"Impact of the generalisation of stand-off precision weapons, notably cruise missiles, on the present balance of the main functions of French defence policy (put into practice with the example of Iraq)"

Summary

The aim of this study was to define the great doctrinaire tendencies from a political-strategic point of view as regards stand-off precision weapons, taking as a starting point the lessons learnt from the recent Iraq conflict in 2003. Therefore the study focuses on the United States and the United Kingdom, as well as on China and Taiwan - China because it would be of use to observe how a developing country is approaching armament and Taiwan because it is threatened by a neighbour that is likely to develop such weaponry. The study indeed intended to examine the doctrinaire consequences of the development of such types of weapons in terms of offensive action as well as in terms of potential threats to our territory, to our interests and to our forces.

The final objective was to determine what kind of policy we should define with regard to such types of weapons and to identify the consequences on the four main functions of our defence policy: protection, prevention, determine and projection.

The first chapter of the study is thus devoted to the doctrinal analysis of those stand-off precision weapons in four countries: the United States of America, the United Kingdom, China, and Taiwan. The analysis is done from doctrinal writings as well as from lessons learnt by the United States and the United Kingdom during the last Iraqi conflict.

The aim of the second chapter is to systematize the approach that led those countries to decide on various options. So, the analysis depends on the role played by political, financial, and technological criteria connected to the three main functions of these weapons, which are accuracy, limitation of collateral damage, and protection of the forces resulting from security distance. What emerges from this chapter is that those functions do not have the same importance in the various countries; they depend on the variation in political, financial, and technological parameters.

From this analysis, we can identify in chapter four some 'laws' on how to decide in a given situation which policy to adopt in face of stand-off precision weapons. There are seven laws:

- Accuracy is an infra-political factor.
- As financial means increase, the political factor becomes more important when defining the importance that precision weapons fired from a security distance have in the defence doctrines.
- The more democratic a country is, the more important the functions such as "security distance" and "limitation of collateral damage" are.
- As financial capabilities increase, the factor "security distance" is more and more taken into account.
- Budgetary constraints lead to decisions as regards to precision weapons fired from a security distance, which are based on a dual compromise - a compromise among the various functions of weapons and a compromise among the main functions of defence).
- Limitation of collateral damage is necessary in the prospect for stabilization and reconstruction operations.
- The stand-off precision weapons which are fired at security distance are just one link in this chain of capabilities.

Finally, chapter four deals specifically with the threats that the development of such weapons could create, with the probability of such threats as well as with the potential answer an antimissile defence system could bring. The approach aims at protecting the deployed forces or the energy supply networks and the information and communication systems.

From these analyses, the study concludes by making some recommendations as for the policy our country should follow regarding stand-off precision weapons. It also draws the consequences of the distribution of our defence's main functions. The conclusions are as follows :

The study indisputably confirms that the use of stand-off precision weapons has become widespread. Accuracy allows the increase of the military effect of strikes tenfold while giving the possibility to limit collateral damage. The first function corresponds to the natural quest of the 'operationals' and the second one is especially sought after by the political powers of the European Union members which try both to have a role in the international arena and to remain sources of peace and stabilization.

Security distance is of a different matter, i.e. of the protection of forces. Its purpose is not only to protect a costly military tool but also to take into account a public opinion that is not inclined to accept numerous human losses for operations which do not concern the defence of our territory.

A well-ordered approach is necessary to determine how France should take into account this trend; we should therefore prioritize the questions to be dealt with. While political considerations have a great impact on the decisions we take, we should remember that France is a medium-sized economic power, which imposes on us a definition of priorities regarding defence policy. The study allowed us to identify a similar approach in a country like France, i.e. the United Kingdom, even if some choices made by this country can be disputed.

1. The British arbitration approach which defines primary and secondary defence systems should be used by France:

The United Kingdom made a clear choice by establishing priorities among the various functions of defence (prevention, protection, deterrence, and projection)¹. Even if it is not theorized, it amounts to setting a main defence system - the force projection to fight against terrorism, to be specific – and secondary defence systems which act as emergency systems if the main structure was to be failing. This approach is structured around three ideas:

- Defence functions do not have the same efficiency in the fight against threats; for example, the United Kingdom believes that the projection function is the most efficient.
- The UK does not have the means to develop three defence systems which would be as optimal and redundant as the United States'.
- The nature of the European/transatlantic share of capabilities allows the different functions to be covered entirely.

We should adopt a similar approach.

2. Stand-off precision weapons which are fired at security distance do not just cover one French defence functions:

The study indeed demonstrated that those weapons were fully efficient only when target recognition capabilities and the networking of high-tech weapons systems were used at the same time. This means that when weapons themselves are part of the projection function, the environment necessary for these weapons to work is also part of the prevention function. Stressing one element inevitably implies emphasizing the other one too.

3. What is the arbitration among the different functions of the military programme law?

¹ The UK does not use the same typology for the various functions of defence as we do. For greater convenience, the French typology of the military programme law is used here. It is however possible to draw a chart that relates the French and the British terms (cf Study on the UK in Chapter 1).

Theoretically, the UK seems to have stressed the projection function (and the prevention function as far as the environment necessary for these weapons to work is concerned) over the protection and deterrence functions. This choice does not appear to be followed by France, at least in its entirety, because of two things:

- France's choice for nuclear deterrence means autonomy, which nowadays tends to become more valid politically (e.g. nature of the relationship with the United States). There is nevertheless a risk that this deterrence may be bypassed and we shall not therefore aimed at guaranteeing totally this credibility of deterrence, but at restoring the balance among the various functions of our defence. (The option of miniature weapons which aim at deterring imminent attacks does not appear to face effectively a cost/benefit reasoning.) If savings may be drawn out of the deterrence function, one should nevertheless not sacrifice it.

- It is necessary to separate out the issues dealing with the protection function.
 - An antimissile defence project that would cover our entire territory should not be considered as the probability of such a threat is very low, the costs are very high and the system would be redundant added to our deterrence tool. The complementary nature of an antimissile defence and a deterrence force as advanced by the UK is lower in France since the British deterrence tool is less credible that the French one (in matters of decision-making autonomy and nature of the forces).
 - On the other hand, the protection of our territory against terrorist threats should be better taken into account than it is in the UK because of the credibility of the threats and the coherence of our defence system. While the threats are not a matter of precision weapons by now, it is nevertheless necessary to have the capabilities from now on to protect sensitive areas against all types of terrorist attacks and to acknowledge this reduced threat (because of precision weapons) in a term of 20 up to 30 years. The credibility of our external actions depends also on the security guarantee that we can offer on our territory. In the event that a major attack happened in our country and that our citizens did not feel adequately protected,

public opinion could call into question our foreign interventions. On this matter, we should learn from the current debate in the United Kingdom.

• If the protection function, in which stand-off precision weapons that are fired at security distance are included, is to be favoured, it is essential that we remain able to define the type of interventions in which we could be implied and therefore to identify the type of enemies we could be facing.

We cannot exclude the possibility of being confronted to enemies with classical armed forces like Milosevic or Saddam Hussein. In this case, targets are easily identifiable even if some may be buried and tightened while the issue of mobile and moveable targets remain.

The fight against terrorism which is done abroad raises other types of problems. The probability to face buried and tightened targets remains, but above all, there is an increased chance to encounter scattered enemies who will not be centrally organized. In that case, we face such problems as the relevance of the Network-Centric Warfare (NCW) technological system against scattered and non-centralized defence systems or as the failure of the precision weapons to adapt to targets which do not have anything to do anymore with those that can be found within classical armed forces. It is therefore not the combination NCW/precision weapons that is questionable in this case, but rather its implementation methods in practice. To conclude, is the couple NCW/precision weapons as it currently functions adapted to asymmetric threats?

Finally, there may also be a contradiction between the wish to have a limited army with increased technological capabilities and the necessity to conduct stabilization operations that require a high number of troops and that can last very long. Considering this last point, it is not certain that the United Kingdom is heading in the right direction when it chooses to build its army on the American model to fight terrorism on foreign territories.

There should therefore be a discussion on these two levels:

- the combination NCW/ precision weapons and its structure in the face of the two main types of threats;
- the link between projection forces and stabilization forces, and its consequences on the ratio troops/equipment.

This discussion has to be done at the European level.

4. The precision strike capability has to be acquired at the European level:

Depending on the type of targets, the ammunition and the carrier to be used may be totally different. Some weapons can be very sophisticated and intended for high-strategic value targets, while others consist mainly in the adaptation of precision kits on inertia bombs. The precision function thus became commonplace at a very low cost. It is now the difficulty to reach certain targets (tightened or moveable targets) or the necessity to shoot from a security distance that can increase the costs of those weapons. The obligation to adapt each piece of ammunition and each carrier to a type of target implies having a whole range of precision weapons. And yet European countries have nowadays only a part of this set of necessary precision weapons and are in a never-ending search for the entire range.

Following the effects-based concept, it could be useful to determine the volume of capabilities (according to a distribution of the various types of ammunition) that are necessary for the completion of the European Union missions. The long-term objective would be to generalize the capability at the European level so as to rationalize the programs of precision weapons. The aim would be to benefit from a pool of precision weapons, which would be available for the European Union actions (this could be done through a structured cooperation). At first, every weapon that can be used by all carriers is to be included in this project. Then, it would be necessary to standardize the precision weapons programs even if the carriers are different. The European Defence Agency could be the one to manage this capability and to become a platform of exchange for the various concepts on the use of those weapons.

Regarding this distribution of capabilities, it would also be necessary to consider how the 'security distance' function is approached, as it could turn out to be very expensive if it is searched for by all EU countries. A division of capabilities may then be desirable in this case.

5. The acquisition of an autonomous capability for precision strikes implicitly implies a NCW:

Precision weapons are practically useless if one does not have the full capabilities of target acquisition and command and information structures which allow the different platforms to work in networks. Those include all types of intelligence satellites, telecommunication satellites, sensors, drones (UAVs), and platforms that can receive and transfer information related to the management of the battlefields. It also implies that the NCW is organized on a EU and NATO level and that it can be compatible for a possible ad-hoc coalition with the United States.

Three questions have to be asked about the NCW:

First, the overall costs of such a capability have to be determined and what can be shared among Europeans (e.g. the system of intelligence satellites) as opposed to what is common (e.g. the information and command system) should also be defined. There is indeed a risk that a capability gap be created between the biggest European countries (France and the United Kingdom) and the smaller countries, following the example of the current gap between the United States and the European Union. It is also necessary to consider which links have to be defined between the European NCW and the NATO NCW.

Second, it is necessary to define a NCW structure at the European level. This structure has to be coherent with the political and military doctrine of the EU; the objectives regarding stabilization and reconstruction imply a strong political leadership over the operations. Another issue to be dealt with is the adaptation of the NCW to asymmetric threats. The idea indeed prevails that the British and American NCWs are structured to face the military tools of centralised states, as seen during the Cold War, but not to face guerrillas or transnational terrorist networks, which are based on a type of NCW that is devolved or even decentralized.

Finally and following directly from our previous point, it is maybe necessary to favour a decentralised NCW that is able to work according to a layer model in the event that the central level becomes ineffective. The autonomy that exists today in the French armed forces at unit level should therefore be maintained in such an architecture. As far as the United States is concerned, one can expect that the current NCW will increase the excess of centralisation that has always been noticed in American armed forces and that prevents them from adapting to a change in battlefield configuration.

6. To fight against the threat of precision weapons, decentralised architectures have to be favoured for the information and energy supply centres:

If we do not face any threat coming from precision missiles in the next 20-30 years, we should not face it at all after that. The main threat posed by those missiles may not be a military matter, but a civil one (the costs of a precision missile capability - added to the adjoining NCW - which are necessary to impact a military tool of the size of France's are only within the scope of countries like Russia – if its economy gets back on its feet – or China in the next years). Our societies have become extremely dependent on technology even at the cultural level. Theoretically, their disorganisation can thus be achieved very easily. It is therefore necessary to approach the structure of vital systems (such as energy supply or information system) with the view that they need to be able to go on working if some centres are to be destructed. This type of architecture should also be extended to all services which influence our lifestyle (bank services for example) and which could suffer from cyber attacks. Finally, it may also be necessary to organize some antimissile defence systems for the most sensitive areas (i.e. nuclear power plants), or at least to anticipate their tightening in case military attacks happen.