## Pensées mili-terre Centre de doctrine et d'enseignement du commandement



## The operating environment in 2035 a French vision CDEC Published on 18/07/2019

Engagement opérationnel

After three decades of limited and low-intensity engagements, the French Army is today part of a profound strategic landscapecharacterized by polymorphous and extraterritorial threats, competitive relations in all fields of confrontation and a worrying change in the international order.

## This chaotic and relatively unprecedented strategic environment has led to an increased risk of extremes, making the prospect of major and lasting commitments for France once again conceivable.

Observation of the conflicts of the last fifteen years (Israel, Central African Republic, Donbass, Levant, terrorist threat in the TN, Sahel-Saharan strip, Yemen) allows us to observe an evolution of the conflictuality towards more ambiguous modes of operation and in all the possible fields of confrontation. This observation, combined with the extremely rapid progress of technology and a no less rapid evolution of the societal framework of Western countries, has prompted the French army to take very proactive prospective steps in recent years. For the French Army, which is already engaged in a process of profound transformation, both intellectual and capability-based, anticipating the future operational environment is a major challenge.

This understanding of the future enables us to envisage the determining factors likely to have a real impact in the near future, on the way the army will operate and the way in which it will be able to respond to the challenges of the future.on of conducting the battle and creating the conditions for strategic success, after having durably and at a lower cost constrained the will of the adversary. Analyses drawn from recent conflicts do not lead us to imagine a fundamental revolution in the art and nature of warfare within a twenty-year horizon, but rather to discern simultaneouslyThe analyses drawn from recent conflicts do

Page 1/6

not lead us to imagine a fundamental revolution in the art and nature of warfare within twenty years, but rather to discern simultaneously the constants, trends and probable operational disruptions for which the armies, but also French society as a whole, must already prepare.

Recent and current conflicts have first and foremost revealed marked trends in the evolution of conflictuality. Over the last three decades, with the risk of a generalised nuclear confrontation having been removed, control of the terrestrial environment has once again become one of the main keys to understanding the relations and antagonisms between the powers. Control of this environment thus remains the strategic goal of all recent conflicts. The study of the latter first of all makes it possible to affirm that the commitment of forces on the ground continues to constitute a **strong and unambiguous** signal **for public opinion**, **for allies** and for the adversary, because it gives concrete form both to a de facto and a de facto decision to engage in a conflict. First of all, the commitment of forces on the ground continues to send a strong and unambiguous signal to public opinion, to allies and to the adversary, because it is the embodiment of **political determination**, a visible effort through the commitment of scarce**resources** and the acceptance of a level of risk that **varies but** is always present, due to the interlocking of populations and contact with the adversary (willing, funding and fighting).

Moreover, unlike the air, sea, cybernetics and space, which are characterised by their fluidity, the terrestrial environment is increasingly characterised by inhomogeneity and friction. The complexity of taking this environment into account is likely to remain a constant in 2035. However, even more than today, the porosity of the earth's field of confrontation with the other domains, of which they are mainly an extension, will make it impossible to conceive of its control without a convergence of actions and the achievement of precise and coordinated multi-domain effects. It can therefore be seen that the sustainable control of this environment cannot simply be reduced to the action of land forces.

The latter make it possible to achieve decisive tactical and strategic effects by means of powerful, precise, graduated air-land aggression capabilities whose undesired collateral impacts remain limited and controllable. The permanence on the ground, the reversibility and plasticity of postures therefore continue to guarantee the maintenance of the contact essential to the control of the physical and human environments. Moreover, land forces are still able to produce lasting effects in the field of perception through their direct interactions with the population and the adversary. In the near future, they should also be called upon to contribute locally and temporarily to maintaining or re-establishing superiority over the adversary in other contested environments (in particular air and cyber), particularly in the context of first entry.

Feedback shows that ground-based action requires **extensive planning and coordination of cross-domain action, as** it is still only one component of the necessary but not sufficient means of gaining the upper hand over the adversary and then obtaining the conditions necessary for lasting peace. It **requires a minimum mass to** control space, particularly in very large or highly compartmentalised areas, but also to compensate for inevitable attrition and operational wear and tear, when **operations in contact and in** highly abrasive environments are envisaged. Moreover, it is **necessarily long-term, since the** generation of the force, its routing, deployment, the conduct of its action, the achievement of lasting effects, the restoration of minimum security conditions and its withdrawal imply incompressible deadlines.

Page 2/6

The contribution of land forces, in particular through the effects they have on the will, is therefore essential for a global strategy with clearly defined objectives, understood from the outset in the long term, in a joint, interdepartmental, inter-allied and inter-agency framework, aimed ultimately at creating the conditions indispensable for lasting peace.

Feedback from the most recent conflicts, technical-operational monitoring and current forward-looking work make it possible to discern vulnerabilities **and trends likely to lead to disruptions that could significantly challenge our conventional operational superiority by 2035**.

Through the reactions of public opinion during our latest commitments, deep sociological trends can be observed in Western countries already characterized by a fragile demography. For so-called "hyper-pacified" Western societies, the understanding of the stakes of sovereignty and the conditions for achieving victory could rapidly be affected.e by efforts to be made that public opinion deems exorbitant (budgetary choices, victimisation, legal proceedings, sensitivity to losses) on the eve or during a conflict. Moreover, the consequences of changing lifestyles (decline in hardiness linked to continuous urbanization, already observable decline in the physical and cognitive abilities of the younger generations) are also likely to affect the ability of the armed forces to Western armies, to recruit satisfactorily in terms of volume and quality (this is already the case in Germany, the United Kingdom and the United States) and thus to build up a **sufficiently robust and resilient** critical mass to **conduct demanding military operations over the long term**.

The forthcoming entry into service of equipment derived from 4th generation technologies will <sup>undoubtedly</sup> open up new possibilities in terms of collaborative and infovalorised combat. The forthcoming commissioning of equipment derived from 4th generation technologies will undoubtedly open up new possibilities in terms of collaborative and info-valorized combat, increased battlefield transparency, precision, lethality, protection, mobility and support for our forces, but also those of the adversary. However, the use of high-tech equipment in recent years by regular and irregular adversaries shows that technological advances, both in terms of the technology used and the quality of the equipment used, have made it possible for our forces to fight with a high level of precision and lethality, protection, mobility and support. However, the use of high-tech equipment used is possible for our forces to fight with a high level of precision and lethality, protection, mobility and support. However, the use of high-tech equipment used is possible for our forces to fight with a high level of precision and lethality, protection, mobility and support. However, the use of high-tech equipment by regular and irregular adversaries in recent years shows that technological advances, even if they give rise to many fantasies, should not be sufficiently mature and widespread to create a fundamental upheaval in the way the battle is fought in 15 to 20 years ' time.

The means that will be available on this horizon are generally known and will mainly aim at a densification of **land action**, **capable of** responding to the imperatives of mass, circumvention of **power and distancing from the battlefield**. However, it will be unavoidable to address in depth the moral dimensions and the real effectiveness of a more or **less thorough** dehumanisation of **war**. Answers to this complex questioning will necessarily have to take into account those adopted by adversaries, or allies, who are much more uninhibited by the ethical aspects of this issue.

The major trends observed in recent conflicts naturally lead us to consider a number of

presuppositions regarding our future commitments. The belligerents will deploy conduct by all kinds of intermediaries (proxies) in all fieldsof conflict (physical and immaterial), requiring **increasingly complex** anticipation and coordination of **inter-domain effects**. Conflictuality in the cybernetic, marine and exo-atmospheric domains will intensify because of our increased dependence on **data networks (immaterial, land and** submarine **cables**) and space assets, particularly for command systems, sensors and systems using geolocation. The battlefield is expected to become partially less opaque with the multiplication of sensors and observation satellites, restoring **a crucial role** to deception. The spread ofsophisticated(Russian S400 or S500) or more rustic A2/AD (Anti-Access/AreaDenial) capabilities will, **at least temporarily, call into question our air superiority and involve ground engagements** without systematic air support and under the potential threat of opposing aerodynes.

Despite our lead time in the field of collaborative combat and info-enhancement, access to dual or "levelling" technologies will provide irregular adversaries with significant capabilities in terms of aggression and **power bypass**. The **porosity between international criminal organizations, regular and irregular adversaries often having** greater agility and freedom of action, is a major obstacle to the development of a more effective and efficient fight against terrorism. The porosity between international criminal organizations, regular adversaries often with greater agility and freedom of action, is a major obstacle to the development of a more effective and efficient fight against terrorism. The porosity between international criminal organisations, regular and irregular adversaries often with greater agility and freedom of action than deployed forces, will continue to impose indirect, integrated and not essentially military approaches from the planning stage of operations. The **continuity of the enemy threat between external theatres of operations and national territory, which is unlikely to diminish** in the short term, will require a new understanding of the **threat**.hension of revolutionary struggles, to give substance to the defence-security continuum and to strengthen the resilience of the population and its ability to endure.

The ability of our armies, tailored to the right size in terms of manpower and equipment, more effective but more expensive, to withstand blows, suffer heavy losses and be rebuilt, will be crucial. The ability of our armies, which are more efficient but more expensive, to withstand blows, suffer heavy losses and be re-generated, therefore calls for a review of the notions of critical mass and resilience, **which** are essential for the **conduct of** warfare operations based on contact manoeuvres.

In order to respond to the operational disruptions and potential vulnerabilities suggested by the observation of recent conflicts, the French Army has now decided to develop the concept of critical mass and resilience, which are essential for the conduct of warfare operations based on contact manoeuvres. To respond to the operational disruptions and potential vulnerabilities suggested by the observation of recent conflicts, the French Army has already embarked on several lines of thought aimed at making land action more effective in achieving the strategic conditions necessary for crisis prevention, management and recovery.

The hybrid, infra-nuclear strategies developed in recent years by our potential adversaries give de facto a more direct role to **land** forces in the **strategy of deterrence**. Conventional ground action has two effects: on the one hand, it poses the threat of a conventional response to aggression below the nuclear threshold ("conventional deterrence"). On the other hand, by its very presence, it forces the adversary to consider escalation, which leads to actions falling within the scope of nuclear deterrence. By 2035, the role of land forces, and in particular those of sovereignty and presence, will be

amplified first of all to prevent crises that might occur on our territories ofOverseas territories or in the countries where we are deployed, and secondly to circumvent adverse A2/ AD arrangements that could seriously hamper our ability to move troops. To do this, the expeditionary experience of the Army and the maintenance of a first entry capability **will continue to be decisive for a force** likely to act in the depths of the adversary's apparatus, **potentially without joint support and backing**. This capability will require, in particular, the re-acquisition of a robust and comprehensive accompanying ground-to-air defence.

Work on **resilience** is also being conducted to improve the sustainability of land forces. This work also concerns the land forces on national territory where they are structurally dependent. Strengthening resilience will necessarily involve **decentralising resources and support so** that crisis players have the tools to react to the unexpected in peacetime. The reconstitution of stocks (of equipment, consumables or spare parts) is also a key element in the ability to act in the face of time and uncertainty. In essence, land forces on operations or on national territory must regain operational self-sufficiency in time and space. **Training for action in a degraded technological environment** is also an essential **area of** effort that must be pursued. Moreover, with a view to strengthening its moral strength, agility and endurance, the Army has developed a policy of warrior spirit **which aims to spread a state of** mind based on tradition, rusticity and the use of high-tech equipment.

Finally, there is every reason to believe that the role of the land forces in the land protection posture will increase as a result of the persistent threat on the national territory. The place they occupy with Operations Sentinel and Harpie or with its specialised units contributing to civil security (BSPP, UISC) is now well established. The Army will undoubtedly have a greater societal role to play in helping to rebuild national ties.

In spite of the notable developments observed in the forms and fields of confrontation, the art of warfare is therefore not likely to change fundamentally in the next twenty years. The earthly environment should indeed remain, for at least fifteen years, at the heart of conflict and the logic of power. Its control will probably still be the concrete and measurable translation of strategic success or failure. It will continue to be the essential condition for emerging from the crisis. Achieving this condition will always necessarily have a cost and a duration, which can only be objectively evaluated in terms of political-military gains previously and precisely defined in relation to clearly identified adversaries.

The principles of war inspired by 19th century Western thinkers therefore have every reason to remain relevant.

The operational environment envisaged for 2035 leads all Western nations today to question the perennial nature and supposed universality of the principles bequeathed by the military thinkers of past centuries. Will the understanding of tomorrow's adversary, new technologies, the digitisation of forces and the porosity of the areas of engagement have fundamental implications for the way in which war is thought out and conducted in the near future? Is it not necessary today to envisage new rules, new precepts that can guarantee success in war and in establishing the conditions for a lasting peace?

The forum of 12 and 13 June on the principles of war in 2035 was twofold. Firstly, the

participants were able to exchange views during a seminar structured around workshops for reflection, on issues related to the main questioning. The second part of the forum was centred around two round tables of a colloquium. The summaries on the following pages summarize the exchanges and conclusions drawn by the participants during the workshops.

- <u>VIP Workshop</u>: the operational environment of 2035 questions the sustainability of former military principles. What forward-looking approaches are being taken by Western nations to reflect on this subject?
- <u>Workshop n°1</u>Workshop 5: What is the difference between principles of warfare and principles of operations?
- <u>Workshop n°2</u>The Future: Are the principles of warfare being challenged in the new operating environment (new technologies, demographics, culture)?
- <u>Workshop n</u><sup>•</sup>3The question: Will the types of adversaries being considered and the porosity between locations of engagement have consequences on how to win the war in the future?
- <u>Workshop n°4</u>The question: On an increasingly transparent battlefield, what principles will ensure lightning strike and security? Is the uncertainty principle the only universal and timeless principle?
- <u>Workshop n°5</u>The uncertainty principle: Do we need to deduce new ways of applying it in order to ensure the success of war and lasting peace?

Title :	CDEC
Author (s) :	CDEC
Release date	13/07/2019

## DOWNLOAD DOCUMENT