

The desirable contribution of lessons learned to the **future land action** study

The CEREX, acting on two grounds, participates in the studies related to doctrine: first by bringing the lessons learnt from passed and ongoing engagements, i.e. experience feedback, the RETEX, and then by checking the implementation of doctrine during major units exercises, i.e. the after action review and analysis.

As far as the study of the “future land action” “ATF” in French is concerned, which deals with the new tactical perspectives offered by the technological enhancements of the CIS systems and of future weapons and equipments, the CEREX participation has an additional reason which is that of drawing orientations concerning the new objectives for research and assessment.

The ATF study concerns a land force component at brigade level and essentially pertains to three fields linked to the contribution of new technologies. First, the consequences for the operational “command and control” function of the implementation of operational information systems that are more effective; then the implementation of new weapon systems and last the management of the psychological environment.

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In each of these domains what can be drawn from lessons learnt and after action reviews?

The lessons learnt drawn from ongoing conflicts are rich in terms of doctrine lessons likely to improve the operational capabilities of the Army and to determine the needs as far as equipment and training of land forces are concerned.

The new technologies at their present stage of development already equip our forces and can therefore become part of a first assessment both in operations and during major units exercises: our operational centers use various operational

information systems whether in former-Yugoslavia or during brigade ops centers' training exercises at Mailly.

BATTLE SPACE DIGITIZATION AND FACILITATION OF THE DECISION-TAKING PROCESS

First of all, it is in the information management field that changes are expected. In fact, digitization must be used for the acquisition, the recording and the dissemination of information with the aim of enabling all involved parties in an operation to have a common perception of the situation. Then, as far as drafting and execution of orders are

concerned, it must allow, thanks to simulation and situation monitoring, to provide an aid to command and control. The use of new IO systems within Ops Centers is permanent, and new improvements are permanently enhancing them during exercises carried out at the CP training center at Mailly, thanks to the use of the forces information and communications system (SICF). Graphic space representations of the situation through projections and databases updates accessible to everyone, are easing the co-operative work, whether at relieve time between shifts for situation updates or

during the decision-making process to make possible the analysis phases. Nevertheless, information management remains a weak point in the running of OPS Centers. In fact the faced risk is that of over-information. This latter may appear in various forms such as the absence of reaction to messages from addressees that are no longer able to sort out a huge amount of mail or the impossibility to extract one piece of up-to-date information from databases that are not correctly updated.

What should have a determining effect on the running of CPs is

the networking of all the OISs that are to be fielded within the forces: SICF of the force, Information system at battalion level (SIR) and at terminal level (SIT). In fact presently, a lot of time is still dedicated to data input in order to ensure the monitoring of the tactical situation and the updating of documentary databases and a great number of staff officers are assigned to those tasks. The automatic data update, that digitization should make possible, will lead to save a significant time and will enable staff officers from the various operational functions to make a more



The Army Lessons Learned process in contact with realities must permit the adaptation of forces' know-how during operations to the future land action.

thorough contribution and to have more initiative. The multinational context, which is now the normal employment framework of forces in operations, requires interoperability between our OISs¹ and that of our allies. This is already possible thanks to the implementation of protocols such as the *Multilateral interoperability program (MIP)*. The possibility of working in a multinational environment also requires the employment of standardized procedures. A significant effort has been undertaken at European level within

NATO and staff officers are now familiar with the electronic mail system and with the structure of orders.

Therefore, lessons learnt and the after action review processes should enable the "*command and control*" function to accompany the evolution linked to the implementation of new operational information systems thanks to the analysis of various specific fields among which :

-Mastering of information : more particularly the possibility to obtain the representation of one unique reference operational situation ;

network update and sharing of operational databases ;
 - Decision-making process : co-operative work, facilitated by the use of computer aided decision-taking tools such as simulation ;
 - Interoperability ;
 - Standardization of procedures.

IMPROVED OPERATIONAL FUNCTIONS

The ATF study is also interested, beyond the implementation of operational information systems in future equipment and weapons, in the necessary evolution of the employment doctrine within the various operational

functions among which intelligence, contact battle and logistics. To strike fast and far when and as wanted with an operational logistics fully integrated into the maneuver, this is the objective. The lessons learnt and the after action review processes are able to provide an inventory assessment in these fields, and also to monitor and validate the ongoing evolutions and to establish some tracks in order to assess the requirements.

INTELLIGENCE

The main difficulty in the resolution of conflicts lies in grasping the threat.

Today, intelligence appears in different forms whether tactical, situation or environment intelligence are concerned, it deals with the political, economical and military appreciation of the situation. The result of this is that the sensors are not only those of the force, whether technical or human, but those of other players present on the theater of operations : medias, NGOs, foreign armed forces, host nation. It will therefore be necessary to ensure a convergence of information by opening the network to the various organizations likely to collaborate in the apprehension of

the threat. The present situation is not satisfactory. Besides the already existing partitioning within the intelligence community, it is worsened by the often-noticed impossibility of database interconnection. The accomplished work is from then on often incomplete, redundant and lacks some coherence. However, in the field, the investigation assets and contact intelligence are still insufficiently coordinated. Therefore, beyond the contribution represented by the new sensors which implementation is announced (robots, drones and imagery), studies are ongoing to solve these issues. As far as the common sharing of intelligence originating from different sources is concerned, a new architecture of the OISs, named "*Air-land Intelligence and Observation System AIOS*" is under development.

Concerning the improvement of contact intelligence gathering, the organization of the intelligence research units based on the "*Intelligence Surveillance Target Acquisition Reconnaissance, ISTAR*" concept should improve its organization.

CONTACT BATTLE

Will the real innovation come from new weapons and especially

from the new offered striking capabilities ? It is already possible to have an assessment about some of them. The Leclerc, for example has already been tested : its mobility was tested as soon as 1999 during its deployment in Kosovo and its firepower in 2002 during the armored exercise of the 2nd Armored Brigade in Bulgaria. But the capability to strike hard, fast and far must be accompanied by the establishment of an innovation spirit that must run the brigade OPS Center. Some new applications that are similar to those studied for the future land action in order to increase the reaction speed and to gain surprise when facing an opponent, and permitting to strike it when and as we want in the contact battle have already been noted. Let's quote for example as a concrete case search operations in towns or in built-up areas objectives, that of the multinational brigade north³ which, in order to avoid preliminary reconnaissance likely to alert, has used image and map video taps in three dimensions in order to enable the subordinated battalions to carry out the rehearsal of scenarios and the learning of courses of action.

OPERATIONAL LOGISTICS

In the future the monitoring tasks

pertaining to the logistics situation could be significantly lightened thanks to digitization, as it may be felt through the implementation of the SILCENT procedure, which is now running well and allowing to localize, in an automated manner and at any moment, the location of any piece of equipment during its projection thanks to the bar code given to it.

Thus, the officers of the operational logistics cell, free from monitoring tasks, will now be able to play a more active role within the Ops Center, in anticipating the maneuver and the conduct of logistics operations.

Changes in operational functions linked to the implementation of new technologies can therefore be tracked thanks to lessons learnt and after action reviews and permit the doctrine evolution that is already applicable to :

- intelligence : concerning the integration of tactical, situation and environment intelligence and for the coordination of contact intelligence.

- contact battle : by analyzing the innovation spirit likely to create surprise.

- Operational logistics : by tracking the consequences of the lightening of situation monitoring tasks and

of the increased capabilities in the anticipation and conduct of the operations.

THE REAL CHALLENGE : TO CONDUCT AND WIN THE INFORMATION SUPERIORITY

Today the Army has reached the end of a re-foundation process that has turned it into a projection professional *Army*. The ATF is the continuation of this evolution, with the perspective of exploiting new information techniques and the subsequent operational superiority.

This superiority is gained thanks to moral influence over the enemy, from the awareness acquired by the land force of its own superiority and from the management of the psychological environment the objective of which is to win the hearts and spirits.

It is the case of winning the day over the opponent thanks to the troops morale, the support of the local and international public opinion, the dissension and doubt spread in the opposite camp.

ENSURING THE MORALE OF OUR OWN TROOPS

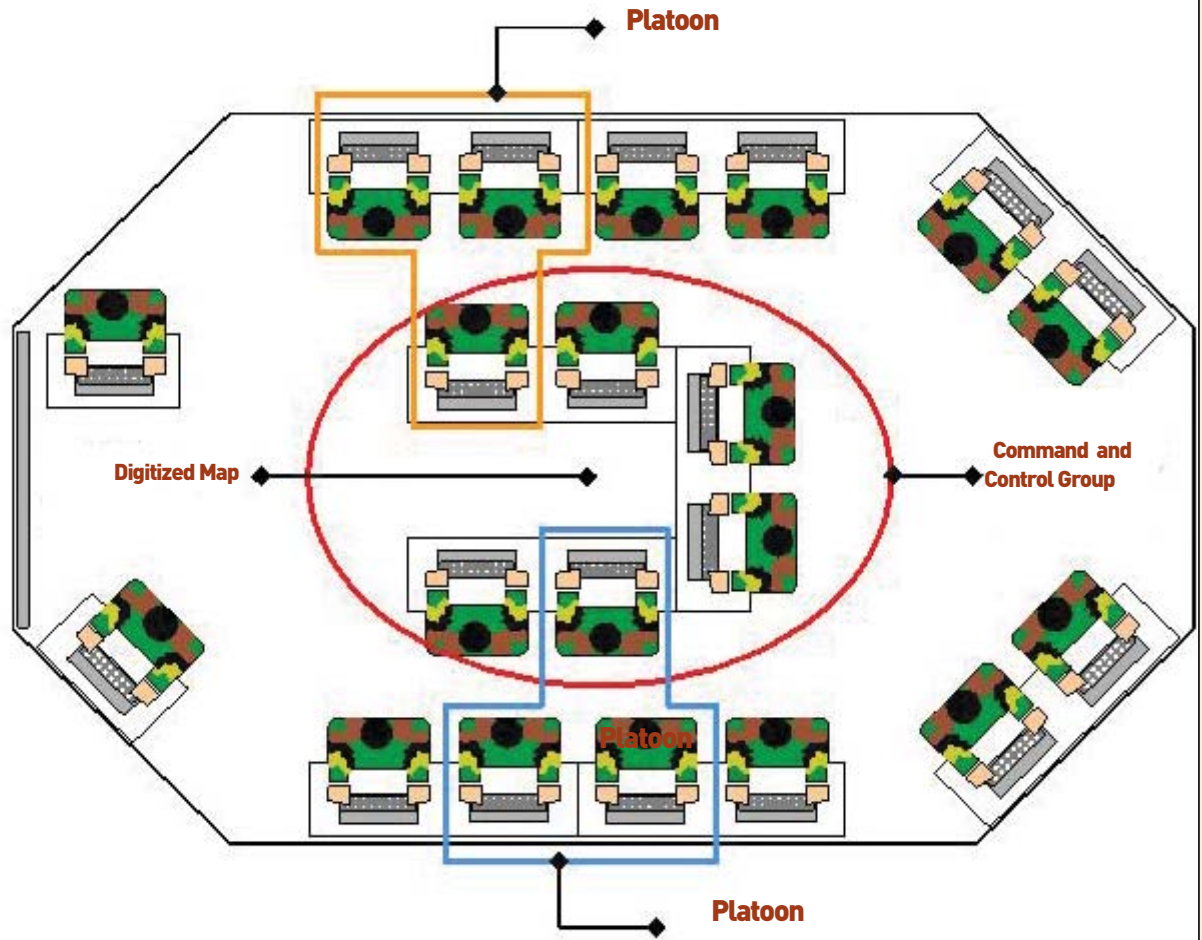
Above all, it is through a greater cohesion that are expressed the results of the acquired advantage linked to professionalization and also the ability to understand the spirit of the mission that

now lies within our troops. Our professional soldiers are now very well trained to the most varied theaters, the loss of cohesion due to the division of battalions subject to the modular forces generation process is compensated by the fact that elementary units from the various branches are used to maneuver together within the brigade which has now become the melting pot inside which the combined arms integration is achieved.

The self-confidence necessary to a good behavior of our soldiers on the ground also comes from their professionalism. In this field we must maintain the same effort on permanent individual technical training of the various levels : at basic level for example, a gun shooter must know how to shoot or else at NCO of officer level, an intelligence analyst must have a prior training adapted to the theater. The effort must mainly be made on combined arms technical knowledge. In fact, today more than ever, an effective combined arms cooperation is necessary up to taskforce i.e. battalion, sub-taskforce i.e. company. In order to evaluate the training level of infantry and armored units, the *Army* has a first rate tool which is the tactical training center

FUTURE LAND ACTION OPERATIONS CENTER WORKING METHOD

The tools of the Battlefield Environment Digitization associated to the fielding of new generation equipments and weapons open new tactical perspectives that the Lessons Learnt process help to evaluate.



at Mailly, the CENTAC. There, thanks to the simulation assets, units' commanders are confronted to the reality of the combined arms maneuver at their level. The synthesis of the lessons learnt during 2002 show the wide variety of points that should be improved, but also of those that have been improved for the training of officers and NCOs in this area.

MANAGING THE PSYCHOLOGICAL ENVIRONMENT

But the good behavior to obtain is that of troops vis-à-vis the population and the

opposing forces. This behavior will be decisive during the theater entry or during the end of the crisis. From the manner in which the force will be perceived will depend the way in which its action will have legitimacy in the eyes of the local and international public opinion.

This action upon the environment will depend on the interaction of several operational functions : operational communication, civil-military cooperation and PSYOPS, in French local communication.

The management of the psychological environment defined in such a way is responding to a strategy initially fixed at a higher level than the one to which the future land action study is devoted i.e. the tactical one. Nevertheless, its implementation will be conducted at brigade level, which is the only one able, as in contact, to assess its effect in the field.

The psychological environment management is similar to deep operations. Similarly, it results from the capability to

plan and anticipate. Depending on the targeted audience, our own troops, the allied troops, the belligerents, the population, the vector to be used will vary : internal communication, medias, direct communication to the population by means of pamphlets, local authorities. In most cases, it is a part of the "targeting" process. Insofar as a force at brigade level is led to act in an autonomous manner, it will have to be trained to plan and anticipate and be provided with the appropriate assets.

The implementation of these individual or collective know-hows must be controlled as in operations as during exercises and the lessons learnt and the review after action processes can participate in this by analyzing :

- the level of individual training of specialists and its adaptation to their position;
- the planning and anticipation capabilities within brigade Ops Centers for the management of the psychological environment, operational communication, CIMIC and PSYOPS.

Lessons learned

The lessons learned and after action review processes which lead information upwards are similar to what is performed in industry during a market survey. Similarly to the quality approach that tries to determine the user's satisfaction, the Lessons Learnt Studies Center can confirm the needs perceived in face of the effects pursued on the ground. Modeling and simulation during exercises must allow to validate some envisaged solutions.

The future land action study approach is new if compared to the usual doctrinal cycle. Indeed, it is concerned with a land force model foreseeable in the year 2015. In that way, it is similar to the Anglo-Saxons approach : the

American Future Combat System and the British Emerging Army. However, the doctrinal cycle, which follows the changes of the French Army, fits in a semi-annual rhythm, which is the one coordinated by the Operational Studies Coordination Committee (COCOOPS).

The CEREX, which is closely associated to the doctrine development and to the studies carried out by the Army realisation and doctrine studies center (CREDAT) and also to major units exercises carried out by the Land Force Command along the same semi-annual rhythm. Nevertheless, its participation to the ATF study puts its action into perspective.

- 1 *Interoperability definition according to TTA 206 : capability of several systems, units or organizations whose organization, doctrines, procedures, equipments and respective relationships allow a common help that render them capable of operating together.*
- 2 *Kosovo 10th mandate.*

Dealing with past engagements, the CEREX can also bring lessons learnt of past conflicts ; in this field it works in cooperation with the Historical Department of the Armies.

By conducting the Future Land Action study, the CDES resolutely participates to the evolution of the Army towards new operational capabilities adapted to the implementation of major innovations in the field of information, command and control and armaments.

Participating in this process, the CEREX can bring a useful contribution, that of contact with terrain reality, that of operational experience. However, this contribution will be possible only if it is appropriately oriented in the Future Land Action perspective, notably that of gaining the operational superiority through information.

(**FLA : the pictures**)



FELIN - p. 14
Infantrymen, equipped with the Félin system, have already reached their positions...
STAT



Numérisation - p. 21
Training personnel ranges from individual to collective level.
Vincent BEGON/ECPAd



CIMIC - p. 35
... the aid to populations becomes one permanent factor of the commitments...
Thomas SAMSON/ECPAd



Char Leclerc - p. 14
... the "Leclerc" formations converge towards their objective...
Dominique VIOLA/ECPAd