched in a bilateral, trilateral or minilateral (in small groups) form. It will be an opportunity to address the issue of Lessons learned in the working groups and exercises directly. These initiatives allow the development of social bonds and common work habits facilitating the sharing of national Lessons in the long term. This allows for learning in a conjoint manner, and thus within a same framework of cooperation.

For example, the Franco-British Combined Joint Expeditionary Force (CJEF) project, announced at the signing of the Lancaster House Treaties in 2010, mobilized, between the end of 2010 and 2016, dozens of actors from both sides of the Channel. The people involved were predominately from the military staff, and interacted through regular meetings and the setting up of thematic working groups. In fact, the development of the CJEF itself was considered "a progressive process" and as "a laboratory, a learning system". The French defense minister at the time, Jean-Yves Le Drian, also spoke of the CJEF as a "prototype". CJEF’s contribution to learning in cooperation occurred through the promotion of social links and the development of common practices and procedures. To a large extent, the development of the CJEF was equivalent to developing cooperation between the French and British armed forces, who had been cooperating irregularly since the 1990s. Is it widely acknowledged that the densification of exchanges and the multiplication of actors involved in the cooperation is what has made cooperation durable. This process has been sustained by increased monitoring of officers at co-operative posts on both sides of the Channel, as well as the increase in number of liaison and exchange officers. The establishment of the Combined Joint Expeditionary Force also entailed the development of standard operating procedures (SOPs) specific to CJEF. These standards - based largely on NATO standards and adopted at the bilateral level - were subsequently partly incorporated into national procedures. In addition, a set of communication tools allow the transmission of knowledge and documents about the CJEF (the User Guide, the newsletter, a shared platform with CJEF reference documents or minutes of meetings). Finally, in order to maintain a sufficiently dense level of exchange and to sustain the project – so as to not lose the knowledge acquired in common – CJEF officers plan to hold a series of bilateral exercises for the 2018-2020 period. However, the bilateral level is not a panacea: some political and/or interoperability issues have not been resolved in a sustainable manner, such as CIS, third-country integration, or intelligence sharing.

The Trilateral Strategic Initiative (TSI) is another example. The launch of this initiative between the French, British and American air forces took place shortly before the intervention in Libya in 2011, since it was initiated in October 2010. The primary aim was to integrate French and British aviators in the Strategic Studies Group of the US Air Force. Then, the operations in Libya strengthened the case for more coordination between the air forces of the three countries, before and during interventions, causing an extension of the project. The three Chiefs of Staff of the Air Force

31. Interview, former task officer at the Strategic Affairs Directorate (Direction des affaires stratégiques, DAS) of the French Ministry of Defense, April 2014.
33. Interview, General Staff Headquarters (état-major des Armées, EMA), April 2017.
35. Interview, French exchange officer in the United Kingdom, April 2014.
(CSAF) became more actively engaged in the trilateral work as of June 2011, during the Libya operations.\(^{36}\) In March 2012, the three CSAFs published a joint article in which they stated that "following the 2011 operations in Libya [they] had [...] decided to continue this close cooperation, improving strategic understanding and operational efficiency"\(^{37}\). This cooperation, is also organized around a network of officers from the military staff and liaison officers, workshops and exercises organized at regular intervals. The initiative is the first of its kind involving the armed forces of the three countries, and since 2013 a charter signed by the CSAFs serves as a framework for cooperation. The perceived benefit of the TSI is the flexibility provided to participants to select the topics addressed and to promote a program to enhance cooperation "without the heavy bureaucracy associated with a formal alliance or coalition"\(^{38}\). Despite this organizational simplicity, the IST is conceived as a long-term initiative under the responsibility of a steering group. But this brings a major drawback: only a small group of actors is involved, which does not have the means to influence decisions at the highest level, nor to implement the changes that would be needed for a more effective cooperation\(^{39}\).

**THE MAIN LIMITS TO LEARNING**

We have identified a variety of exchange channels allowing for learning in and about cooperation. However, regardless of the form of cooperation, existing literature and empirical observations identify similar constraints that limit the effects of lessons identified about cooperation and/or in cooperation, that is to say, actual learning.

- Non-dissemination of lessons

First, a major difficulty concerns the willingness to disseminate lessons, positive or negative, to allies and international organizations. At the individual level, actors are inclined to minimize their own failures, whereas on the collective level, allies cannot mutually "accuse" one another. It is then much easier to spread successes and good practices than mistakes. All actors interviewed admit that the sharing of errors is difficult, firstly at the bilateral level, yet more so in a multinational context: to study an example of error at a degree of precision sufficient to make it useful would make anonymity impossible.

This can be explained by the need for a certain degree of trust, and the fact that lesson sharing – just like intelligence sharing - is usually based on "give and take" cooperation practices. Like any other form of knowledge, and as an interviewed general officer claimed, "Lessons are a capital that cannot be exchanged for free": as a principle, the lessons learned by some parties are not shared and disseminated to other countries or actors not involved in their development\(^{40}\). The perceived comparative advantage of holding information - according to the idea that "information is power"\(^{41}\) - may cause a lack of information sharing and limit the possibilities of progress. "Need to share" must therefore replace "need to know" practices to facilitate cooperation on the ground\(^{42}\). However, the diversity of strategic cultures and military capabilities of allies means that the armed forces prefer to share with certain allies rather than with others\(^{43}\). Finally, lessons learned and knowledge can be used as bargaining chips: Elie Tenenbaum showed how US allies have sought to cash out their counter-insurgency skills, for example, when the French traded their expertise in that field in exchange for information on the US army’s tactical nuclear program\(^{44}\).

Finally, when disseminated publicly, lessons can play a strategic communication role (STRATCOM). The statements about the lessons learned from deployments must therefore be taken with caution. For example, at a bilateral working meeting held in April 2014, British and French officers responsible for STRATCOM in the CJEF project spoke of the need

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39. Ibid., p. 10.
40. Interview, EMA, December 2016.
41. Interview, Centre for Studies, Reserves and Partnerships of the French Air Force (Centre études, réserves et partenariats de l’armée de l’Air, CERPA), December 2016.
43. Goldenberg, Soeters and Dean, *op. cit.*, p. 4.
44. Tenenbaum, *Une odysée subversive*, op. cit., Chapter 8.
to develop "a media plan" with a "clear narrative for the wider international environment, the other partners". This "binational strategic narrative" should highlight "the experience gained in Libya and Mali", even though cooperation on the ground was in fact limited or difficult, especially in Mali. On the other hand, analyses showing difficulties are little disseminated and, when produced by external experts, may be poorly received by military actors or politicians. As summarized by Heidi Hardt, the purpose of externally-directed lessons is to increase the legitimacy and reputation of the actors or organization concerned: "showcasing success increases the organization’s prestige, perceived legitimacy and prospects for future funding. In contrast, strategic errors put these in jeopardy".

- Few links between different actors

Second, one may observe that lessons learned nationally, by multinational agencies, and through bilateral or trilateral initiatives are not pooled together. Lessons learned within international organizations, such as NATO, are often not disseminated in the military staffs, and vice versa: lessons learned bilaterally and trilaterally have little or no impact on lessons at the multilateral level. There are several factors that explain this, in particular: the question of language - documents written in French, for example, that must be translated to be communicated to allies; the question of classification - the most diffused versions being by definition the least specific; and the existence or inexistence of secure communication channels between countries and stakeholders to disseminate more sensitive documents.

- The place of Lessons learned and cooperation among the priorities of military institutions

It is clear that cooperation between allies is not currently deemed as an important issue in defining the action of ministries and armed forces, even within Europe. In other words, cooperation, as well as lessons, - and, moreover, lessons in cooperation - are not carried out as a priority: they are preceded by the other functions of defense organizations (equipment, the preparation and use of armed forces) developed in a primarily national framework. This lack of priority can be identified in the following example: while the military intervention in Libya was conducted by a coalition - -        The place of Lessons learned and cooperation among the priorities of military institutions

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- Mandate and capacity for implementation

The development and implementation of learning relative to cooperation in allied operations suffer from organizational constraints of time and resources. Indeed, once lessons are identified, the question of prioritization and mandate for implementation arises: because of their position in the hierarchy, LL officials (senior officers) cannot initiate changes identified without the involvement of general officers - they can only provide feedback and make proposals. The question of mandate is even more complicated in the context of cooperation: "It’s easy to agree on the difficulties identified in lesson learning, but when working on solutions, eve-
ryone has their own national priorities.\textsuperscript{58} In fact, as we have seen, lessons regarding operations in contexts of cooperation are developed amongst small groups of individuals. The possibility of seeing the dissemination of lessons that produces a structuring effect on national military organizations is limited. Finally, we see that the lessons learned about cooperation often concern the interoperability of equipment and communication systems. But such problems require solutions that go far beyond the strict framework of relations between armies, and concern industrial, research and development, as well as acquisition issues. This may require trade-offs between the programs developed at the national level, and the buying of foreign equipment that facilitates interoperability with allies but does not support the national defense industry.\textsuperscript{59} Because of these industrial aspects, there appears to be, at this stage, a glass ceiling limiting what can actually be "taught" and thus changed in allied operations.

The picture painted here should not give the impression that only a series of constraints and failures characterizes what is achieved in terms of exchanges between allies regarding lessons and learning about cooperation. Rather, once again, the variety of channels, scales and degrees of exchange between allies should be noted. In addition, these constraints exist because the level of requirements in terms of interoperability is much higher today than it was thirty years ago: while, until the 1990s, the goal was simply a deconfliction of forces – which implied lessons were drawn at a general level – the level of work today is much more micro, as it is about including foreign battalions in national forces, allowing forces from different countries to know how to communicate between them and making practices converge. The next stage, which has already started but will take some time, implies the achievement of the interoperability of equipment, from ammunition to communication systems,\textsuperscript{60}, taking into account all the industrial challenges we have mentioned and which will add to the challenges presented here.

\textsuperscript{58} Interview, French liaison officer in the United Kingdom, April 2014.
\textsuperscript{59} See the example of Germany and France in Afghanistan, in Schmitt, op. cit.
\textsuperscript{60} Interview, DCDC, May 2017.
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