



Romanian Military Thinking

Military Theory and Science Journal

Published by the Romanian Armed Forces General Staff



3 July
September
2009

Founded in 1864 under the name
"Military Romania"
~ English edition, 5th year ~

Romanian Military Thinking



PUBLISHER

ROMANIAN ARMED FORCES

GENERAL STAFF

EDITORIAL BOARD

CHAIRMAN

Maj Gen Nicolae TABARCIA

MEMBERS

Academician Dan BERINDEI
Lt Gen Professor Dr Teodor FRUNZETI
Maj Gen Dan GHICA-RADU
Maj Gen Dr Ion-Aurel STANCIU
FRAdm Dorin DĂNILĂ
Brig Gen Dr Mihai CHIRIȚĂ
Brig Gen Dr Dumitru SCARLAT
Col Dr Mircea TĂNASE

SCIENTIFIC REVIEWERS

Gen (r.) Professor Dr Mihail ORZEAȚĂ
AF Gen Professor Dr Florian RĂPAN
Brig Gen (r.) Professor Dr Costică ȚENU

EDITORIAL STAFF

Editor-in-Chief

Col Dr Mircea TĂNASE
e-mail – mirceatanase2003@yahoo.com

Deputy Editor-in-Chief

Alina PAPOI
e-mail – alinagmr@yahoo.com

Editors

Iulia NĂSTASIE
Diana Cristiana LUPU
Adelaida-Mihaela RADU (Layout)

EDITORIAL STAFF ADDRESS

Bucharest, Izvor Street, No. 13-15, Sector 5
Telephone: +4021.410.40.40/1001731; 1001732
Tel/Fax: +4021.319.56.63
<http://www.defense.ro/gmr>

Romanian Military Thinking Journal
is issued in March, June, September, December.

ISSN 1841-4451 ~ Print
ISSN 1842-824X ~ Online

COPYRIGHT: articles may be reproduced free of any charge,
on condition that appropriate credit is given by making mention
of the number and date issue of the journal

HIGH ROYAL DECREE NO. 3663 THROUGH WHICH "MILITARY ROMANIA" BECOMES THE OFFICIAL JOURNAL OF THE GENERAL STAFF

Art. I. - The official journal named "Military Romania" is founded at the General Staff, starting January 1, 1898, in which all officers within the Armed Forces will find military studies, which interest their training.

Through the agency of this journal all officers, of all kinds of arms, who are in service, will be able to publish their personal papers and the ones that interest the Armed Forces.

Carol - King of Romania
Issued in Bucharest on December 8, 1897



Romanian Military Thinking Journal's National Awards



"Division General
Ștefan Fălcoianu"



"Brigadier General
Constantin Hirjeu"



"Marshal
Alexandru Averescu"



"Army Corps General
Ioan Sichițiu"



"Lieutenant Colonel
Mircea Tomescu"

*These awards are yearly bestowed
on the most valuable contributions
to the enrichment of the national military
science theoretical heritage*

1859 150 years since
the General Staff
was established **2009**

Romanian Military Thinking

Military Theory and Science Journal

Published by the Romanian Armed Forces General Staff

3 July
September
2009

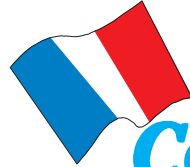
Founded in 1864 under the name
"Military Romania"
~ English edition, 5th year ~

*Authors assume full intellectual responsibility
for the articles submitted to the editorial staff,
in keeping with law no. 206, 27.05.2004*

*Romanian Military Thinking Journal
is recognised
by the National University Research Council
and included in the "B" category*



Contents



Contenu

Editorial

“Revolution” in Logistics
– A Necessity or a Whim ?
Colonel Dr Mircea TĂNASE

Editorial

7 “Révolution” dans la logistique
– une nécessité ou un caprice ?
Colonel dr. Mircea TĂNASE

Conceptual Projections

Motivational and Effective Leadership.
Education Management
Lieutenant General Dr Sorin IOAN

Defence Resources Management
– Human Resource Management (I)
General (r.) Dr Mihail ORZEAȚĂ

The PSYOPS & CIMIC Binomial
in Operations (I)
Colonel Dr Florentin UDREA
Lieutenant Colonel Valentin VASILE

Projections conceptuelles

1 1 Leadership motivationnel et efficace.
Management de l'éducation
Lieutenant-général dr. Sorin IOAN

2 1 Le management des ressources
pour la défense – le management
des ressources humaines (I)
Général (ret.) dr. Mihail ORZEAȚĂ

3 0 Le binôme PSYOPS & CIMIC
dans les opérations (I)
Colonel dr. Florentin UDREA
Lieutenant-colonel Valentin VASILE

Military Logistics – Directions for Transformation –

Military Logistics.
A New Approach Strategy
Brigadier General Valentin PETRE

Logistique militaire – repères pour la transformation –

4 1 Logistique militaire.
Une nouvelle stratégie d'approche
Général de brigade Valentin PETRE

- Logistics Activities Efficiency
in the Context of the Acceleration
of the Romanian Armed Forces
Transformation Process
Major General Dr Cătălin ZISU
- 53 Efficacité d'activités logistiques
dans le contexte de l'accélération
du processus de transformation
de l'Armée Roumaine
Général-major dr. Cătălin ZISU
- Determinants of Supply Chain
Management in Multinational
Logistics
Brigadier General Dr Liviu SCRIECIU
- 63 Déterminants de la gestion
de la chaîne d'approvisionnement
en logistique multinationale
Général de brigade dr. Liviu SCRIECIU
- Modern Options
for the Logistics Management
Transformation
Colonel Dr Gheorghe MINCULETE
- 71 Options modernes
pour la transformation
du management logistique
Colonel dr. Gheorghe MINCULETE
- Logistic Support
and Its Contribution to the Success
of Multinational Operations
*Lieutenant Colonel
Dr Bixi-Pompiliu MOCANU*
- 79 Le soutien logistique
et sa contribution à la réussite
des opérations multinationales
*Lieutenant-colonel
dr. Bixi-Pompiliu MOCANU*
- Air Force Logistics
in the New Security Context
Lieutenant Colonel BEng Nicolae BUGA
- 87 La logistique aérienne
dans le nouveau contexte de sécurité
Lieutenant-colonel eng. Nicolae BUGA
- The Role of Transport Infrastructure
in Planning Joint Operations Logistics
*Lieutenant Colonel
Dr Marian MAZILU*
- 92 Le rôle de l'infrastructure de transport
dans la planification logistique
des opérations conjointes
*Lieutenant-colonel
dr. Marian MAZILU*
- Integrated Defence Resource
Management in the Context
of Military Transformation
Lieutenant Colonel Vasile ENE
- 100 Le management des ressources
de défense intégré dans le contexte
de la transformation militaire
Lieutenant-colonel Vasile ENE

Host Nation Support – A Booster for the Deployable Forces Capability <i>Lieutenant Colonel</i> <i>BEng Cornel COMEAGĂ</i>	107 Le soutien fourni par le pays hôte – un pousseur pour la capacité des forces déployables <i>Lieutenant-colonel</i> <i>eng. Cornel COMEAGĂ</i>
Perspectives on Logistic Support in Theatres of Operations <i>Lieutenant Colonel Costel DUMITRU</i>	113 Perspectives sur le soutien logistique dans les théâtres d'opérations <i>Lieutenant-colonel Costel DUMITRU</i>
Strategic Sealift within NATO and the EU <i>Lieutenant Commander Metin OMER</i>	121 Le transport maritime stratégique dans le sein de l'OTAN et de l'UE <i>Lieutenant-commander Metin OMER</i>
NATO Security Investment Programme – An Instrument for Maintaining Political-Military Stability <i>Major Antonio DAN-ȘUTEU</i> <i>Carmen CĂLINESCU</i>	128 Le programme OTAN d'investissements au service de la sécurité – un instrument pour maintenir la stabilité politique-militaire <i>Commandant Antonio DAN-ȘUTEU</i> <i>Carmen CĂLINESCU</i>
NATO Logistics – The Logistics of the Future. NATO Maintenance and Supply Agency <i>Captain Marius DĂNCIULESCU</i>	132 La logistique de l'OTAN – la logistique du futur. L'Agence OTAN d'entretien et d'approvisionnement <i>Capitaine Marius DĂNCIULESCU</i>
A Logistic Echelon of the Romano-Byzantine Army in the Sixth Century – quaestura exercitus Iustiniani <i>Dr Alexandru MADGEARU</i>	139 Un échelon de logistique de l'armée romano-byzantine du VI ^{ème} siècle – quaestura exercitus Iustiniani <i>Dr. Alexandru MADGEARU</i>

*International
Connections*

*Connexions
internationales*

Europe Has a Central Role to Play in the Middle East <i>Marc OTTE</i>	145 L'Europe a un rôle central à jouer au Moyen-Orient <i>Marc OTTE</i>
---	--

Security and Elections in Afghanistan: Why the Two Must Go Together <i>Dr Wadir SAFI</i>	1 4 9 Sécurité et élections en Afghanistan: pourquoi les deux doivent aller ensemble <i>Dr. Wadir SAFI</i>
Rule of Law Deficits as a Security Challenge: “Touching the Surface” <i>Dr Sari KOUVO</i>	1 5 3 Le défi sécuritaire des déficits en matière d’État de droit: “toucher la surface” <i>Dr. Sari KOUVO</i>
The Joint Operating Environment 2008 – Challenges and Implications for the Future Joint Force (III)	1 5 8 The Joint Operating Environment 2008 – Challenges and Implications for the Future Joint Force (III)

*Military Journalistic
Universe*

1 8 6

*Univers journalistique
militaire*

Editorial Events

1 9 1

Événements éditoriaux

Abstracts

1 9 4

Résumés



“Revolution” in Logistics

– A Necessity or a Whim ? –

We live in a world with ups and downs, with lights and shadows, with peace and present and future wars. With armed forces, more or less engaged and sustained to handle the tools of war for the invariably stated use of peace. A world that we perceive and must accept as permanently changing, continuously revolutionising itself. We talk about revolution in science, revolution in culture, revolution in many other social fields and, of late, we have been more and more talking about the revolution in the military environment, in the military affairs, to be more precise. The change in the way of carrying out military operations has brought about a real revolution in most of the modern armed forces in regard to the place and role of each military branch/speciality that is engaged in the current confrontations. This determines us to acknowledge it as necessary and inevitable.

Therefore, why wouldn't there be a revolution in the military logistics ?

For a while, there was the *Support* (in Romanian – *Spatele*) of the armed forces, then there were the *Services* and now, for several years, the *Logistics*, after all, *the same modest branch without which neither combat nor victory would be possible, just as the mind, the arm and the heart, no matter how strengthened, would not exist without the ordinary and neglected stomach*, as a famous historian wrote, dismayed at the unfair role of Cinderella assigned to this branch.

Therefore, let us accept that logistics is revolutionising itself, and not necessarily in order to change its role in the construction of the military body, which is always the same, in essence, meant to generate and distribute the energy that is needed for the deployment of the combat forces involved in the accomplishment of assigned missions, but especially to change, at the conceptual level, the way to approach this logistic support.

Logisticians, heroes without glory until recently, paraded not long ago under the Arch of Triumph, alongside the Romanian Armed Forces, which came back from the theatre of operations in Iraq. And which declared: *Mission accomplished !* A well-deserved, undissembled triumph, supported by the almost superhuman effort of those committed to provide the deployment of a system that was often deprived of everything that was necessary in order to function properly. The mechanism functioned, with difficulty, if truth be told, and with great efforts, at first, with envy and out of spite because of the easy way in which the Alliance partners were dealing with their logistic problems, then with diligence, with the perseverance

needed to find solutions to problems that apparently seemed to have no solution. And, why not, with changing the perspective of those who could make decisions in this respect. And who obviously understood that the military operations and, especially, the multinational ones would be successful only if the engaged forces were provided with efficient support. Hence, the importance of logistics and, especially, of its command.

Sustainability in theatres of operations, as an experienced military leader has recently stated, is provided through investment in technique and command systems, an objective that requires time and considerable resources. As well as the change in the attitude of the military personnel – as far as implementing the mentality of a winner is concerned –, and in the attitude of the public opinion, which must be properly informed in order to support the political decisions regarding national security.

Prediction, economy, cooperation, simplicity, flexibility, responsibility, authority will remain simple words in a glossary of terms that should illustrate the principles of logistic command unless a firm decision is made with regard to actually supporting the development of the process meant to promote, adopt, adapt and implement new concepts aimed at making the logistic support more efficient. **Distribution-based logistics** and **focused logistics**, concepts already embraced by Romanian logistics specialists, are more and more discussed. Their essential elements have been mostly integrated in the programmatic documents that project the development of the military logistic system. Further proof of the fact that military logisticians keep pace with time.

Even if certain corrections are made, required by the current crisis, the Romanian military logistics carries on with its own transformation process, and the logisticians, no matter if they are logistics planners, logistics experts, logistics managers, are the ones who must have the ability to know what the requirements of the beneficiaries, the fighters, are before they send their requests. This is the ideal of providing logistic support.

Therefore, is the logistics the Cinderella of the armed forces anymore, as maliciously or only compassionately we (still) tend to consider it? Is revolution in logistics a necessity or only a whim? These are questions that we have tried to answer in this issue of the journal, as an editorial endeavour that is intended to be the beginning of a thematic series in which all those who may have something to say, substantiated by their positions of responsibility or theoretical elaborations, pay a contribution, one way or another, to conceptually and operationally revolutionising their field of action.

And the reason why we have begun with logistics is precisely because we do not seek to create a preconceived hierarchy or classification of military branches and specialities. However, paraphrasing a popular saying (that applies to the military as well), we can argue this option in a different way: without logistics we are nothing!

✍️ Colonel Dr Mircea TĂNASE

English version by
Iulia NĂSTASIE

“Révolution” dans la logistique – une nécessité ou un caprice ? –

Nous vivons dans un monde du bien et du mal, avec ses lumières et ses ombres, avec la paix, avec ses guerres d’aujourd’hui et de demain. Avec ses armées, plus ou moins engagées et soutenues pour traiter les outils de la guerre pour l’utilisation invariablement déclarée de la paix. Un monde dans lequel nous percevons et nous devons accepter dans un changement permanent, dans une révolutionnaire continue. On parle de révolution dans la science, la révolution culturelle, une révolution dans de nombreux autres domaines de la vie sociale et on parle aussi, ces derniers temps, de plus en plus de la révolution dans le milieu militaire, en particulier dans les affaires militaires. Le changement de la façon d’exécution des opérations militaires a conduit à une vraie révolution dans la plupart des armées modernes en ce qui concerne la place et le rôle de chaque arme/spécialité militaire impliquée dans les confrontations actuelles. Ce qui nous oblige à lui accepter comme nécessaire et inévitable.

Et puis, pourquoi ne serait pas là une révolution dans la logistique militaire ?

Nous avons eu, un certain temps, *le Soutien* (en Roumain – *Spatele*) de l’armée, nous avons eu *les Services* et voici nous avons, plus récemment, quelques bonnes années, *la Logistique*, en dernier ressort *la même arme modeste sans laquelle aucune instruction, aucune lutte, aucune victoire n’est pas possible, tout comme l’esprit, le bras et le cœur, n’importe que d’aciers peuvent être, elles n’ont pourraient exister sans le banale et négligé l’estomac*, pour répandre les mots d’un célèbre historien, consterné par le rôle inéquitable de Cendrillon, qui a été attribué à cette arme.

Donc à accepter que la logistique est en train de se révolutionner, et pas nécessairement de son désir de changer son rôle dans la construction du corps militaire, en substance toujours le même, c’est-à-dire de générateur et distributeur de puissance nécessaire pour le mouvement des forces de combat engagées à mener à bien les tâches qui lui sont confiées, mais surtout pour changer, à un niveau conceptuel, la manière d’approcher cet appui logistique.

Les logisticiens, ces héros sans gloire jusqu’à hier, ont défilé récemment sous l’Arc de Triomphe, à côté de l’Armée Roumaine qui est rentrée du théâtre d’opérations d’Iraq. Et qui a rapporté: *Mission accomplie !* Un bien mérité triomphe, non dissimulé, soutenu par un effort presque surhumain de ceux qui sont déterminés à assurer le mouvement d’un système souvent privé de celles nécessaires à son bon fonctionnement. L’engrenage a fonctionné, il est vrai, plus difficile, avec nombreux

efforts au début, avec l'envie et du ressentiment sur la façon désinvolte dont ils avaient traité ses problèmes de logistique avec les partenaires de l'Alliance, puis avec la persistance, avec l'insistance de trouver des solutions aux problèmes apparemment sans solutions. Et, pourquoi pas, avec le changement de l'optique ceux qui ont pu décider à cet égard. Et ceux qui, bien sûr, ont entendu que les opérations militaires et, en particulier, celles multinationales seront couronnées de succès si on offre un soutien efficace aux forces engagées. D'où l'importance de la logistique et surtout de ses dirigeants.

La durabilité dans les théâtres d'opérations, a récemment déclaré un chef militaire d'une certaine autorité, s'assure par des investissements dans la technologie et des systèmes de gestion, un but qui prend du temps et des ressources considérables. Et qui exige le changement de l'attitude des militaires – de mettre en œuvre la mentalité de gagnateur –, mais aussi de l'opinion du public, qu'il faut être correctement informé pour appuyer les décisions politiques sur la sécurité nationale.

La prévision, l'économie, la coopération, la simplicité, la flexibilité, la responsabilité, l'autorité resteront de simples mots dans un glossaire de termes qui devraient illustrer les principes de la gestion logistique, si pas procéder fermement à soutenir le processus de promouvoir, adopter, adapter et appliquer de nouveaux concepts visant le même appui efficace pour la logistique. Il parle plus que jamais de **la logistique basée sur la distribution** et **la logistique focalisée**, des concepts déjà adoptés aussi par les spécialistes roumaines en logistique. Leurs éléments essentiels ont largement été intégrés dans les documents de programmation de projeter le développement du système logistique militaire. Une autre preuve que les logisticiens militaires suivent le rythme avec le temps.

Même si il ferait les corrections nécessaires selon la période actuelle de crise, la logistique militaire roumaine poursuit son processus de transformation et le logisticien, soit que nous l'appellerons *le planificateur logistique, l'expert en logistique, le manager logisticien*, il est celui qui doit savoir les besoins de bénéficiaire, le lutteur, avant qu'il soit envoyer la demande. Voilà l'idéal pour fournir un appui logistique.

Alors, la logistique est encore la Cendrillon de l'armée, comme malicieusement ou peut-être seulement avec compassion nous avons (encore) la tendance à le croire ? Est-ce que la révolution dans la logistique une nécessité ou un caprice ? Il y a des questions que nous avons essayé de donner une réponse à cette édition de la revue, dans une approche éditoriale que nous le voulons être le début d'une série thématique que chacun puisse avoir quelque chose à dire, où les agents ont rencontré l'argument de ses responsabilités ou de celles des élaborations théoriques, et tous puissent contribuer d'une certaine façon à la révolution conceptuelle et actionnelle de leur champ d'action.

Et, si nous avons commencé avec la logistique, c'était précisément parce que nous n'avons pas du tout la tendance d'une hiérarchie ou d'une classification préconçue des armes et des spécialités militaires. Toutefois, en paraphrasant un célèbre dicton (valable même dans l'armée), on peut argumenter ce choix dans une manière différente: sinon la logistique, rien n'est !

Version française par Alina PAPOI

MOTIVATIONAL AND EFFECTIVE LEADERSHIP

– Education Management –

Lieutenant General Dr Sorin IOAN

In the author's opinion, the leadership of any educational institution has to be connected to an integrated inter-institutional system through the pragmatic cooperation with not only the local administration system, the local, national and international academic environment, but also its potential beneficiaries, the graduates.

In this respect, the author mentions the role of leadership policies, which, even if not identical, should preserve the traditional elements of the institution through a process of continuity, on the one hand, and permanently impose rules meant for modernisation and harmonisation with the dynamic realities, on the other hand. Thus, whenever competent leaders establish the content of reform, they have to focus on the directions for improvement and on the aspects they can change. Leaders have to trust the programme for reform, motivating the collaborators and subordinates accordingly.

Keywords: *modernisation; leadership; education system; professional integration; performance criteria*

The general characteristic of transformation and reform in all the institutional fields is even more “vibrant” in the national education system and, subsequently, military education is no exception.

The transformation centre of gravity is represented by *leadership*, as the essential vector to the success of the education process and, specifically, to the success of students, as far as education is concerned. Through its fundamental function, it is leadership responsibility to assess the own system and to make the necessary corrections, through identifying the most effective “bridges” for the transformation efforts or practical reform to be applied, connecting all the related dimensions that contribute to notable outcomes: motivation, learning methods, attractiveness, the clearly cut definition of the role education plays in young people’s life and in their future careers etc.

Teachers, a social category whose members should perceive themselves as educators, have to contribute to the definition of the system as well as to be the front of manoeuvre for the main courses

Lieutenant General Dr Sorin Ioan – the Romanian Military Representative to NATO and the EU.

of action established by the leadership to achieve the practical effectiveness of the estimated process.

In order for the education system to have competent leaders, not only experts in the field but also good managers, four essential conditions have to be met, as follows: the *first* one is to establish a training course designed only to develop managerial competence for the leaders of educational institutions; the *second* is to establish some criteria regarding leadership aptitudes, having minimal standards to meet professional expectations, which may contribute to the increase in the preoccupations related to knowledge assimilation and education, assessed on the basis of a relevant measurable system; the *third* one is represented by a coherently defined set of sub-conditions that materialise the abilities of the eligible ones to get informed and to impose their authority in the decision-making process; the *fourth* one is related to the managerial capacity to direct resources, for the benefit of the students, to knowledge acquisition and results assessment.

The leadership of any educational institution has to be connected to an integrated inter-institutional system through the pragmatic cooperation with not only the local administration system, the local, national and international academic environment, but also with its potential beneficiaries, the graduates.

Leadership policies, even if not identical, should preserve the traditional elements of the institution through a process of continuity, on the one hand, and permanently impose rules meant for modernisation and harmonisation with the dynamic realities, on the other hand. At the end of each education cycle outcomes are measured through the student performance level.

Leadership – link between reform and transformation requirements

The efforts meant to enhance the education system have to start with and permanently relate to the enhancement of the leadership of the institutions in the field.

Leadership that is oriented towards progress should realistically analyse all the aspects regarding the functioning and functionality that require to be reformed and find the most appropriate “bridges” between domains or sequences of activity, in a general programme of coherent transformation. The first reaction meant to facilitate such an attempt is that of detaching from any tendency to argue or block, even from the very beginning, the need for change or the superior decision directed to it. On the contrary, the intellectual energies and efforts should be directed towards the concrete goals concerning the improvement of the internal education system, having as target the quality of graduates. Such a process takes

into consideration a wide array of factors, from the minimal criteria used for the selection of the candidates, the quality of the teaching staff, the institutional infrastructure and the logistics in education, the most attractive teaching methods, the assessment and periodical control of the level of assimilating knowledge and skills, making proper and appropriate corrections, up to the final outcome that includes the capacity of the graduates to become professionally and socially integrated in the system of the beneficiaries, the civil society respectively.

Success depends on five fundamental requirements:

- knowledge and research work, identification of some measurable parameters for assessment, cooperation with other educational institutions, expertise exchange, testing some modern ways for improvement and their adaptation;
- leadership capability, through the unconditioned participative engagement of the subordinate staff towards common directions for transformation;
- managerial capacity, through the correct and efficient management of all the available resources, no matter the category they belong to (human, material, financial);
- organisation of training and continuous education courses for the managers of the institutions, including the anticipated preparation of a group of potential leaders in the field;
- permanent communication with students, through dialogue.

In this context, we can mention two significant conclusions: *first* – a standard mechanical algorithm for the success of reform cannot be relied upon, although success is thought to depend on effective leadership; *second*, the institutions that have mediocre results will not go through the stages of reform successfully, unless their managers are not thoroughly prepared for it.

A question might be raised, at this stage of the analysis, regarding the concrete ways and tests to differentiate the aptitudes of a leader, before taking up the appointment, having in view that each and every eligible individual perceives him/herself as “*the most suitable*” for the position. If a concise and thorough definition could be interpretable and unconvincing, then deciding between the candidates is related to finding the answer to the following questions: *What is the projection of an effective leadership like, for a certain type of school, at a definite stage ?; How could leadership influence the education process ?; What kind of supplementary education should leaders receive in order to be able to meet the expectations ?; Who and how could their education be better organised ?; What are the most appropriate methods to assess leaders performance, guaranteeing the certitude of their future practice effectiveness ? What about the capacity to timely intervene to correct some vulnerabilities regarding the road map to reform ?*

Instead of developing answers to the above-mentioned questions, which is the task of a group of experts following the conduct of a thorough study, we will list a short series of possible orientations closely connected to the present reality, as follows:

- a clear policy to identify future leaders and their subsequent education and training to coordinate some students programmes, not only as administrators or managers but also for them to be prepared to influence students to have a certain vision and attitude on the education process, on the one hand, and to create an environment to favour teachers development and improvement, on the other hand; concurrently, they have to prove their abilities to develop a strategy to support the two directions;
- effective leadership determines the measurable differentiation from other institutions. Their classification according to performance is best determined from outside: the appreciation of parents and of the institutions that benefit from graduates; the availability of other institutions, from the country and abroad, to cooperate, depending on the level of relevance; the standard level in accordance with the ranking system established by the competent ministry. Subsequently, the indisputable image, although embarrassing for some leaders, will be projected through the level of education of the candidates that enrol for the courses of the educational institutions and, furthermore, it is an indicator of the necessity for self-assessment or, depending on the situation, for the reevaluation of the leadership capacity for some leaders;
- leaders' education, following courses, is assessed through their results regarding how well they can motivate students and teachers and the evaluation of the causes of differences in performance; conclusions should represent the basis for the improvement of the courses;
- leadership courses have to be continued with an activity meant for the new leaders monitoring by a team of mentors;
- monitoring is necessary, even after leaders accumulate expertise that has been demonstrated through laudable results, to either get rid of routine tendencies or identify new successful methods; in this context, those who teach the courses for the future leaders may be the mentors;
- periodically convoking leaders, even the ones that have positive results, should provide them with the opportunity to exchange opinions and, maybe, to debate different themes such as, for example, ways to shorten the time allocated by leaders to administrative tasks so that they could be more focused on the curriculum.

The analysis of the qualities that should be included in the performance criteria for a leader of an educational institution could also contain another subject to be debated and, possibly, experimented in the military education system. It refers to whether it is necessary or not for the command position to be held by someone who has a high rank, by an officer at the end of career, who is about to retire. On the other hand, an officer who has gained experience in fighting units, who has taken part in multinational missions in theatres of operations, who has graduated from educational institutions abroad, thus having the experience of a different system that uses modern methods, and who is open to communication could be a model for the students and could gain the credibility of the teaching staff. The success of such a leader could provide him/her with the opportunity to promote to another stage in career, in three or four years, which makes him/her more motivated, in the case of a demanding reform process.

The presented aspects demonstrate that a process meant to thoroughly reform education has to start with the establishment of a school for leaders, coordinated by a group of mentors selected according to strict value criteria and able to meet the goals of an effective and relevant education system.

Mentoring and evaluating leaders does not end with their appointment. It has to be a rather continuous process related to a set of performance standards. Success is not guaranteed only by the appointment of a very good leader to the command of an institution that functions in a deficient system.

A structural reform meant to reduce positions has to be accompanied by a proper functional reform, in harmony with the new configuration. It is necessary for the evaluation of the combined success, reform-leadership, to be strictly related to the quality of the future graduates.

Leadership – the vital centre of educational reform

Experts called out to put the bases of reform policy have to organise their approach system pragmatically and methodically, following a research action and an algorithm with clearly defined stages that should indisputably include the following:

- engagement in all the analysis activities at the level of the national educational system, organised by the competent ministry or by private initiative, meant to elaborate on the national legal framework that is harmonised with the European one and is adapted to the domestic social realities at a definite stage;

- communication with the large academic society and with those preoccupied with the improvement of young people's education, following the general guidelines;
- acknowledgement of the realities of the military education system, with the positive aspects, the traditional ones and the shortcomings that cause difficulties in integrating after graduation, not only in the beneficiary military structures but also in the civil society, immediately or in a future stage in career;
- interaction with the beneficiary military structures to cover the vulnerabilities related to the rapid appointment to the first position, as far as both professional and civic-social knowledge and skills are concerned.

The results of the research group of experts are materialised through the validation of the optimal conduct regarding leadership and management, as well as through guidelines for reform.

Any reform should be approached, from the very beginning, through a very firm leadership, which does not exclude but, on the contrary, implies a pronounced communicative attitude not only with the collaborators but also with the young students. The main action that follows the theoretical understanding of the directions for change consists in establishing the appropriate and optimal methods for change to materialise, through initiative, experimentation and courage in assuming the associated risks. It is sure that risks are better controlled if leaders are not only dedicated, meaning "*hardworking*", but also talented.

The reform process requires the involvement of all the personnel and not only the one of the leader of the institution who is responsible for the individual assessment throughout the stages of the process, proving his competency in diagnostic and correction, and even eliminating the incompetent personnel who cannot meet the requirements.

Depending on the circumstances regarding functionality and sometimes on the decision-makers' will, there could be three types of reform: *general reform*, in a determined period, when all the domains of the system are approached (structural, academic, administrative) at the same time; *echeloned reform*, promoted at a slower pace and approaching the domains in turn; *limited reform*, comprising minor, "cosmetic" changes. No matter the content, reform has to be implemented according to a programme, measures to be taken being planned in detail and implications properly correlated. The programme has to be implemented through teamwork, being coordinated by the leader of the institution. Measures to be taken cannot be the same for all the institutions. They should be related and respond to the performance level of each of them.

If the target is the level of the graduates' education and training, then the leadership seeks to impose a system of order, respect and discipline that may be subordinated to or overlapped with a motivating study environment. Consequently, measures should be aimed at either the improvement in the level of education of the students with poor performance without neglecting the students whose performance is over the average or the change in circumstances in order that the teaching staff should abandon the inefficient methods and adopt more flexible ones.

A general reform should also improve both the academic content and the volume and methods meant to develop skills through curricula.

Efficient teachers deserve valuable leaders

The necessity for education reform and/or for maintaining an appropriate pace of transformation has to be recognised by all the decision-makers as a vector that determines young people's education to meet the current and future requirements of the society not only domestically but also in the common European and Euro-Atlantic area in which the country has to fully integrate. Reality shows that we have a long way to follow to achieve it, and one of the immediate answers to the question *How can we get there ?* is represented by the quality of teachers, educators and trainers, real models for the students. Any sequential action meant to enhance infrastructure, to select candidates or to update the curriculum does not bring the expected success in itself unless leadership and the criterion of qualified and competent teachers or trainers are not placed at the centre of the reform process. The solution is represented by the establishment of a distinct sub-system designed for the selection, training, coordination and professional development of teachers and educators. This programme should be developed in parallel and correlated with the sub-system of *leadership in education*.

The interrelation *leadership – teaching staff* resides, on the one hand, in the leader's responsibility to select competent teachers, to maintain or to train those who do not meet the requirements and, on the other hand, in the right of competent teachers to decide if they continue to practise in an institution, depending on the administrative support and the quality of the particular organisation leadership. In other words, the relevance of the institution is given by the quality of the leadership and of the teaching staff, measured through the level of the graduates, while the irrelevance of the institution is given by the tolerance towards teachers and students belonging to a poor quality category.

The central organisational system is the one that orients the way to both relevance and irrelevance, determined by a unique indicator, namely the correct assessment

of the graduates' level of education, training and social integration. Teachers' competence is achieved not only through a rigorous selection but also through the way in which the system components support and encourage the efforts of the talented and dedicated teachers. When, following a scientific analysis, it is found out that the people are better than the system, the necessity for the system to be reformed should be recognised. Whenever such situations occur, those who are in charge of making decisions have to take into account the following principles:

- the establishment of a set of directions, based on a coherent and realistic vision, desired objectives and goals;
- the encouragement of didactic activities through individually supporting each teacher (guide and evaluation), concomitantly with the development of collective work in the field of education, through common, collaborative actions, meant to develop a planning and training programme based on some professional practice standards;
- the redefinition of the principles that lie at the basis of the organisation functioning, able to favour internal collaboration to support the students and integrated cooperation with the civilian community involved in education, with the local administration, with the graduates' beneficiaries and the students' families;
- the consolidation of educational institutions leadership through the budget and resources.

These principles do not exclude but, on the contrary, strengthen the importance of transforming the leadership paradigm and the competent teaching and administrative staff.

Leading through models

The experience of those in charge of defining the transformation process combined with the results of similar internal and international expertise has to orient the establishment of some models of leadership in action, able to meet the requirements related to the vision, objectives and goals established by decision-makers. The possibility for them to be interns in other institutions in the field that have achieved a transformation cycle and have common objectives such as:

- the coherently harmonised relationship between leadership and the functional educational programmes;
- the establishment of a curriculum based on performance standards and supported by a proper management and administrative process;
- the ways to develop practical activities meant to consolidate theoretical knowledge and to develop skills;

- the development of projects through the collaboration of some teams appointed by experts in the field of competence and the related ones;
- the selection of experts so that a balance between theorists and practitioners can be achieved;
- the development of partnerships between educational institutions so that competitive facilities can be used in common;
- the approach of the evaluation system and of the implementation of corrections throughout the process or at the beginning of a new study cycle;
- the integration of leaders and expert teachers in a large network of communication and transfer of expertise/models.

An important role is played by the ways meant to attract and motivate students to study and remain permanently connected to the concrete aspirations for their future career. Both the leadership of the institution and the teaching staff have to support them to do it through providing them with some reference models. For example, young people are, in general, attracted to the “*heroes*” they choose out of films and television. They have to be made aware of the fact that successful actors, singers or sports people are not heroes but celebrities. In most of the situations, “*heroes*” are not public persons, they remain shadowed and they are, in fact, those who have educated and trained the young. The merit of those who have become famous is that they follow the models provided by their teachers and trainers, thinking of performance.

An aspect that should be equally considered by leaders, teachers and students, in search of proper answers to guide their individual choices, is generated by simple questions such as: *What should I expect and from whom ?; What should I teach and who ?; What should I learn and from whom ?; Who teaches who ?*. The analysis initiated by these questions may create the image of future proper training, corrections, and even policies.

An example of individual analysis conducted by a teacher and rooted in the first question could hypothetically illustrate the case of a student coming from a poor family that does not wish performance, in disagreement with his will and vocation, a student who has never had his own room, bookshelf or writing table, who has been fed improperly or has been marginalised. The student perseveringly wishes a future totally different from his native environment. How could a teacher approach his education and training ? What is the diversity of the particular cases at the level of the classes ? Can I have an equal didactic attitude ? What are the limits of an individual educational process ? How can I eventually achieve almost the same performance as of the whole class ?

Leaders and teachers who are responsible and passionate will assess and improve the quality of their work through details. They will focus on what they really have to do instead of seeking justifications and arguments for what they cannot do. They know that they do not enter the class as in a conference room, teaching the lesson and leaving. They are aware of the fact that they have to prepare students that need their science and expertise.

*

The leaders are the institution centre of gravity, as they have to orient, coordinate or evaluate all the internal domains: academic, educational or administrative.

Any reform action has to overcome the more or less resistance to change. If, theoretically, everybody agrees on the reform, practically, those who are affected by change in a way or another oppose resistance to it. Once the programme is accepted, the leader has to put it in practice in a firm manner, through communicating.

Whenever competent leaders establish the content of reform, they have to focus on the directions for improvement and on the aspects they can change, and not on what they cannot achieve, namely on the resistance to change. Leaders have to trust the programme for reform, motivating the collaborators and subordinates accordingly.

The leader who promotes transformation is the one who is aware of reality and provides objective interpretations regarding it. He/she knows the teachers and the students who aspire to enhance performance. In contrast, there are those who try to find excuses and justifications supported by fragile arguments all the time, in order to move the centre of gravity.

The leaders of educational institutions have to be seriously educated, trained and selected, through courses conducted by experts in the field, in agreement with the requirements for transformation. Teachers should also be involved in these courses, thus supporting the leadership process. Not only teachers but also leaders have to be convinced that education can transform lives, and that school can become the most powerful instrument of transformation if all its force is used with energy.

English version by
 *Diana Cristiana LUPU*

DEFENCE RESOURCES MANAGEMENT (I) – Human Resource Management –

General (r.) Dr Mihail ORZEAȚĂ

The continuous struggle for a better life is becoming a normal way of living for every human being, especially for the those of us who want to be performers. As a consequence, if we make a wrong choice – between performers and survivors – then everyone will suffer because of the unseen connections that exist among all the inhabitants of “the global village”.

Human beings have always been our most important resource for defending the country. That is why we need to be aware of the evolution of the national human potential in the coming years.

It is very important to know the current situation of human resource for defence, and it is equally important to take the appropriate measures to protect and develop it.

As a NATO and EU member, Romania has benefits and responsibilities, among the latter ones being the Armed Forces transformation with a focus on the human resource.

It is very important to give proper attention to human beings because they are the military body's brain and hands, considering that they create strategies and act for implementing them.

Keywords: *human capital; military transformation; interoperability; future battlefield; mind – the best weapon; performance; continuous change; globalisation*

The current period, dominated by globalisation and information, is perceived differently by each of us, depending on the education and information level, personal experience and even social status. This period requires us to continuously adapt, because it is “*The era of inherent instability ... that is full of uncertainty, ambiguity and changes*”¹. The features of the era of information and globalisation make most people worry, because they require us to choose between two main objectives: performance and survival. Not only us, but also our close ones – family, friends, colleagues, fellow citizens etc. – depend on this choice, namely all the inhabitants of the “*global village*” in which we live, because, whether we like it or not, our destinies are interconnected and, the more the people who choose to be effective will be, the better will be for us all. This is the “*New Normality*”² towards which we are headed and only we, the human beings, namely the human resource, can make the difference between welfare and survival. Considering that, in various situations, the human beings have represented a reliable support of the Romanian people and so will it be in the future,

General (r.) Professor Dr Mihail Orzeată – Associated-Invited Professor at the “Carol I” National Defence University in Bucharest and former Deputy Chief of the General Staff.

¹ Mark Eppler, *Capcanele managementului*, Editura Polirom, Iași, 2007, p. 14.

² *Ibidem*.

the most appropriate decision is the one through which each of us will understand not to look back, waiting for “better times”, but to look ahead and to adapt to the requirements of the future.

Conceptual Clarifications on Human Resource

Generally, resource means “reserve or source of means that is susceptible of being capitalised on in a given situation”³. Broadly, defence resource consists in “all the means (possibilities) that exist at a given time in order to meet certain needs of the military actions”⁴.

According to the law, defence resource consists in the “range of human, material, financial and other resources that are provided and committed by the Romanian state to supporting the country’s defence effort”⁵.

Defence human resource consists in all the military and civil personnel of the Ministry of National Defence, as well as the reserve one, capable, when necessary, of being mobilised in order to take part in the nation’s efforts to face necessity, crisis or war situations.

Defence Human Resource Management is a process consisting in activities regarding the recruitment, selection, professional orientation, training and in-service training of the personnel belonging to the Ministry of National Defence.

Recruitment is a process meant to identify the Romanian citizens who are adult and capable of meeting the requirements of the military service in peacetime, in crisis situations and at war.

The access of Romanian citizens to the active military personnel takes place in two ways: directly and indirectly. *The direct way* means being recruited and joining the military education and training personnel for assuming positions of volunteer soldier and military cadre. *The indirect way* means being recruited and joining the military education and training system for assuming positions of military cadres. Each of the two ways has criteria regarding admissions and performance during the education and training process.

Considering that the military service is voluntary, recruitment is meant to determine the nation’s human potential based on which selection is made.

The recruitment activity falls under the county and regional military centres, which, in cooperation with the territorial structures of the Ministry of Administration and Interior and the local administrative ones – city halls and prefect’s offices – permanently evaluate the quantity and quality of the nation’s human potential.

³***, *Dicționar Explicativ al Limbii Române*, Editura Academiei Republicii Socialiste România, București, 1984, p. 801.

⁴***, *Lexicon militar*, Editura Saka, Chișinău, Republica Moldova, 1994, p. 281.

⁵***, *Legea apărării naționale* no. 45/1994.

Nation's Human Resource Assessment

Knowing the nation's human potential is a necessity, because the human resource is the most important component of defence resources. It is well known that any strategy and any plan regarding the development and transformation of the military body must be made based on the current human potential and the prognosis of its evolution. The nation's human potential assessment is done based on the following criteria:

- distribution by: gender, age, education level, professional qualification, geographical regions and administrative-territorial structures;
- birth rate;
- mortality rate;
- population growth rate and its short-, middle- and long-term prognosis;
- population density, at the level of the country and at the level of the regions and counties;
- the total number of the population.

Distribution by Gender

Personnel recruitment for military service is not discriminatory, but the lessons learned from daily military activities and past conflicts and wars show that men are better suited for combat actions. There are many arguments in this respect, but the most important ones are: greater – physical and psychical – resistance to stress, dangers, bad living conditions (in tents or outdoors; with no comfort; living in common, in mostly male communities; long-term isolation etc.); increased capacity to adapt to the military regime, which has several privations; greater physical force etc. On the other hand, women are better suited than men in the following fields: finances-bookkeeping, procurement, food, management and public relations.

There are also exceptions, of course, but for the assessment at the national level, it is necessary that we take into account the average values, the ones that help us to make a real assessment of the nation's human potential. There are no important differences between the performances of women and men in fields such as: medical insurance, communications and informatics, education, personnel, intelligence, civil-military relations etc. In the light of these findings, it is important that we know the ratio between men and women in order to make a preliminary assessment of the nation's human potential.

Distribution by Age

The studies conducted all over the world so far have shown that the most appropriate age for people to carry out military activities is between 20 and 60. Of course, there are exceptions, but the selection made for the reserve human resource must consider the general

facts (average value) and not the exceptions. Moreover, the decision to use, in defence efforts, this period of the human existence has also been made based on the studies that have approached the – physical and psychical – evolution of human beings. These studies have shown that, as people get older, they experience some *changes at the physical and psychical level*, which can diminish the capacity of the human beings to deal with efforts and dangers, mainly because:

- the decrease in the physical force, resistance to stress and physical and psychical efforts;
- the diminution of the capacity to react and adapt to often-changing situations;
- the diminution of visual, auditory acuity and memory;
- the increase in the instinct for self-preservation etc.

Even if life expectancy is increasing, war is for young people, because they can adapt rapidly to the often-changing situations during operations and endure the known and forecasted privations and dangers (*“In the developed countries, retirement sometimes occurs at 60, generally at 65, in Denmark at 67 ... All advanced societies acknowledge this notion of the physiological decline of the individual”*⁶). In addition, the not-so-hopeful prognoses regarding the share of the elderly population (*“In the following decades, the demographical changes will trigger the increase in the number of the elderly within the European Union population”*⁷) should generate political, educational and social measures to determine the increase in the birth rate and the optimal relation between the young and the elderly.

Education and Professional Qualification Level

It is highly important for military planners and decision-makers to know whether those who can be enlisted need a bigger or shorter training period, depending on the level of their knowledge and skills required by working with and respectively using a certain type of combat technique or weapon system.

This indicator is necessary in the following situations:

- at recruitment, to decide on the domain (military specialty) in which the recruit has knowledge, skills and abilities in order to assume positions and become effective as fast as possible;
- during crisis and at war, to assess the time needed by a military structure, filled with personnel or created through mobilisation, to reach the level of operationalisation required by the fulfilment of the assigned tasks.

⁶ Pierre Accoce, dr. Pierre Rentchnick, *Bolnavii care ne conduc*, Editura Z 2000, București, 2000, p. 8.

⁷ Lucica Matei, *Management public*, second edition, Editura Economică, București, 2006, p. 118.

**Prognosis on the Evolution
of the Nation's Human
Resource**

Based on the birth rate, the mortality rate – especially the infantile one – and the population growth rate, one can foresee the tendencies of the nation's human potential, according to the following criteria: the distribution by gender, by age and the total amount of the population. In the situation in which negative tendencies may occur regarding population growth or when the share of the elderly population is bigger than the one of the young one, then the causes must be analysed and measures must be taken to correct the situation: improving the system that ensures the healthcare of the population, improving the standard of living, stimulating the increase in the birth rate through providing facilities to families in order to have children and bonuses for families with more children etc.

The evaluation of the nation's human potential must include the distribution on education and qualification levels in order to know the selection basis for each military specialisation and the possibilities to provide the human resource for each type of unit and large unit. If the existing human resource cannot provide the necessary resource for certain military specialisations, measures must be taken for its formation through the civil or the military education system or in both the civil and military system.

It is highly important that other qualitative elements of the human resource are known, such as:

- the recruits and the reserves who are members or are involved in actions organised by extremist parties or are members of organisations forbidden by law;
- the attitude towards the nation, sovereignty, public order, democracy and rule of law;
- the attitude towards NATO and the EU;
- the cohesion degree among the population, in its whole and at the level of local communities;
- the number of those who committed antisocial acts, detailed on levels of threat characteristics.

At the end of the data analysis of the nation's human potential, the military planners and decision-makers must know:

- the morale of the population in various situations;
- the estimated degree of support that the population may show towards the Romanian armed forces and some decisions made by the leadership of the state, regarding the country's security and defence;

- the degree to which the human resource is provided, quantitatively and qualitatively, in case of mobilisation.

Human Resource Selection and Training

Human Resource Selection

The human resource selection activity is very important and must be made on a permanent

basis, because its role is:

- to identify the Romanian citizens who can be part of the active and reserve personnel of the armed forces;
- to distribute recruits to military and education units in order for them to become volunteer soldiers and sergeants, active military cadres respectively;
- to identify the active and reserve personnel who must be promoted and to establish the career path for every military man, depending on the individual potential given by personal qualities (courage, spirit of initiative, esprit de corps, integrity, will, tenacity, resistance to physical and psychical efforts, spirit of discipline, loyalty, altruism etc.) and the level of professional competence;
- to establish the entries and exits from the system, so that a harmonious numerical proportion is established between the personnel categories; between ranks, within the same personnel categories; between command and execution functions etc.;
- to establish the criteria each candidate should meet when assuming a position or being promoted within the Ministry of National Defence;
- to permanently tailor the criteria for entering and maintaining the personnel in the system to meet the evolution of the Romanian armed forces, NATO and EU transformation process.

In order for a human resource activity to be successful, the people who are in charge of this domain must consider some of the lessons learned from the personnel selection and promotion process⁸:

- the individual has a visible emotional and behavioural state;
- the individual can be controlled through various functions of the management process;
- the individual is subjective;

⁸ Maria Gâf-Deac, *Îndrumar pentru management modern*, Editura Fundației România de Măine, București, 2008, p. 87.

- the individuals are rational, because, through the activity performed, they seek to derive material advantages and obtain rights;
- the individuals use both their professional knowledge and intellectual potential in order to be promoted;
- when appreciated at their fair value, the individuals use creatively their intellectual potential.

The human resource is also named “*human capital*”⁹, because it is the most important of the resources that are available to the society and that is why it should be invested in for achieving long-term results. The studies conducted by well-known researchers from our country or abroad have shown that “*almost 80% of the welfare of developed countries has been obtained based on the contribution of the human capital*”¹⁰.

The quality of the human resource can decide the fate of the war through the training level, spirit of discipline and its morale (“*Morale means diligence, courage and hope. It means trust, eagerness and loyalty. It means to remain strong, it means the spirit that endures until the end – the will to win. With it, everything is possible, without it, nothing else, planning, training, production, matters*”¹¹).

Human Resource Preparation

Human resource, both the active and the reserve one, must be prepared in order to fulfil the assigned missions. Knowing the current and estimated exigencies of the military body transformation, the ones of the Romanian society and the ones of the Euro-Atlantic structures Romania is part of, the training-educational process in the armed forces has been tailored to meet the objectives and requirements of the transformation process. In this respect, the *Armed Forces Training Doctrine* and the *Conception of the Military Education Reorganisation* have been drawn up.

According to the *Armed Forces Training Doctrine*, the entire personnel must be subordinated to the principle “*train as you fight*”, a principle that requires diligence, realism and involvement both in the individual training process and in the command training one.

Many renowned experts state that the future belongs to “*knowledge society*”¹², to continuous learning respectively, in order to become effective and efficient.

⁹ Colonel prof. univ. dr. Constantin Rizea (coord.), *Managementul resurselor apărării*, Editura Academiei de Înalte Studii Militare, București, 2002, p. 42.

¹⁰ *Ibidem*, p. 46 (quoted from Ibbotson and Gary Brinson, *Investment Markets*, McGraw-Hill, New York, 1987, pp. 21-25).

¹¹ William A. Cohen, *Înțelepciunea generalilor. Managementul strategic al afacerilor*, Editura Antet, Filipeștii de Târg, Prahova, 2006, p. 89.

¹² Acad. Mihai Drăgănescu, *Societatea informațională și a cunoașterii. Vectorii societății cunoașterii*, p. 26, www.racai.ro/INFOSOC-Project.

It is an honour for someone to enter the profession of military man, yet, at the same time, it is a demanding endeavour, up to the supreme sacrifice. Consequently, education and training can and must attain the most important objective of transformation: *mentally adapting the personnel to permanent change* and connecting them to the requirements of the future battlefield. Mind is the strong point, but it is also the most vulnerable point of every individual, because *“no man is ever whipped until he quits – in his own mind...; the human mind builds or destroys...; there are no limitations to the mind except those we acknowledge”*¹³. In line with the previous assertions, we reckon that the future war will be won mentally, because the *human mind is the most effective weapon*. This statement has been acknowledged for a long time, but when it was not understood and applied in accordance with its fair value, problems occurred:

- the USA *“lost”* the Vietnam War because of the fighters’ morale and the pressure exerted by the internal public opinion, not a supporter of the continuation of the war;
- the incidents in the Abu-Ghraib prison, in Iraq, have done the USA and the Multinational Coalition a great disservice, because of some military men who, lacking moral integrity and disobeying the laws of war, have broken the military honour code (*“Many of the things America have done in Iraq are unforgivable. Yet, those we have sent to wage this unforgivable war make incredible sacrifices – they continue to make these sacrifices – for which they are not given any recognition. It is a paradox that might never be solved !”*¹⁴);
- the ethnic cleansing in the former Yugoslavian space, the atrocities in Rwanda, Darfur, Somalia etc. are consequences of the actions of some people who have not respected themselves nor have they respected the written and unwritten laws of war.

When the decision-makers and the operating personnel attached proper importance to the multilateral training of fighters, the success belonged to the ones with better morale and a superior professional training level:

- the Arab-Israeli wars were won by the Israelis thanks to their more increased level of training and morale;

¹³ Napoleon Hill, *De la idee la bani*, Editura Curtea Veche, București, 2008, pp. 39, 118, 137, 270.

¹⁴ Florin Rusu, Interview with Steve Făinaru, Romanian-origin journalist, awarded with Pulitzer Prize, published in the newspaper *Săptămâna financiară*, 18 May 2009, p. 10, www.sfin.ro.

- Napoleon won most of the wars with numeric inferiority because of the superior level of morale of his forces and the way he led his armed forces in battles¹⁵.

*

Resources play a **crucial part** in the range of the analysis, evaluation, decision activities and, consequently, of the one meant to coordinate the transformation process, because these activities represent the basis of the initiation of the process, as well as the *“fuel that feeds it”* throughout its development. This is the reason why the multiannual planning, made through the *Directive on Defence Planning*, provides a reasonable perspective for the political-military decision-makers, yet, the incomplete fulfilment of the planned objectives has medium- and long-term implications, because the provision of certain capabilities is a matter of years and, even, decades.

Human resource is the nation’s most valuable capital, that is why it must be paid special attention in order to develop itself in keeping with the current and future requirements of the security environment.

English version by
 *Iulia NĂSTASIE*



¹⁵ Colonel Trevor T. N. Dupuy – U. S. Army, Ret., *Numbers, Predictions and Wars*, MacDonald and Jane’s, Londra, 1979, p. 3.

THE PSYOPS & CIMIC BINOMIAL IN OPERATIONS (I)

*Colonel Dr Florentin UDREA
Lieutenant Colonel Valentin VASILE*

The authors point out the need for conflict prevention and crisis management, having as main finality the consolidation of governmental authority at central, regional and local level, law and public order restoration, and normalisation of economic life.

In this respect, information operations are required to act and react both kinetically and non-kinetically, using all their available means, tools, techniques and capabilities. Among those, a significant role to be played belongs to the support elements, the so-called “force multipliers”, the Psychological Operations (PSYOPS) and the Civil-Military Cooperation (CIMIC), which can effectively promote the image, the mandate, and the legitimacy of the intervention force. Winning the sympathy and the support of the population for the military objectives will reduce the recruitment base of the insurgency and support to terrorist organisations, and, therefore, facilitate the conditions which enable the disengagement and withdrawal of the intervention force.

Keywords: *PSYOPS; CIMIC; force multipliers; key leaders engagement; presence, posture and profile*

There is no need to be a political analyst to notice that most contemporary conflicts are generated by the divergent interests between different ethnic, religious, economic and social groups. Gradually, the manifestation of the divergence becomes acute and evolves into a crisis. This process is favoured by different circumstances as long-term repression of interethnic and inter-confessional tensions by dictatorial regimes, foreign interference, economic collapse, and dissolution of public order and governmental authority.

As a rule, due to the inherent interdependencies of the global society, the effects of a crisis often exceed the limits of the particular area in which it occurs. If the intervention is not opportune, the crisis evolves like gangrene, decisively compromising the health of the entire body. This is the reason of conflict prevention and crisis management, having as main finality the consolidation of governmental authority at central, regional and local level, law and public order restoration, and normalisation of economic life, all these carefully watched by the main international and multinational organisations concerned with maintaining equilibrium

Colonel Dr Florentin Udrea, Lieutenant Colonel Valentin Vasile – Operations Directorate, the General Staff.

and preserving peace and security. Consequently, these organisations and the governments of the states whose interests have been affected by the crisis initiate and sustain, financially, logistically and militarily, peacekeeping, imposing, enforcement, prevention, crisis management, stabilisation and reconstruction, counterinsurgency and/or counterterrorism operations.

The typological variety of the operations conducted by a multinational force covers a very broad spectrum, from classical military and crisis management operations to stabilisation, reconstruction and development operations. All these are aimed at a common end-state, defined by an easily understandable acronym, SASE (*Safe and Secure Environment*), with an impressive international “career” from the Balkans to Afghanistan. For the military, once the main mission of providing security for the local populations is accomplished, to enforce a safe and secure environment implicitly means to assume additional responsibilities for delivering humanitarian assistance, exercising administrative tasks and public services, urgently reconstructing and developing economic and social projects. In the medium and long terms, the successful implementation of these projects is far more important than a militarily obtained victory. It is the only way through which the legitimacy of the force is acknowledged, and its prestige, appreciation and support are recognised by the people living in the area of operations. Even if the amplitude of the stabilisation, reconstruction and development projects usually exceeds the mandate and the actual possibilities of a multinational intervention/stabilisation force, the slow implementation or the lack of visible results are promptly sanctioned by the local population. As a result, the intervention force will be confronted with a reduced level of acceptance of the military presence, and of public support for the military operations. The precarious living conditions, acute need for means of subsistence, generalised unemployment, corrupt and ineffective administration, deficient public services and utilities will have a major impact on the administrative credibility and capacity of the government and local authorities in the host nation. In this context, even if the multinational force does not have responsibilities with regard to reconstruction and development, its freedom of manoeuvre and action will be reduced, because the sympathy for opposition members, insurgents and terrorists, as well as their base of support and recruitment are directly fed by the discontent of local population. For this reason, the theorists of counterinsurgency and counterterrorism operations believe that, in this kind of operations, victory cannot be won exclusively through military means, but through political solutions and through the constant implementation of reconciliation, stabilisation, reconstruction and development programmes.

Promoting the mandate, legitimacy and objectives of the intervention force with a view to drawing and motivating the sympathy and to gaining the support of local population, simultaneously with rejecting the influence of hostile propaganda, takes place both in the information environment and on the ground, among the local population in the area of operations. Information environment becomes a battle arena, where information operations are required to act and react both kinetically and non-kinetically, using all their available means, tools, techniques and capabilities. Among these, a significant role to be played belongs to the support elements, the so-called “*force multipliers*”, the *Psychological Operations (PSYOPS)* and the *Civil-Military Cooperation (CIMIC)*, which can effectively promote the image, mandate and legitimacy of the intervention force, win the sympathy and the support of local population for its military objectives, reduce the recruitment base of the insurgency and support given to terrorist organisations, therefore, facilitating the conditions that enable the disengagement and withdrawal of the intervention force.

The Interplay of PSYOPS & CIMIC

Within the broader framework of the information operations, to meet the doctrinal requirements, *PSYOPS* and *CIMIC* must act in coordination, at unison, *de facto* forming a veritable binomial. As “*force multipliers*”, they boost each other, amplify the desirable effects of the specific activities among the local population through the synchronisation of their programmes. At the same time, their activities are coordinated and synchronised with the activities conducted by the other vectors that contribute to information operations: *Public Affairs – PA*, *Key Leaders Engagement – KLE*, *Presence, Posture and Profile – PPP*, *Operations Security – OPSEC*, *Information Security – INFOSEC*, *Electronic Warfare – EW*, *Deception and Physical Destruction* etc. Because the objectives of information operations are accomplished through predominantly non-kinetic modalities, the *PSYOPS & CIMIC binomial* actions are conceptualised both in the information operations integrating doctrine and in own doctrines. The lessons learned in the multinational operations in Bosnia-Herzegovina, Albania, Kosovo, Afghanistan, Iraq confirm the validity of the assertion that the action of the above-mentioned binomial has become the foundation of information operations, the acute necessity and *sine qua non* condition for winning the hearts and minds of local population in favour of the mission of the intervention force.

The harmonisation of the activities developed by *PSYOPS* and *CIMIC* is mutually advantageous; on the one hand, the achievements of the latter are promoted, on the other hand, the psychological impact of the messages of the former is strengthened with the purpose of influencing the opinions, attitude and behaviour

of the population in the area of operations. *CIMIC* makes available to the commander the methods of managing civil-military relationships for the fulfilment of the mandate given to the intervention force. The systematic and coordinated capitalisation on the results achieved by *CIMIC* and *PSYOPS*, in keeping with information operations plans, makes it possible for missions to be accomplished. The results of *Crisis Response Operations (CRO)* prove the fact that *CIMIC* has all the properties inherent to a persuasive, proactive communication tool with authorities and local population of the host nation that is made available to the commander in the theatre of operations. Unlike the public relations and the psychological operations structures, which only send, each one in its specific way, data and messages towards target audiences, the civil-military cooperation operates among local communities not only with messages but also with deeds, actions, definite projects. Because of immediate material aid, the *CIMIC* provides consistency and convincing arguments to the communication processes between the intervention force and the civilians in theatre of operations.

All *CIMIC* activities have a significant psychological impact on the audiences groups (hostile, friendly or neutral ones) nominated by the *PSYOPS*, which inevitably expands on the information environment, the battlefield for gaining the information superiority. Implicitly, all *CIMIC* activities carry direct and indirect messages, which can be understood or interpreted differently. It must be looked upon as a *PSYOPS* complement in the multilevel dialogue between the military and the civilians. Acting among the people, in the middle of the communities in the area of operations, the *Civil-Military Cooperation* becomes a very reliable source of information made available to the commander, able to provide relevant data about humanitarian situation, population's problems, attitudes and tendencies that are manifest in the area of operations. All these pieces of information represent a feedback, a reaction of the civilian side to the presence and activities of the intervention force. At the same time, it provides enough indicators to assess the effectiveness of information operations, the level of achieving the assigned influence objectives. On the other hand, in return to the information received from *CIMIC* about target audiences, the *PSYOPS* acts as a veritable "advertising agency" in the service of *CIMIC*, having all the necessary tools to promote its results among local populations. Under the above circumstances, the activities conducted by *PSYOPS* and *CIMIC* will condition each other to the benefit of their effectiveness. These two functional areas will proceed to a conjugated effort, supporting each other to increase their own effectiveness through a beneficial cooperation, circumscribed to the field of information operations. At the theoretical level, this is the common understanding of the activities developed by the two components of the mentioned binomial.

However, in the practice of different national and multinational headquarters, even more in the current NATO operations, the relationship between the two components varies more or less and gathers subtle nuances and various applications, required by the reality, under the pressure of particular events and circumstances and, last but not least, by the availability of necessary resources.

Due to the fact that *Civil-Military Cooperation* missions require all the support that can be offered by *PSYOPS* and the *Psychological Operations* missions need the *CIMIC* arguments in order to provide the messages directed towards the target audiences with more credibility, all the activities of these two functional areas must be well coordinated, synchronised, and integrated into the general picture of information operations. This means it is mandatory to consider the use of the binomial during all the phases of operational planning process, at all levels and during all the execution phases of an operational plan, in the framework provided by the information operations working and coordination groups. *PSYOPS* can make available to *CIMIC* personnel good pieces of advice with regard to the local culture, the best modalities to relate to indigenous communities, considering the characteristics of the social life of the people living in the areas of operations, their cultural and religious norms, personal security and standard of living, the public utilities capacity and environmental risks etc. In its turn, the *CIMIC* makes available to the *PSYOPS* personnel pertinent data and information concerning the general attitude of population regarding the presence, activities and missions of the intervention force, as well as the effectiveness of *PSYOPS* programmes.

The binomial approaches to target audiences will require the proper capitalisation on the potential added by direct communication. Its efficiency is directly conditioned by events, personal communication abilities, good knowledge and deep understanding of the operational environment of the local people with which the *PSYOPS* and *CIMIC* personnel are interacting with during their missions.

Doctrinal Elements – Functional Perspectives

The relationship and mutual support requirements between *PSYOPS* and *CIMIC*, as well as the integration of the activities conducted by the binomial into the operations are well described in NATO main documents, doctrines and field manuals relating to information operations, *PSYOPS* and *CIMIC*. When referring to the Romanian Armed Forces, the long lasting efforts made to assimilate NATO procedures regarding the role and functions of *PSYOPS* and *CIMIC* in various operations have materialised in the drawing up of national doctrines and field manuals for the respective functional areas.

❖ *The PSYOPS & CIMIC Binomial in Operations*

The binomial is able to make an important contribution throughout the operations by winning and amplifying the approval, sympathy and support of population in the area of operations. That is why it can induce the acceptance and facilitate the military activities by promoting the image, mandate and missions of the intervention force, as well as by reducing the support and recruitment base exploited by the adversaries of peace and stability.

Doctrinally, the *Civil-Military Cooperation* takes upon itself the incumbent responsibilities and plays a prominent role in establishing liaisons and acquiring the necessary degree of cooperation between military and civilian players with population and authorities, national and local agencies. Therefore, it facilitates the cooperation between NATO forces, host nation authorities, local communities, international organisations and non-governmental organisations that are active in the area of operations. To a great extent, the *CIMIC* is not only authorised but required to consider, with proper arguments, during the operational planning process, the political, economic, environmental, humanitarian factors when planning and executing military operations. At the same time, the *Civil-Military Cooperation* helps with the building up of efficient and trustworthy relationships between military and civilian players, with organisations, agencies, representative authorities and, last but not least, the population in area of operations.

Besides the tasks of establishing liaisons, assessing and providing assistance, management and coordination of different projects, the *Civil-Military Cooperation* can develop distinct activities for offering directly humanitarian aid to the people in need in the area of operations. Obviously, because of its various contacts and liaisons with a multitude of international organisations, non-governmental organisations, national agencies, representative authorities and population in the area of operations, the *CIMIC* personnel must be regarded as a valuable source of information particularly needed during the *PSYOPS* planning process.

Subordinated to the desideratum of fulfilling the commander's mission, the *CIMIC* activities directly contribute to influencing key decision-makers in the area of operations. In this respect, the *CIMIC* projects and results are taken into consideration by the different commanders during the meetings with the representatives of national, regional and local authorities, defined as *Key Leaders Engagement* activities and conducted according to the information operations plans. This is just a part of the contribution information operations may have to the process of carrying out the mandate given to the intervention force. Successful *Key Leaders Engagement* requires detailed knowledge about the main decision-makers in the area of operation, finely correlated with a good understanding of the events that

are important for the local population and cannot be neglected during the operational planning process. *KLE* is planned for national, regional and local levels, and consists of direct meetings with key leaders (political, religious etc.) or with representative groups (elders, students, women, professionals etc.). Depending on the circumstances, *Key Leaders Engagement* can consist in regular telephone conversations or correspondence with local personalities. *KLE* objectives, topic and themes to be discussed during the meetings, as well as desired effects and assessment indicators are developed during the planning of information operations. Successful *Key Leaders Engagement* cannot be imagined without detailed knowledge about key leaders, including their psychological profile, personality, leadership style, motivations, ambitions, desires, short, medium and long-term objectives, personal and professional background, diagram of relationships, as well as a sound understanding of the circumstances they are living in. *KLE* planning is based on the data provided by intelligence, *PSYOPS* and *CIMIC*, because working with local authorities for local communities, to the benefit of the people in need, *PSYOPS* specialists in analysing target audiences and *CIMIC* personnel can contribute to the understanding of key leaders, of their strong points and vulnerabilities, as well as of their relationships.

From the broader perspective of information operations, for accomplishing the *CIMIC* objectives it is necessary to turn to good account the positive impact of the engineer projects – building of bridges, roads, water sources, schools etc. – for promoting the image of intervention force, during *KLE* meetings as well.

Civil-Military Cooperation specialists approve of the modalities of using the *CIMIC* data, assessments, means and capabilities in support of the operations, coordinate the *CIMIC* activities in the framework of information operations, and provide indicators for evaluating the effectiveness of information operations. At the same time, they supervise the way in which the commanders, units and military men relate with civilians in the area of operations and provide the necessary expertise to define the measures needed to optimise the effects induced by the presence, posture and profile of the intervention force. Conceptualised by the information operations doctrine, the *Presence, Posture and Profile* must be considered during the operation planning process, due to their significant impact on the authorities, communities and population in the area of operations. Being the result of deploying a military, even limited, contingent to a particular area, to the right place and at the right time, the *presence* increases the credibility of messages addressed to target audiences through different channels and deters disturbances and acts of violence. The *posture* adopted by the military men deployed in the field, either it is an aggressive, determined, neutral, friendly or benevolent one,

must be carefully considered, well-balanced and correlated with the force protection requirements. The decision to send foot patrols in localities, with berets instead of combat helmets and without body armour will send a different message than patrolling with heavy armoured vehicles on the streets and looking at local civilians along the line of sight of machine guns. Thus, various effects can be obtained regarding the way the intervention force is perceived by the local population and hostile groups. The *profile* of the intervention force is given by the commanders from all the echelons, by their performance during public interventions, press conferences, *KLE* activities, meetings with representatives of the host nation authorities and the population in the area of operations. Consequently, the commander has to play a very important public role, being required to show proof of his professional competence, authority and prestige, credibility and visibility in media and in society, sustained by the qualities of a good communicator. Therefore, the main messages transmitted by commanders must be prepared very carefully and coordinated with the messages delivered by other military communicators, on the basis of information strategy and information operations plans.

At the national level, the *Information Operations Doctrine SMG/FOP – 3.15* refers to the ways of enhancing the effectiveness of the *Civil-Military Cooperation*, as a related functional area, by means of its fundamental vectors, *PSYOPS*, *PA*, *KLE*, *PPP*, which have great influence upon the selected target audiences, naturally affecting the will of key decision-makers. As a matter of fact, in accordance with NATO doctrine, information operations are the framework for the integration, harmonisation and synchronisation of the activities developed simultaneously by *PSYOPS*, *CIMIC*, *PA*, *EW*, *OPSEC* and *INFOSEC* etc. In line with the similar NATO regulations, the *Romanian Doctrine of Information Operations* describes the *Civil-Military Cooperation* as “a functional area responsible of developing liaisons between military and non-military institutions in the area of operations, with the aim of sustaining the unity of effort, which implies a direct influence on the target audiences perceptions and an increase in the credibility of the messages delivered through information operations”¹. Therefore, the Romanian doctrine recognises the value of *CIMIC* as a source of information and a powerful tool for putting into practice the objectives pursued by information operations, under the categorical imperative of developing the cooperation between *PSYOPS* and *CIMIC*. At the same time, it is recommended to avoid actions that can spread wrong perceptions of *CIMIC*, as information collection elements, and to eliminate the eventual suspicions that *CIMIC* is trying to manipulate civilian institutions.

¹ *Doctrina Operațiilor Informaționale SMG/FOP – 3.15*, București, 2006, p. 21.

Information operations are intended to exploit the opportunities and vulnerabilities owed to the dependence upon timely and accurate data needed for planning and executing any kind of military operations by own forces and by hostile forces as well. Information operations are used to communicate intentions and to demonstrate the determination of the military involved in managing a crisis situation. In the event of a conflict, the non-kinetic panoply of information operations is augmented with kinetic tools, adequate for coercion and physical destruction, and recognised for their capacity to generate psychological effects, having a great influencing capacity because of the lethal strikes aimed at nominated targets, selected and approved through the joint targeting process. Punctually applied by means of special forces, artillery or aviation, physical destruction generates ample effects in the information environment as a result of attacking adversary command and control systems, affecting the adversary decision-makers' will and ability to evaluate and understand the situation, exercising their prerogatives, implicitly reducing the adversary's fighting capacity. Although the consequences of physical destruction usually exceed the framework of information operations, the significant psychological impact on the population in area of operations, which results after using kinetic lethal strikes, cannot be neglected. Obviously, the main message of physical destruction means coercion, intimidation, discouragement and deterrence, but there is an urgent need to consider the eventual undesired effects, not intended, which will definitely occur after the disproportionate use of kinetic lethal strikes, followed by collateral damages, unjustified destructions and civilian victims. Undesired effects on the efficiency of information operations may consist in the more and more reduced support of the population and even the manifest hostility towards the military contingents of the intervention force. Consequently, military decision-makers must analyse very carefully all the cases when and where the physical destruction is really needed in order to achieve particular effects, after considering the advantages and disadvantages in connection with the presence, image and legitimacy of the intervention force, promoted by *PSYOPS* and enforced by *CIMIC* projects.

❖ *PSYOPS Perspectives on CIMIC*

In accordance with NATO regulations, the main *PSYOPS* responsibilities include activities aimed at influencing perceptions, attitudes and behaviour of selected target audiences, corresponding to *PSYOPS* objectives approved by the North Atlantic Council and with the aim of favouring the fulfilment of the Alliance general objectives. In reference to the relationships between functional areas, *AJP-3 10 1(A) – Allied Joint Doctrine for Psychological Operations* specifies that *PSYOPS* and *CIMIC* support each other in order to contribute as efficiently as possible to the accomplishment of the missions and tasks stipulated in the operation

order. While *Psychological Operations* are particularly focused on influencing opinions, perceptions, attitudes and behaviour of the selected target audiences, the *Civil-Military Cooperation* decisively contributes to the improvement of the living conditions of local communities, with at certain long-term influencing capacity upon the population in the area of operations. Mentioned should be made that, in cooperation with civilian actors (international and non-governmental organisations, national authorities etc.), the *CIMIC* dedicated efforts help to rise the standard of living of the people through delivering humanitarian assistance, implementing reconstruction and development projects and supporting a stable development of the economic life in the area of operations. The *Civil-Military Cooperation's* influence on the population and its persuasive capacities are given by the power of deeds, much greater than the power of words, the last one being counterproductive when there are significant discrepancies between words and facts. It stands to reason that *CIMIC* establishes its own line of conduct on the *observance of transparency* as a fundamental principle, without manifesting the slightest intention to influence organisations, authorities and population it interacts with. The assistance it provides is not at all conditioned by the acceptance of the NATO military presence and activities in the area of operations. *PSYOPS* must avoid as much as possible the spreading of such undesired perception among target audiences. The *Civil-Military Cooperation* primary objective of establishing and maintaining full cooperation between NATO commanders and civilian authorities, organisation, agencies and population in the area of operations will enable the development of optimal conditions, in favour of the accomplishment of military missions. With that end in view, NATO commanders may support directly, as far as resources permit, the provision of humanitarian assistance by the specialised agencies and the implementation of reconstruction and development projects – bridges, power plants, production facilities etc. Before and during operations, the *CIMIC* personnel establish and develop liaisons with civilian agencies, in the most adequate format, supporting the implementation of reconstruction and development projects, with impact on the strategic, operational and tactical levels, with the aim of facilitating the mandate accomplishment and the general missions of the intervention force. The *Civil-Military Cooperation* personnel draw up reports and assessments concerning the humanitarian situation in the area of operation, estimate the serious needs of the people, and intermeditate the intervention of civilian agencies able to provide humanitarian assistance. Through the effort of reconstruction and development, *CIMIC* specialists are working in such a manner as to create the proper framework for the handover of responsibilities concerning public order, procurement of supplies, and functionality of utilities, temporarily assumed by the military, to the competent

civilian authorities. For this purpose, *CIMIC* works closely with the other headquarters divisions to clarify all the aspects of the operation that may influence the humanitarian situation. *CIMIC* specialists make available own assessments for the military planners and assist the commander with regard to all the above-mentioned aspects.

PSYOPS capabilities are used effectively to support the population in the area of operations for the projects and activities developed by the *CIMIC*. The success of the *Civil-Military Cooperation* may be considered as valuable subjects to be turned to good account by the *Psychological Operations* through the development and dissemination of different printed and audio-visual products. *PSYOPS* themes and messages need fact-based arguments, provided by *CIMIC*, in order to generate positive opinions, sustain the legitimacy of the intervention force, motivate favourable attitudes and stimulate the cooperation of the people in the area of operations, feeding their confidence in the military. This way, *PSYOPS* will enable the creation of a favourable environment for the activities conducted by *CIMIC*, in support of fulfilling the general objectives of the mission. From the *PSYOPS* perspective, it is not to be neglected the positive influence that might be exercised upon the population in the area of operations by most of the *CIMIC* activities. Therefore, throughout the operational planning process and the operation as well, the achievement of a permanent, mutually advantageous cooperation between *CIMIC* and *PSYOPS* is required.

*

In the second part of the article, the authors take an approach to the PSYOPS & CIMIC binomial from the Romanian perspective, elaborating on the regulations of the Romanian Psychological Operations Doctrine, and write about the relation between the above-mentioned binomial and the field of information and public relations.

BIBLIOGRAPHY

- *Doctrina Operațiilor Informaționale SMG/FOP – 3.15*, București, 2006.
- *Doctrina operațiilor psihologice SMG/FOP – 3.16*, București, 2007.
- *Manualul pentru operații psihologice SMG/FOP – 3.14*, București, 2004.
- *Doctrina pentru cooperarea civili-militari (CIMIC) SMG/PF 5.2*, București, 2005.
- *MC 422/3 NATO Military Policy on Information Operations*, March, 2007.
- *AJP 3.10 Allied Joint Doctrine for Information Operations*, March, 2009.
- *AJP-3 10 1(A) – Allied Joint Doctrine for Psychological Operations*, August, 2006.
- *MC 411/1 NATO Military Policy for CIMIC*, July, 2001.
- *AJP-9 NATO Civil-Military Co-Operation (CIMIC) Doctrine*, June, 2003.
- *MC 0457/1 NATO Military Policy on Public Affairs*, September, 2007.

MILITARY LOGISTICS – A NEW APPROACH STRATEGY –

Brigadier General Valentin PETRE

In the author's opinion, the achievement of an integrated distribution-based system is the goal of the Romanian Armed Forces logistics transformation process. This new system will comprise a complex of policies, doctrines and innovative concepts, remodelled functional logistics principles, new logistic structures, a new digitised command and control system that will represent the basis for the information and decision-making process and, last but not least, logisticians, highly specialised military men and civilians that have a new mindset and are able to manage the complex aggregate of specific activities in the entire logistic system.

The author points out that the new system has to be lean and flexible, compatible and interoperable with similar NATO structures and to provide the fighting forces with the necessary support and liberty of action during the readiness period and the participation in the full range of operations.

Keywords: *transport capacity; training programmes; logistic support; operational environment; military actions*

In the context of the diversification of the types of risks to national and international security and, consequently, of the forms of security crises and of the nature of civil emergencies, the beginning of the 3rd millennium has marked a diversification of the types of missions the armed forces may be engaged in, from the operational standpoint, in the context of the decrease in the resource access and availability.

These aspects have generated ample transformation and adaptation processes in the military systems in the majority of the states in the world. Practically, these processes convert the military structures and strategic goals from the specific *Cold War* construct to types of forces capable of conducting a wide and complex array of military and non-military operations to respond to the full spectrum of conflicts/crises.

This transformation means more than technological enhancement, as it presupposes important changes regarding the conceptual component, training programmes, structural organisation and management reconfiguration (including the leaders' professional and managerial profile), logistics flows and resource availability levels.

Brigadier General Valentin Petre – Chief of the Directorate of Logistics, the General Staff.

In this context, the role of logistics as a military system essential component that provides the armed forces with the necessary energy to reach and maintain a high readiness level to accomplish the assigned missions gets amplified.

The General Context for Logistics Transformation

The change in the way operations are conducted implies the change in the way logistic support is provided and we currently witness a revolution with regard to the military logistic systems in the majority of armed forces. This revolution in logistics includes three components: the technological and procurement component, the force projection, and the force sustainment ones, all approached in an integrated manner. Actions are focused on the enhancement of the information and decision-making systems, communications, business relationships, the change in the command and control relationships, so that control can be more effective and the logistic effort reduced. The development of distribution technologies that facilitate the achievement of a rapid flow of resources and the continuous support for the fighting forces adds to them.

If, in civilian commercial logistics operations, an effective management of logistic flows makes the difference between loss and profit, in military operations it makes the difference between life and death. In both environments, civil and military, there are similar challenges but the military logistics professional has to cope with more dynamic situations that include conducting conventional or asymmetric actions, damaged or destroyed infrastructure elements, diffuse requests, lines of communication that are either insufficient or lack.

These are the reasons why military logistics needs superior effectiveness, flexibility, responsiveness, and one of the keys in achieving these desiderata consists in the existence of an effective information and decision-making management.

The Romanian military logistics has been undergoing its own transformation process, although some inherent adjustments are to be made because of the current economic crisis. This fact is a logical and natural necessity derived from the essential requirement to continually improve and adapt to be able to effectively respond to the rapid and profound changes in the military field as well as to meet the challenges and commitments that are specific to Romania as a NATO and European Union member state.

New Concepts in the Logistics Transformation Process

Military logistics has already met the new challenges of the economic and security context that is specific to the beginning of the 3rd millennium, as in the latest years a series of new concepts have developed in the armed forces of NATO

member states. Out of them, there are two that practically govern the majority of the above-mentioned transformation processes, as follows: *distribution-based logistics* and *focused logistics*. The two concepts are not very different as far as the content is concerned, being interconnected and complementary. Both of them have already been adopted by the experts in logistics in Romania, their essential elements being integrated in the programmatic documents meant to project the development of the military logistics system.

Distribution-based logistics may be defined as the multidimensional capability to provide the military system with the necessary human and material resources, in the necessary quantities and of the appropriate quality, when and where they are needed, across the full spectrum of military and non-military actions, not only on the national territory but also in different theatres of operations or in missions in other areas in the world.

Focused logistics mainly addresses the actual logistic support in theatres of operations and presupposes the capability to ensure the logistic support to a joint force group, consisting in the proper personnel, resources, equipment, in the right place, at the right time, and in the right quantity, while the group participates in different military operations.

Concepts are not singular and they are interconnected with another operational construct, that of *Effects-Based Operations*, which is better known. In this type of operations, success is assessed based on the operational effects rather than on the traditional ones that take into consideration the number of destroyed targets or dead enemies. As a rule, in effects-based operations, the goal is to achieve the political and strategic objectives without generating major losses as far as personnel and assets are concerned.

Concomitantly, a parallel process unfolds. It is meant to promote, adopt, adapt and implement new concepts that are also aimed at enhancing the logistic support effectiveness. Among them, the following can be mentioned: joint deployment/rapid distribution, logistics information fusion, joint logistics command and control system, multinational logistics and agile logistics infrastructure. These concepts that are practically interconnected are designed to provide a rapid and effective support to the fighting forces engaged in the full spectrum of military and non-military operations.

The transformation that marks the “*revolution*” in logistics to a system based mainly on distributing and not on storing means more than the improvement of the resource flows in supply chains or the enhancement of responsiveness. The real change is represented by a new way of “*doing business*”.

Distribution-based logistics and *Focused logistics* rely on precise and effective management that is in its turn grounded in the real-time and correct situation

awareness. The necessity for this “*revolution*” in military logistics to lead to the achievement of high-level interconnectivity and interoperability derives from the requirements related to conducting military actions that are specific to the “*information age*” combined with the current realities in global economy that more and more depend on the same “*information*”. The specific management of the resources in motion is very demanding for logisticians, experts in their fields of activity, at all the hierarchical levels. In a distribution-based logistics system, the quantities of resources as well as requirements are very dynamic. The logistics manager has to be capable of anticipating orders, of thinking of the rate and priorities related to the use of available capabilities, and of making the necessary corrections in the supply chain in real time. The ideal in providing logistic support would be for the logistics manager to be able to know what the needs of the beneficiary, the fighter, are before the request is made. All these activities are carried out based on the information made available through the logistics information system interconnected with the general military information system.

Interconnectivity and interoperability extend beyond what the internal information flow in the military system means, and include, more and more, components that are specific not only to the military logistics systems of the partner countries but also to the civilian economic system as well as to other structures having responsibilities in the field of national defence. On the other hand, in the military environment, the logistics system has to interface not only with the command and control systems and the financial system but also with the information systems of the armament systems, which provides the opportunity to extract and use the necessary information to make realistic forecasts regarding the integrated logistics support.

As we have already mentioned, this military logistics transformation should result in the logistic support responsiveness and effectiveness. The transition from the supply-based logistics system to the distribution-based logistics presupposes the improvement of responsiveness to the beneficiaries’ requests, the enhancement of suppliers credibility and the amplification of resource accessibility, having as goal the achievement of an integrated logistic support capability able to cover the entire logistic chain, from the supplier to the fighter’s post, either it is in trenches, in the cockpit, on the deck of a vessel, in a military base or in an office. In order to achieve this goal it is necessary for all the logistics structures and the ones related to them at all echelons to get involved.

Distribution-based logistics involves, among others, the reduction in the quantities of equipment and consumable supplies that the armed forces need to store and to take in the theatre to support operations. This can be achieved using two methods.

The first one presupposes that a greater level of reliability is built into equipment and military assets to reduce the maintenance burden, which may mean the reduction in the quantity of spare parts and accessories necessary to be stored and transported in the supply chain.

The second method refers to the more effective analysis and assessment of the rate of consumption for different resources, which allows, on the one hand, for the logistics planners to timely and effectively schedule supplies and, on the other hand, for the economic agents to judiciously and rhythmically plan the production of those particular goods to assure the supply flows. This system replaces the philosophy of “*just in case*”, meaning that resources are stockpiled in quantities that cover a wide range of possible situations with the “*just in time*” one, meaning rhythmical supply. This conceptual shift does not mean to renounce the system of warehouses but to reduce them to achieve an optimal balance between storage and rhythmical supply.

The complex and echeloned storage system is replaced by a new resource flow management system. The key to this new system is the dynamics of the resource flow, and the distribution network practically replaces a part of the storage system that is, in general, a great money-consuming one, having in view the support and maintenance it requires.

However, what should be very well understood is that warehouses are not given up, most of them will be preserved but their destination is to be changed. Throughout the distribution-based supply chain, a number of warehouses tailored to meet the needs will be found, which are designed to the resource storage and transit. The dimension of these warehouses will be established depending on the missions assigned to the structures they serve and not on the levels of traditional stocks. Their location will reflect the operational realities, the priorities related to the logistic support and the availability of the transportation capabilities.

Defining Elements of the Distribution-Based Logistics

The above-mentioned responsiveness/agility has to address three components/dimensions of the logistics system – structural, physical and conceptual-relational.

From the structural standpoint, agility can be achieved through the integration of the efforts of all the logistics components of the military branches, as well as those of the partners in the alliance, during the participation in multinational operations, to which the ones of the economic partners are added, to meet the specific requirements of the missions that have to be accomplished. In this context,

the team spirit and the working style oriented to the accomplishment of the mission are key qualities for logisticians. The logistics operational units, organised following the modular principle, have to be very flexible as far as the structure and the technical expertise are concerned. At the same time, the personnel, the subunits and units belonging to all the logistics components have to prove the capacity of manoeuvre and rapid and independent deployment to a theatre of operations as well as within it. Last but not least, it may be necessary for the logistics structures, depending on the characteristics of the missions and the equipment that has to be made available to the fighting forces, to be augmented with civilian personnel or with experts and equipment belonging to contractors.

Physical agility refers to the capability to deploy and manoeuvre the operational logistics infrastructure. To keep pace with the transformations in the military system, in general, and with the ones pertaining to the fighting components, in particular, in order to assure an advance regarding the functionality and effectiveness of the logistic support against the potential adversaries, the logistics personnel and units have to work in a networked manner, being interconnected through multiple ways of command and control, cooperation and interoperability. The system has to be able to rapidly deploy and re-deploy its components and to control the movement of the distribution platforms, depending on and in accordance with the changes in the operational environment, without interrupting the ongoing logistics flows meant to support the fighting units. Among the keywords in this field, as well as in the other branches of logistics, there are *transportation capability and velocity*.

The development of transportation capabilities to project forces in the theatres of operations and to sustain/provide them with the logistic support throughout the mission weighs heavily with the success of the mission. The deployment of the forces in the theatre of operations alone does not guarantee the success of the mission. It is valueless if, once in the crisis area, the deployed forces cannot be appropriately supported by logistics so that they could stay highly operational throughout the mission, until they come back to the country, the supply transportation capability playing an important part in this context.

Logistics transformation should not be seen only as the structures remodelling and the equipment and capabilities modernisation, but also as a complex and continuous process meant to the integration of new concepts, strategies and projects, to change the mindset regarding the logistics phenomenon, which leads to what can be called *conceptual-relational agility*, with a view to enhancing the effectiveness and the operability level of the logistics elements and to adapting them to the new context of planning and conducting military actions. All logistics managers and experts, throughout the logistic support chain, have to think at least few steps in advance.

The military system and mainly the contingencies in the theatres of operations needs for logistic support are permanent, 24/7. Logistics structures and especially the operational ones have to be staffed and to train their members to work in a fast-paced non-stop environment. Moreover, many of the new economic procedures that accelerate and enhance logistics processes also play an important role in the amplification of conceptual-relational agility.

An effective logistics structure does not reduce itself to an effective information management but it involves many other aspects, being a new way of “*doing business*” that materialises in a focused and distribution-based logistic support. Some important processes lie at its basis, as follows:

- readiness management that requires experts in logistics able to monitor the real situation on the ground, to centralise and integrate the information and, more important, to predict with a high degree of accuracy the future status of the logistically supported structures and the capacity of the system to provide the necessary support;
- logistics interventions that represent the supply sequences consisting in materials, equipment, activities and knowledge that contribute to the enhancement and, more important, to the sustainment of a structure readiness;
- distribution management that assures the efficient movement of the materials and capabilities in the right place and at the right time; logistic interventions are conceived to enable the goods and transportation platforms to be efficiently used/re-used within the distribution-based logistics network;
- logistics capabilities management that assures the availability of the logistics capabilities in concordance with the existent needs for logistic support identifies the possible deficits and covers them through interconnecting with the structures/institutions that have responsibilities in the field, as well as with the specialised industries to supply the necessary means.

To provide a coherent and timely logistic support for the fighter, the operational concept of distribution logistics is based more on the velocity and precision of resource delivery and less on the storage of great quantities of materials in warehouses. This type of logistics rests on three pillars: visibility, capacity and control.

Visibility refers to three elements. The first comprises the logistically supported structures and the units prioritised requirements, the commanders’ priorities as well as their current and projected intents. The situational awareness of the supported unit is the most essential element of the visibility tenet, since the status of the fighting units and their requirements define the logistic missions and establish

priorities. The second element of visibility refers to the logistics capabilities and constraints. Logisticians have to permanently be aware of these two components that include elements of infrastructure, structures, inventory, transportation resources, personnel skills and training, and the degree of involvement in the given situation. The third element includes the logistic requirements and priorities to the supporting organisations at the theater and strategic levels.

Capacity – the logistics system must have the physical capacity to act in conformity with the requirements resulted from the situational awareness. The capacity of the system includes the supply sub-systems, the quantity and the quality of materials, the infrastructure – road and rail networks, warehouses etc., as well as specialised personnel.

Control – is one of the main directions on which the logistics modernisation efforts focus and refers to not only the command and control systems but also to the logistics conceptual basis or to the legislative support, which play an important part in assuring the logistic support continuity and rapidity.

Advantages and Disadvantages

The achievement of an integrated distribution-based system is the goal of the Romanian Armed Forces logistics transformation process. This new system will comprise, on the one hand, a complex of policies, doctrines and innovative concepts, remodelled functional logistics principles, new logistics structures, a new digitised command and control system that will represent the basis for the information and decision-making process and, last but not least, logisticians, specialised military men and civilians who have a new mindset and are able to manage the complex aggregate of specific activities in the entire logistics system.

The new system has to be lean and flexible, compatible and interoperable with similar NATO structures and to provide the fighting forces with the necessary support and liberty of action during the readiness period and the participation in the full spectrum of operations – from the emergency management, through peace support operations to Article 5 operations, in peacetime, crisis situations and at war, not only on the national territory but also in the international context.

The advantages of adopting the concept of distribution-based logistics are as follows:

- the easy and continuous access to the information that is necessary for logistics support planning, following the implementation of the network-type logistics information system (LIS); its interconnection with the other military information systems will enlarge and complete the common operational picture;

- the achievement of integrated distribution flows – which will contribute to the enhancement of responsiveness, to a better correlation between transportation planning and the anticipated beneficiaries' requirements or needs; logistics will focus on distribution velocity and not on quantities, relying on the rapidity and timeliness of the materials transportation in all the environments;
- the enhancement of the relationships between the military logistics structures and economic agents – meaning the increase in the effectiveness of acquisitions, through the integration of market economy rules. Contracting civilian economic agents to provide a larger and larger array of logistics services is increasing and their more frequent presence in the theatres of operations is not a novelty anymore, and in the future, their presence will be regarded as a force multiplier, especially in peace support or humanitarian aid missions;
- the new tools for logistic support planning will enable the near real-time awareness of the readiness and requirements of the supported units and systems, making possible the proactive action of logistics planners; the logistics personnel will get specialised through the participation in training courses in the field of software and acquisition using the new economic methods;
- the enhancement/optimisation of the way of implementing resource management during the entire life cycle management.

As for any tenet, a series of real or potential disadvantages may occur with regard to distribution-based logistics. Among them, the following are mentioned:

- an over-reliance on technology that may lead to the situation in which the soldier, that is about to become more and more super-technologised, relies so much on the available information equipment that he fails to notice the immediate reality on the battlefield;
- the immense power of new technology, that continually and rapidly develops, creates its own myths and causes a sort of "*technological myopia*", in which ultramodern technique and automation are considered the panacea for all situations;
- in the future, one of the main characteristics of operations may be their multinational character, which brings with itself the issues of interoperability and compatibility between the armament systems and, subsequently, between the logistics systems of the partners participating in the missions as far as acquisitions, maintenance and transportation are concerned;
- another aspect that should be considered in the concept implementation is related to the vulnerability of the own logistics capabilities, in the context

in which the resource transportation phase is mostly exposed to the adversary attacks; the means of transportation – trucks, trains, aircraft, vessels – are vulnerable not only to an adversary that is more advanced as far as the means of attack are concerned but also to well-placed insurgent forces;

- there is also the risk that the military system depends too much on outsourcing.

*

From the historical standpoint, we can draw some important conclusions as far as the role and place of logistics in the military system as well as its perspectives are concerned:

- the tendency to neglect the role of logistics in peacetime and to expand it very much in conflict or crisis time;
- the increase in the logistics importance in terms of strategy and tactics; ever since the beginning of this millennium, the considerations on logistics have more and more influenced not only the drafting but also the putting into practice of the elements of strategy at the tactical level;
- the amplification of the complexity and the scale to which logistics operations are carried out, in the context of the accelerated technological advance, in parallel with the increase in the speed and lethality associated with the patterns of current conflicts development;
- the increasing need for cooperation in logistics, to support the forces in an allied context or in coalition, during international missions. Practically, the participation in all the missions in different theatres of operation has implied providing support to or being provided with support by the partners in those particular missions; the importance of the role played by the host nation support cannot be ignored;
- the enhancement of specialisation in logistics; the specific requirements of the more and more complex equipment presuppose the enhancement of the logistics personnel level of specialisation;
- the increase in the ratio between fighting forces and the logistic support forces, as well as the logistics aspects associated with conducting modern military actions. The more and more complex and super-technologised equipment of the fighting forces capable of acting in any environment in a large array of operations require a more and more important logistic support component; this reality is in a certain opposition with the tendency to reduce the logistics structures so that the force package can be rapidly projected in the theatre;

- the amplification of the number of civilians to provide different logistic support components;
- the increase in the centralisation of logistics planning functions, in parallel with the effort meant to enhance effectiveness, through orienting more towards the organisation on functional flows and less on supply lines;
- the progressive adoption of the economic procedures that are specific to the civilian environment and to the “*just-in-time delivery*” principles, concomitantly with the tendency to renounce very large stockpiles products/spare parts etc.;
- the increasing competition among suppliers and the increasing involvement of the private companies in providing different logistic support services for the military system, thus replacing the traditional military support.

Military logistics will have to approach a new proactive way to monitor and manage the fighting forces readiness, so that it can identify and complete the emergent necessities and deficits within the established time limits through the resource and service acquisition and distribution in an integrated logistics system based on the real-time distribution and on the optimal visibility of requirements, capabilities and demands. In order to create such a system, a close interdepartmental collaboration, as well as the development of a constructive collaboration with economic agents are necessary, to provide the resources, the military assets and the equipment necessary for the military system, at the required quality and performance standards.

Distribution-based logistics contributes to the system enhanced responsiveness to achieve the logistic support, as well as to a cut in the costs of materials storage and maintenance, generates a flexible and mobile logistics infrastructure and, last but not least, improves the quality of the provided services and the readiness status of the military equipment and assets.

Inseparable components of the armed fight, operations and logistics are complementary and interdependent. Each multinational operation is unique in a certain way and requires the adaptation of the logistics support to its characteristics – organisational structure, climate, geographical area, the existence of supply sources in the area, as well as the juridical framework institutionalised by the international bodies that lead that particular mission. In this context, the enhancement of logistics structures interoperability and compatibility with the similar NATO ones remains one of the priority objectives of the Romanian military logistics.

The logistics transformation process presupposes the change in the strategies with regard to planning, organising, leading and conducting the activities specific to all its functions. In time, all the logistics functions will undergo transformations

and will be tailored to meet the requirements of the new concepts of focused logistics and distribution-based logistics.

The success of the land, air and naval forces in operations is conditioned by the readiness of the military assets and equipment in inventory. The characteristics of the modern battlefield, the growing complexity of equipment and the more and more requirements related to its maintenance and sustainment trigger a change in the view regarding the logistic support system. It is not enough for the fighting forces to be provided with competitive technical assets, an effective support system being necessary, at the same time, to assure their functioning throughout their life span. Distribution-based logistics requires that the managers in the field of maintenance should be able to integrate and deploy experts, repair and maintenance capabilities, spare parts, accessories and special equipment in the critical locations and in due time in order to assure the readiness of the technical assets and equipment that are necessary for the fighting forces to accomplish their missions.

Selective Bibliography

- Dr. David A. Anderson, Major Dale L. Farrand, *An Army Revolution in Military Logistics ?*, in *Army Logician*, July-August, 2007.
- Colonel David B. Gaffney, in *Army Logistics Transformation: A Key Component of Military Strategic Responsiveness*, March, 2008.
- Colonel Stephen P. Hayward, *The "Revolution in Business Affairs" and the Army After Next*, in *Strategy Research Project*, Carlisle Barracks, United States Army War College, 6 April 1998.
- R. Houck, *Adequate Logistics Footprint*, in *Army Logician*, May-June, 2000.
- Victor Maccagnan Jr., *Logistics Transformation – Restarting a Stalled Process*, in *Strategic Studies Institute Monograph*, United States Army War College, Carlisle Barracks PA, January, 2005.
- E. A. Orsini, G. J. Harrold, *Transforming Logistics to Support the Army Chief of Staff's Vision*, in *Acquisition Logistics Technology*, March-April, 2000.
- David Payne, *Distribution-Based Logistics* in *Army Logician*, January-February, 2000, pp. 38-41.

English version by
✍️ *Diana Cristiana LUPU*

LOGISTICS ACTIVITIES EFFICIENCY

in the Context of the Acceleration of the Romanian Armed Forces Transformation Process

Major General Dr Cătălin ZISU

Starting from the future logistic system requirements of the Romanian armed forces, this article seeks to emphasise the fact that, regardless of the conditions existing at a given period of time, military logistics will develop even if we do not always understand the concrete realities that shape the transformation process.

According to the author, the future Romanian military logistics system will consist in the contribution of all forces categories and military commands of the organisational structure of the Ministry of National Defence.

To conclude, he wishes to point out that remodelling and integrating the logistic system cannot be achieved other than in a uniform manner, through the joint efforts of the specialists and policymakers at all levels of our military structures, through a complex process that aims to be compatible with NATO's principles, policies, concepts, doctrines, standards and procedures, not only those with general applicability but also those specific to each category of forces or military branch.

Keywords: *state actors; information war; strategic objectives; force projection; logistic system*

The transformations that occurred in the field of security at local, regional, and global level in the last years of the 20th century and the first decade of the 3rd millennium have had profound effects on the North Atlantic Alliance and the European Union member states. Thus, while, on the one hand, there have been provided the conditions for the reduction in the risks member states can face and, consequently, defence budgets have been channelled to traditional domains (the military professionalisation and the reduction in the military personnel, as well as the procurement of the latest generation military equipment), on the other hand, there has been more and more often accepted “... a number of new or expanded tasks”¹, in the military field, for the states that have joined NATO and the EU.

Taking into consideration the new risks and threats to national and international security, we appreciate that war, as a violent form of manifestation of state and non-state actors interests

Major General Dr Cătălin Zisu – Commander, the Joint Logistics Command.

¹ *NATO Logistics Handbook*, NATO Headquarters, Brussels, 2001, p. 1.

at global level, should not be totally excluded. In this context, although warfare should be perceived in its classical form, we may consider that future conflicts will be undoubtedly replaced by the ones that are characteristic of the Information Age: Information Warfare (IW), Network Centric Warfare (NCW), Cyber Warfare (CW) etc.

Organised and developed following the principle of asymmetry and dissymmetry, these types of warfare will include, in principle, military actions directed against forces organised in an atypical manner, disproportionate as far as the number and technological potential are concerned. It is appreciated that these types of confrontations will be very violent at the beginning and then we will witness a different spatial-temporal sinusoid, determined by the initially planned objectives. Military actions will be followed by a calm period that corresponds to the stabilisation phase in which a series of economic agents (companies, firms etc.) are substantially involved in the reconstruction process.

In conformity with the *Romanian Armed Forces Transformation Strategy*, it is appreciated that the future warfare will be preponderantly conducted in the political-economic field, combatants seeking to achieve their strategic objectives. Thus, the goal of the future warfare will be the management of strategic resources and of the ways to access and trade them, as well as the restrictive access of many countries of the world to advanced technology and, last but not least, the intensification of the political-military control over some of the strategic areas worldwide. Through combining classical aggressions with the economic, cultural, psychological, religious, information, electronic, symbolic and imagological ones, it is sought to influence and control the adversary under all the aspects.

For our country, a NATO and EU member state, to guarantee national security is a process that is “... *continuous and complex, that covers a wide array of domains, relations and interdependencies, and that is designed to promote the security objectives and interests of the state, society and citizen, being defined and promoted in accordance with NATO and the EU specific policies*”².

Taking into consideration all these aspects, to provide a credible intervention capability for crisis situations and to increase the possibilities of the two organisations with regard to force projection in their areas of interest are both desired within NATO and the EU. Another course of action is aimed at the acceleration of the transformation process as far as the mechanisms, structures and decision-making procedures are concerned.

² *Strategia de transformare a Armatei României*, Statul Major General, București, 2005, p. 5.

The perspective of the new physiognomy of military actions and of the enhancement, at the conceptual, procedural and actional level, of the military theories and fighting means requires the armed forces of the NATO and the EU member states to adopt a flexible, compatible and interoperable logistic system, capable of ensuring the basic functions of forces support, irrespective of the environment. In this context, it is expected for the integration of operations and of the logistic support to require the establishment of some specialised, flexible and interoperable structures, able to meet the needs of combat units.

According to the provisions of the *Transformation Strategy*, the Romanian Armed Forces will take part, within NATO and the EU, in the military actions led by the two organisations, in support of the efforts to meet the challenges to security interests, within or outside the Euro-Atlantic area, as well as in the resolution of conflicts that require to execute low or high intensity operations. In this respect, the Romanian Armed Forces have to be able to conduct military actions in a multinational environment, together with the forces of the other member states of the Alliance, of the European Union, or of the ad-hoc coalitions, in close cooperation with national, international, governmental and non-governmental organisations. In this context, we appreciate that the future military actions, in which information, economic, juridical, diplomatic components will play a decisive part, will have to be approached in a unitary and coordinated manner.

As for the logistic support that has to be available to the combat forces deployed in the theatres of operations, a series of activities is conducted at the level of the Romanian armed forces leadership, meant to the achievement of an effective logistic system “... *integrated, flexible, computerised, capable of rapid modular adaptation*”³, so that operational units can be relieved of administrative tasks. The requirements in the logistics field call for the establishment of a mobile support system capable of providing the necessary support at the right place, in the right quantity and at the right time. Considering these objectives, the Romanian Armed Forces decision-makers seek to reconfigure the existent logistics system so that, at the end of the transformation process, the military institution can have an integrated logistics system available, and logistics structures tailored to meet the specifics of the fighting missions and the requirements in the theatres of operations. We appreciate that the fulfilment of these objectives will provide the necessary flexibility to meet the new exigencies of the logistics support.

From our point of view, we consider it is first and foremost necessary for us to be able to establish the requirements of logistics as well as the associated ones

³ *Concepția logisticii Armatei României*, Statul Major General, București, 2007, p. 5.

in a coherent manner, as the successful implementation of the principles of the logistic support and of the associated concepts certainly represents a necessity for the effective understanding of the entire current environment. In this respect, it is considered that “... *there are some directions that seem to be significant and common, although the individual perceptions differ depending on the personal observations and experience*”⁴. There is a close connection between these directions and that is why they have to be approached in an integrated manner when the requirements of the logistics system are established.

In line with the above-mentioned facts, we can point out that, in the near future, the need for flexible logistics structures will generate new initiatives in relation to the requirements they have been intended to meet and the combat forces need for support. Once established, logistics large units, units and subunits will have to adopt not only a new, predictive and proactive way of providing the fighting forces with the logistics support, but also “... *the way of logistics planning and operational command*”⁵.

As it has already been mentioned many times, knowing the past and accumulating experience through the lessons learned system (and not only) consistently contribute to modelling the present and outlining the future. Throughout its evolution, logistics has undergone many structural, procedural and actional transformations, depending on the characteristics of the periods of history our country had to pass through.

In the last decades of the 20th century and the first years of the 3rd millennium, due to the emergence of new technologies and the increasing complexity of the systems used in the field of logistics, combined with the progressive resource and budget limitations, all the components of the logistics system started being treated on equal terms. The shortcomings occurred in time, resulted from the different attempts to restructure the system, have required the logistic support to be planned and integrated from the very beginning, as well as related to the process of the entire military system development, so that the balance between the requirements and the available capabilities to be achieved.

We believe that the fulfilment of this desideratum, namely to assure the necessary balance between wish and resources, has to take into consideration the economic performance of the society we live in, in general, and the characteristics of the military system, the resources made available to it by the political factor, in particular, which eventually provides the necessary information with regard

⁴ D. Lăpădat (coord.), *Logistica de producție și consum a sistemelor de apărare. Studiu privind conceptele logisticii pe ciclul de viață al sistemelor*, Agenția de Cercetare pentru Tehnică și Tehnologii Militare, București, 2008, p. 6.

⁵ *Strategia de transformare a Armatei României, op. cit.*, p. 29.

to the logistics system effectiveness and efficiency. In direct connection with the relationship requirements – resources, as well as with the stage in the transformation process, we consider that even under the circumstances of the global economic crisis and the reduced level in the resource allocation for the military institution, the main requirements the future logistics system has to meet are the following:

- the achievement of an operational, flexible logistics system, tailored to the fighting forces size;
- the configuration of viable logistics structures to assure the optimisation of the logistics system functional domains;
- the balanced territorial distribution of structures so that they could provide the logistic support;
- the clear delineation of logistics responsibilities and missions;
- the enhancement of the relationship and information flow in the field of logistics;
- the unitary command of the logistic support effort in peace, crisis and war;
- the reduction of the reaction time in conducting logistics activities;
- the effective support for the armed forces that participate in operations outside the national territory;
- the adaptation of the operational logistics structures to the campaign specific conditions;
- the boost to the maintenance activity;
- the stocks optimal tailoring and echeloning;
- the structures modularity and flexibility in providing resources;
- the movement and transportation capabilities management to accomplish logistics missions;
- the Host Nation Support coordination to accomplish the mission;
- the increase in the rate of turning a profit from the extra or atypical materials;
- the interoperability of the logistics structures with those of the multinational forces that are provided support;
- the completion of the organisational structure and of the functioning mechanism for the systems meant to assure environmental protection, workplace security and safety, technical surveillance and arson protection⁶.

Starting from the requirements of the Romanian Armed Forces future logistics system, we would like to highlight the fact that irrespective of the existent conditions at a certain moment, military logistics develops, even if we do not always understand

⁶ *Strategia logisticii Armatei României* (proiect), Statul Major General, București, 2009, p. 36.

the concrete reality in which the transformation process unfolds. Thus, no matter what the level of available resources may be, the logistics system has to provide the combatant with whatever is necessary for him to live and fight, even if only for a defined period of time.

Consequently, through the measures taken at the level of the armed forces decision-making factors, we appreciate that the future logistics system will relieve the commanders of the fighting units of the administrative and logistic tasks and will assure the necessary conditions for success in fight and in operation. Through the reorganisation and repositioning of the logistics structures belonging to different military branches and branch commands, it is highlighted that the units engaged in fight will be, to a large extent (if not in totality) relieved of the preoccupations regarding resupply and assets and equipment evacuation.

From another standpoint, providing the fighting structures with a high potential in the generating and training period before fight is determined by the intensity and frequent changes in the situation, as well as by the possible interruptions in communications. This aspect requires each military structure, irrespective of the branch (branch command) that generates it, to be assigned only one task (acquisition, maintenance, transportation, medical aid etc.), starting from the premise that assigning more missions to a specialised structure does not contribute to the effectiveness of the logistic support. This is the reason why we support the opinions according to which the structures of the Romanian Armed Forces future logistics system have to be organised following the territoriality and role specialisation principles.

Once the Romanian military logistics system transformation process has been completed, the role of echelons will have to be clearly defined, as each branch (branch command) will have all the logistics elements and material stocks available, stored even since peacetime.

It is not a secret for anyone that logistics, in general, tends to become an inestimable tool at the hand of those that make use of it, through which a veritable information and material flow can be assured, so that productive activities can be carried out effectively. It is the situation of the military logistics system that, following the analyses conducted for a rather long period of time, will have to be qualitatively restructured to better meet the role it has been created to play.

We appreciate that the Romanian Armed Forces future logistics system will be achieved in an integrated vision to which all the branches and branch commands in the organisational structure of the Ministry of Defence will contribute to ensure the optimum logistics. To this end, it should be taken into consideration the fact that the sum of the options materialised in specific activities is not in balance with the optimum logistics system.

The Joint Logistics Command Transformation

To the joint effort meant to the achievement of a joint logistics system for the Romanian Armed Forces, the initiatives of the experts in the *Joint Logistics Command (JLC)* are also added. In this respect, the *Joint Logistics Command* restructuring is conducted in the general context of the acceleration of the Romanian Armed Forces transformation and in the particular one of the military logistics system.

The *Command* reorganisation represents one of the components of the entire military logistics system transformation. This process is a continuous one, so that logistic support activities can be more effective and the subordinate units can achieve interoperability with the similar structures in NATO and the EU member countries.

In order to make the functioning of the logistics operational component more effective, the *Joint Logistics Command*, as the General Staff executive structure that is aimed at providing the forces on the national territory as well as the forces that execute missions in the international environment with the logistic support at the strategic and operational level, currently conducts specific activities meant to:

- *reorganise the structure of the subordinate units*, specialised in storing materials, following the principle of cost-effectiveness;
- *assure an efficient correlation* between supply activities (*areas and classes of supply*) and the missions, the role and place in the disposition, for the supported military units;
- *accelerate the process of materials codification*, through a better organisation and inventory with a view to rapidly identifying the required materials and to enhancing interoperability within NATO;
- *enhance legislation in the field of movement and transportation* and harmonise it with the one in NATO and the EU;
- *establish and have ready movement and transportation structures* compatible with those in NATO and its member states;
- *adapt medical support structures* to the structural changes in the logistics system and to the fighting units' missions;
- *assure the necessary capabilities* to execute, through the specialised structures, the intermediate level maintenance (in certain circumstances, even at the fight level) for the assets and equipment that belong to the subordinate categories of forces and units.

The efforts of the *Command* are meant to establish executive structures, flexible and highly mobile, that can assure the operational logistics. Through this engagement, we wish to contribute to the accomplishment of the fighting units' missions, in agreement with the hierarchical level, nature and value of the forces we have to sustain.

In addition to the above-mentioned activities, there are other activities the *Command* subordinate personnel conduct, missions that have at least the same importance, having in view the specifics of this body, as follows:

- *sending, free of charge, the equipment items* that need reforming and that have become atypical to the public institutions with a view to being used to equip the unfavoured people that benefit from social protection, under the provisions of the law;
- *assuring the activity of representation, ceremonials, military honours and protocol* at the level of the central (local) public administration and the Minister National of Defence, the Chief of the General Staff, and the Secretaries of State;
- *assuring the recovery of work capacity* for an important part of the Ministry of National Defence personnel and managing the accommodation capacities in Bucharest Garrison;
- *achieving the own CAI2SR system architecture and development*, as well as assuring interoperability, with a view to developing the specific infrastructure;
- *conducting activities in line with international military relationships* and the liaisons with the member states of the Liaison Committee of Social Military Organisations (CLIMS);
- *managing codification of materials*.

At the level of the *Joint Logistics Command*, the efforts meant to support the transformation of the military logistics system have not “relied on” the “*principle of direct effort profitability*”, the one that is considered when it comes to the forces and assets consumption. In this regard, the issue of the “*paid price*” to meet the transformation objectives has almost all the time been higher than the forecast. Mention should be made the *JLC* personnel have spared no effort to complete the above-mentioned process, even if it has sometimes involved “*painful*” costs, generated by the social problems that the subordinate military have had to face.

Now, from the structural standpoint, the *Joint Logistics Command* covers, through the subordinate missions and structures, almost all the functional domains of the logistic support in all the three situations: peace, crisis and war. The logistics support for the structures that must be sustained is executed not only on the national territory but also outside it, through the subordinate large units, units and subunits, specialised in acquisition, storage of all classes of materials, transportation, maintenance, infrastructure, campaign services, and medical support.

The current structure of the *Joint Logistics Command* and of the subordinate units is conceived and developed to accomplish the logistic support role and missions

(established through the normative acts in force) necessary for the Land Forces, the Air Force and the Naval Forces. The *Command* has a flexible structure at its disposal, structure that may be tailored to accomplish a wide range of activities or to perform new logistics tasks, necessary for the central structures of the ministry, Land, Air or Naval Forces.

Since 2007, the *Joint Logistics Command* has made a consistent effort to restructure through re-subordinating some units and subunits having specific tasks, as well as different warehouses, out of which four specialised in and intended to store materials for the Air Force and two for the Naval Forces, to the main coordinating and storage centres, namely the Transportation and Service Base.

The transformations have been correlated with the efforts made by the Logistics Directorate, the armed forces branches and branch commands with a view to boosting the old logistic system that used to be characterised by inflexibility, relative immobility and used to have its centre of gravity with the troops. These characteristics have often contributed to the lack of reaction in the elements of the fighting disposition, which has diminished, to a large extent, its reaction capacity.

The experience gained in the recent conflicts in which the Romanian Armed Forces have participated (Former Yugoslavia, Afghanistan and Iraq) has shown that under the conditions of conducting modern fighting actions, it is preferable for the fighting units (subunits) not to have tasks and execute activities related to the logistic and administrative support, as the logistics footprint becomes too large and the vulnerability of logistics structures increases exponentially with the area, aspect that leads to a series of direct implications for the fighting capacity.

As a direct consequence of what has already been mentioned, the *JLC* has permanently sought to: completely relieve fighting units of the administrative tasks; separate logistics planning from logistics execution; assure a high level of standardisation and transparency in the logistic support process; create integrated logistics capabilities, able to lead and coordinate all the subordinated logistics components; reduce the number of subordinate command and control structures and implicitly apply the logistics principles and procedures in a unitary manner; provide the essential materials and services at the adequate level required by the missions of the supported structures; direct the logistics effort towards supporting combat forces and projecting an optimised flow of logistic support⁷.

For the time being, we are seeking to put the coordinating and storing centres on new bases, taking into consideration the new reality at national level and at the level of NATO and the EU, transforming them in new type logistics units, more precisely in territorial logistics bases that should have as far as possible the same structure,

⁷ *Ibidem*, p. 38.

missions and, depending on the available resources, the same capabilities. Through completing this process, we intend to provide the units and large units that are part of the military branches with the necessary resources and capabilities for them to accomplish their missions.

The growth of the role that the *Joint Logistics Command* plays in the Romanian Armed Forces logistics system is a mid-term objective. The rate of capitalising on the existent military assets, ammunition, materials will lie at the basis of the activity meant to build up the stocks of materials that are necessary for the Land Forces, the Air Force, and the Naval Forces, through the modernisation and operationalisation of the operative and strategic warehouses.

Although there are few warehouses that are specialised in the operative and strategic stocks necessary for the Air Force and Naval Forces, their number will be certainly harmonised with the necessary stocks of materials, calculated according to the concept of stocks. In order to efficiently use the allocated funds, it is intended, at the level of the *Command*, for the stocks that are specific to the Air Force and the Naval Forces to be built up after the materials necessary for the stocks are have been decided upon, for each level of military arts.

In conclusion, we would like to highlight the fact that the logistics system remodelling and integration can be achieved only in a unitary manner, through the common efforts of the experts and decision-making factors in all the structures of our armed forces, through a complex process that also seeks to achieve compatibility with NATO principles, policies, concepts, doctrines, standards and procedures, not only those having a joint character but also and mainly those that are specific to each military branch or branch command.

English version by
 *Diana Cristiana LUPU*

DETERMINANTS OF SUPPLY CHAIN MANAGEMENT IN MULTINATIONAL LOGISTICS

Brigadier General Dr Liviu SCRIECIU

The purpose of the article is to point out a series of changes and essential aspects of military logistics, of Supply Chain Management and, last but not least, some of their effects on the logistic support of multinational operations.

In the author's opinion, when defining logistics as a field of activity that encompasses all the stages through which the entries and exits of material goods of any kind are monitored by the management of a trading company and describing Supply Chain Management as a concept that includes logistics and ensures the interconnection of the company staff, it is obvious that the supply distribution chain can provide the infrastructure and the needed distribution options for achieving functions such as: purchase and acquisition of resources, their processing and transformation into secondary and end products and physical distribution of products/goods through clients.

Keywords: *logistic system; distribution channel; organisational theory; operational research; multinational operations*

Following the political-military transformations that the North Atlantic Alliance and the European Union have undergone lately, an interesting competition regarding the access to resources was launched, all types of resources being considered but especially the human resource, which appears to be the most important one. In this regard, an essential condition to achieve success in the military actions led by the two international security organisations would be the adoption of a new defence resource management system that should adopt not only a modern and planned approach but also an integrated one.

This set of characteristics is appreciated to have led to a new type of management that, firstly, took into consideration the integrated defence resource planning in all NATO member countries and, secondly, set some specific objectives and priorities in accordance with the domains of defence planning, the areas of interest (national, regional, NATO, the EU etc.), as well as with the organisational levels. These objectives, both general and specific ones, and the way priorities are set are now

Brigadier General Dr Liviu Scrieciuciu – Deputy Commander, the Joint Logistics Command.

harmonised within the integrated defence planning, which is a process meant to coordinate the development and to maintain the specific capabilities to meet the defence policy objectives.

Currently, based on the lessons learned from different theatres of operation, we can state, without the fear of being wrong, that an important part of the military logistic systems is not very efficient, highlighting a series of unjustified defects or redundancies in almost all the logistic support functional domains. If we consider only the uncontrolled stockpiling and certain interruptions in the processes that are subordinated to logistics during the military operations in the Second Gulf War, the high cost of managing them, as well as the considerable risks the logistics structures were exposed to, we will mention only a few of these shortcomings.

In line with what has already been mentioned and grounded in the necessity for many of the military logistics systems, especially those belonging to NATO member states to evolve, the decision-making factors in this organisation have adopted a series of initiatives meant to integrate all these systems in one single system, that of the North Atlantic Alliance.

These efforts emphasise the necessity for evolution in logistics, namely the transition from the supply-based logistics to the agile, flexible and distribution-based one. Highlighting the fact that a distribution-based logistic system that is at the same time integrated into the NATO logistic system can better meet the combat units' requirements, as it is agile, mobile, flexible and interoperable, assures, in our opinion, the necessary elements for the acceleration of transformations in logistics. We appreciate that the integration of the member countries logistic systems into the NATO logistic system can better meet the increasing need of the troops for logistic support, irrespective of the place in the world they conduct their activities. From this perspective, logistics planning and command factors in NATO have initiated a series of debates over new logistics concepts that may be applied at the operational and tactical level. To achieve the objectives set at the conceptual level, the combat and support units growing need for a linear, optimised, and predictable supply chain to exist and function, one able to operate within the command and control classical structures has been considered.

Which would the major differences between classical logistics, based on the accumulation of materials and operating with customer specific forecast consumption or upon request, and distribution-based logistics that operates across the supply chain be ? To answer this question, one could start with the concept of supply chain and its evolution, as well as with the necessities for world economy to develop

that, this time, have had a positive influence on the military logistics, in general, and on the ways to distribute materials to the fighting units, at the right time and in the right place, namely the activity management.

The term *Supply Chain Management – SCM* is considered to have been firstly discussed about in 1982, by two consultants in the field, R. Oliver and M. Webber. The two experts in management consider that the supply chain management represents the logistics effort to become a top management concern, as “... *only top management can assure that conflicting functional objectives along the supply chain are reconciled and balanced*” and finally “... *an integrated systems strategy that reduces the level of vulnerability is developed and implemented*”.

In this regard, the two experts appreciated that one of the conditions for success would have been generated by “... *coordinating material, information and financial flows within a multinational company*” which is “... *a challenging and rewarding task*”. Another judgement was aimed at the establishment of a supply chain management system at the level of a group of companies to work in a unitary way under a single command. Taking all these aspects into account, we consider that it would have been extremely difficult to achieve it in the '90s.

The study and research into the integration and coordination of many functional structures were conducted long time before the emergence of the term *SCM* in 1982. These efforts were made in a wide array of domains such as logistics, marketing, organisational theory, operational management and operational research. Many specialists have paid their contribution to the development of the domain, as follows³:

- distribution channel research⁴;
- collaboration and cooperation⁵;
- inventory location and control in production and distribution networks⁶;
- bullwhip effect in production and distribution systems⁷;
- hierarchical production planning⁸.

¹ R. K. Oliver, M. D. Webber, *Supply chain management: logistics catches up with strategy*, in *Logistics*, London, 1992, p. 66.

² *Ibidem*, p. 67.

³ N. Florea, C. Clipa, *Supply Chain Management – introduce, bazele, edificiul, originea și istoricul SCM*, ecr.valahia.ro/Simpozion_ECR.../15.15-15.25_N.Florea.doc, p. 12.

⁴ W. Anderson, *Market behavior and executive action*, Homewood, Illinois, 1957.

⁵ D. J. Bowersox, *Physical distribution development, current status and potential*, in *Journal of Marketing*, vol. 33, January, 1969.

⁶ J. W. Forrester, *Industrial dynamics*, New York, 1961.

⁷ F. Hanssmann, *Optimal inventory location and control in production and distribution network*, in *Operation Research*, vol. 7, 1959.

⁸ A. C. Hax, H. C. Meal, *Hierarchical integration of production and scheduling*, in *Studies in Management Science*, vol. I, Logistics, Amsterdam, 1999.

The origin of the *Supply Chain Management* can be traced back into the '50s when J. W. Forrester studied the dynamics of industrial production and distribution systems⁹. Until the mid '50s, *SCM* did not have a spectacular evolution. Only certain fields evolved spectacularly, one of them that enjoyed major interest being that of production. Taking into account that conflict may also lead to progress, at that particular time, inventory management was considered to be the responsibility of the marketing department, while logistics and orders processing were subordinated to sales (accounting) structures. This way of assigning responsibilities in logistics led to certain conflicts regarding the achievement of the set objectives by the involved departments, especially the production, marketing, accounting and financial ones.

This situation led to the emergence of a new trend in logistics, at the beginning of the '60s, trend that emphasised the role of logistics in enhancing companies' competitiveness. Until the '70s, the supply and distribution-based logistics were approached, in turn, in the specialised literature, an exchange of opinion whose object was the physical distribution management, considered to be an instrument of the sales policy in production companies.

As for the finality of this activity, the objectives of physical distribution used to be the "... *coordination and optimisation of transportation and the efficiency of deliveries to the end user, to assure an advantage in competition, an essential condition to conquer and control the market*"¹⁰.

In the mid '80s, the terms and definitions in logistics started to be used in more and more domains of everyday life. Later, in the last years of the 20th century, the concept of *SCM* started to be coupled with that of *e-business* or with IT technologies. *Supply Chain Management*, which is better known as *Logistics Management*, includes, besides the logistics functions, a series of other aspects, thus being one of the most effective instruments to enhance the economic agents' performance, especially with regard to meeting the beneficiaries' requirements and to lowering cost. Based on the benefits derived from implementing *SCM*, in time, marketing departments within multinational companies have become aware of the importance of distribution. Thus, a new domain appeared, namely the *distribution management*, known as *outbound transportation*. By defining, in 1991, in accordance with the *Council of Logistics Management – CLM*, logistics as "*the process of planning, implementing, and controlling the efficient, effective flow*

⁹ J. W. Forrester, *Industrial dynamics: a major breakthrough for decision makers*, in *Harvard Business Review*, vol. 46.

¹⁰ L. Ilieș, *Logistica – sursă de competitivitate*, in *Management&Marketing Journal*, no. 1, 2006, www.managementmarketing.ro/pdf/articole/8.pdf, p. 93.

and storage of goods, services, and related information from point of origin to point of consumption for the purpose of conforming to customer requirements”, a part of the conceptual differences between supply management and production planning has been eliminated, resulting in the increase in stocks to assure production continuity.

By defining logistics as a domain that describes the aggregate of processes through which the flow of materials (irrespective of their nature) is directed in or out the inventory of a commercial enterprise and *SCM* as a concept that includes logistics and relates the personnel of the company, it has become clear that the *supply chain* provides the necessary infrastructure and distribution options to achieve functions such as¹¹: resource procurement and acquisition, resource processing and transformation into finished and semi-finished products, finished products physical distribution to customers, intermediary or end ones.

In the military environment and especially in multinational operations, where a series of commercial enterprises are involved to provide logistic support according to their area of responsibility, the issue of *SCM* is more visible, taking into account the goods and services these economic agents have to provide. At NATO level, more precisely at the one of the *NATO Maintenance and Supply Organisation – NAMS*O and of the *NATO Maintenance and Supply Agency – NAMS*A, the implementation of the *SCM* concept and the associated issues emphasise the importance of integrating logistics functions with the other functions of these organisations and bodies in the effort to contribute to the success of military operations. At the theatre of operations level, NATO logistics, through the flows it manages and the activities it integrates, plays an important part not only for the organisation but also for the firms *NAMS*A collaborates with (suppliers, distributors, customers). We think that the logistics integration at the level of the Alliance is not sufficient when it comes to military actions conducted in theatres of operations, in a multinational environment, with NATO member and non-member states, taking into account “... *the necessity for coordinating with all the partners involved in the flows of materials, components, products and services, from the supplier to the end user, to which the information flow is added. In this context, an extensive theory centred round the logistics chain and its management has developed*”¹².

In the military environment, *just-in-time deliveries at the desired place* have been the key to success in many wars carried out throughout time. From the military standpoint, a war may be won or lost depending on the capability of the supply chain to provide the necessary quantities of armament, ammunition, food etc. in the shortest time possible. Empirical supply chains started to exist in ancient

¹¹ www.esupplychain.eu/ro/136, The History of Supply Chain.

¹² L. Ilieş, *op. cit.*, p. 98.

times, when mankind began to understand and get involved in trade practices. In the multinational operations in which NATO and more recently the EU are engaged, supply chains include mainly the activities that constitute the flow of goods from raw materials to the end customers or users (combat forces), as well as the information flows associated with these operations.

In this environment, the supply chain has to include, besides suppliers and beneficiaries, the companies (economic agents) specialised in providing campaign services, including those agents that fall under the category of *Third Party Logistics*.

In multinational operations, the *Supply Chain Management* assures the systemic and strategic coordination between traditional functions and the policies related to these functions within the multinational force logistic system and “... *between different companies in the logistics chain, with a view to enhancing long-term performance of the firms, individually, and of the logistic chain, in general*”¹³.

In the light of the above-mentioned facts, we think that the performance of the leading structures involved in the multinational operation logistic support depends on the practical ways in which they succeed in minimising the influence of the managers of the companies that constitute the military logistics chain on the other firms involved in providing goods and services in the theatre of operations so that the competition between them at individual level can be related to the competition between the logistic chains that serve them.

SCM development in multinational operations is grounded in the competition between economic agents and even between their logistic chains. The experience gained in the confrontations in multinational environment has proved that this competition cannot be effective unless the aspects related to logistics services developers (through their own forces or by means of sub-contractors) are considered. They have to meet the acceptance criteria in terms of effectiveness, efficiency and quality.

How else could the success of NATO-led operations in Afghanistan be explained if not through the competition launched by NAMSA among the international contractors, on the one hand, and the local ones, on the other hand? So far, NAMSA, which is present in many locations in Afghanistan, has contracted a series of economic agents that carry out some campaign services that are necessary for the troops. Companies such as *ECOLOG*, *SUPREME*, *TOIFOR*, *ATCO FRONTEC*, *KBR*, *AECOM MAINTENANCE* or *FLOUR* provide, on a competition basis, the deployed military with campaign services (wash the equipment

¹³ *Ibidem*, p. 99.

and bedclothes, feed, guard and protect external perimeters, checkpoints, assure transportation services, maintain the equipment and installations in the base etc.).

In our opinion, to enhance the quality of the services provided to the military men deployed in the theatres of operations and of the *Supply Chain Management* designed for this area of operations implicitly, NATO logistic bodies that are responsible for conducting/coordinating the logistic effort in the theatre of operations in Afghanistan and not only have to focus on aspects that lead to the enhancement of these companies availability regarding the quantity and quality of the provided goods and services, the necessary efficiency in building up the stocks of certain goods and materials etc.

Taking into account that the military actions the new NATO and EU force structures are designed for, as well as the growing complexity of the missions that are carried out, it is evident that, for the component structures, the *supply chain* has to become more flexible and agile to meet the combatants' need for support. Under these circumstances, it appears that the classical process of logistic support planning cannot meet the requirements of the new types of military actions. The problems logistic support planners are confronted with are represented by the high speed in the operational field changes, the causality between the events, the shortcomings in different component structures synchronisation, the relatively limited speed in the decision-making process.

Currently, due to management effectiveness, multinational logistics takes rapid steps from the traditional approach, focused on the point of consumption, to the reverse approach (reverse logistics). Another aspect that has been considered is that represented by the integration of the information flows with the physical flows.

In this context, we appreciate that the *supply chain* should be projected to overcome some aspects logistic systems used to be confronted with in the past, such as: the lack of flexibility, the lack of necessary information in real time, the impossibility to anticipate the consumption and transfer rates, the blockages in transportation, the high cost of transportation, the high cost of storage, the low visibility into the movement of goods, the ineffectiveness in planning the milestones in the supply flow and, last but not least, the lack of coordination and guidance in providing troops with the necessary infrastructure and services.

On the other hand, it is desirable that the *supply chain* designed for the new NATO and EU structures should focus on demand rather than on supply, should shorten the time and reduce the cost of delivery and, last but not least, should optimise the subordinate processes. This desideratum evidently depends on the operation planning complexity and the capabilities to forecast, as well as on the fact that there are military structures that may act in different environments as far as the complexity of the situation is concerned. Another aspect that should be considered is that

the rapid changes in the environment may result in shortcomings even in the most sophisticated and optimised supply chains.

To achieve the above-mentioned objectives, it is necessary for the *supply chain* to be optimised and integrated so that it could be interoperable with the similar structures in the other NATO member states to assure the accomplishment of the assigned missions. The transformations in logistics can be achieved only gradually, through the consensus of the countries that contribute to the force structure. These transformations should take into account the logistics system and, implicitly, the *supply chain*, approaching all its components and sub-systems in an integrated conceptual and actional manner.

The necessity for the effectiveness of the *supply chain management* creates, in our opinion, the premises for the concentration and coordination of all the material and information flows, as well as for the coordination and control of these flows in a univocal and integrated manner.

Approaching the above-mentioned facts, we have sought to highlight a series of transformations and substantial aspects related to the military logistics, to the *Supply Chain Management* general framework and, last but not least, to the associated influences on the multinational operations logistic support. In the multinational environment, it is appreciated that through making the supply and distribution activities effective, a part of the total cost of supporting a military operation can be reduced, compared to what was desired before, namely the reduction of the cost of individual activities.

In our opinion, the logistics integration in the multinational environment and the implementation of a flexible and effective supply chain differ from one theatre of operations to another, taking into account the specific characteristics of the companies that accept to provide goods and services in an area of military confrontation. On the other hand, considering the high operational cost of a multinational operation and the requirements of the beneficiaries as far as the services provided by contractors are concerned, the multinational force leading structures should have the will and power to accept and produce organisational changes, to develop the capabilities and, last but not least, to be aware of the way in which the action of the influence factors on the supply chain viability and functioning can be reduced.

English version by
 *Diana Cristiana LUPU*

MODERN OPTIONS FOR THE LOGISTICS MANAGEMENT TRANSFORMATION

Colonel Dr Gheorghe MINCULETE

The current transformations in the military system bring about new challenges and dilemmas for the armed forces. Nowadays, as the author highlights, it is necessary to strike a balance between the need for well-trained and modern forces, the rising number of missions and the increasingly limited resources. The transformation of military logistics management is seen, in the author's opinion, not only as the focal point of the future of logistic support but also as the support point for the effort of the armed forces to establish the necessary balance between the preparation and modernisation states. Moreover, the author emphasises the way in which future wars will be waged. In this respect, military experts consider this transformation as being a process of rethinking the priority objectives and the structure of the armed forces, shifting from the model adopted during the Cold War to a new type of forces, capable of accomplishing a broader range of missions and of gaining the upper hand at the strategic level anywhere in the world.

Keywords: *logistic system; satellite communications; information technology; supply flows; information processing*

The decisions with regard to opting for the best way to achieve performance, not only in the private business sector but also in the military one, are made based on the principles of logistics management. It provides the necessary abilities to achieve effectiveness in different fields, through judiciously engaging the human, material and financial resources available to the economic or military organisation.

From a conceptual standpoint, at the company level, logistics management represents the specific process that integrates the commodities and services flow in, through and outside the organisation with a view to meeting the supply and distribution requirements, at the right time and in the right place.

Military logistics management assures the planning, acquisition, distribution and transportation of the equipment and materials that are necessary for military operations. It is also responsible for transporting and moving the personnel, lodging and quartering troops, maintaining facilities, providing medical and health service support, as well as for providing support services to meet the operational requirements.

Colonel Professor Dr Gheorghe Minculete – “Carol I” National Defence University.

To respond to the challenges of the future, military experts have proposed high-performance solutions in the field of logistics that include, among others, management processes and tools, modern technologies for the supply chain management, and a profound understanding of the most consumer-sensitive requirements, starting from the equipment meant to protect against weapons of mass destruction to different types of ammunition.

The current transformation in the military brings about new challenges and dilemmas for the armed forces. Nowadays, it is necessary for an optimal balance between the need for well-trained and modern forces, the increasing number of missions and the more and more limited resources to be achieved. Logistic stockpiles have to be diminished, the quantities of materials to transport have to be reduced and the reaction time has to be significantly shortened. The military logistics management transformation is perceived not only as a central point in the future of logistics support, but also as a support point for the armed forces effort to achieve the necessary balance between readiness and modernisation¹.

The armed forces transformation is about changing the way to fight. Military experts see this transformation as the process of converting the armed forces focus and structure from a *Cold War* construct to a full spectrum combat force that is strategically responsive and dominant at every point on the spectrum of conflict. It presupposes not only new technologies but also changes regarding the doctrine, the new philosophy of training, leadership and organisational structure, the increase in the availability of equipment and installations and, last but not least, military men trained in new domains².

These changes are vital for the military logistics management transformation. The main important measures taken in this domain are focused on: exploiting the new technologies in the field of communications, adopting and adapting some business practices that are specific to the civilian sector, “*redesigning*” the command and control relationships to enhance command unity and reduce the logistics volume in the general economy of forces.

At international level, the new practices in the military logistics management contribute to the development of a new distribution technology that, in its turn, facilitates the multidimensional armed forces support. In what follows, some of the main aspects that are determinants of the military logistics management transformation, as well as the positions that should be adopted by the experts in the field of logistics as part of this transformation process are developed.

¹ Lieutenant General Charles S. Mahan Jr., *The Challenges of Fielding The Army's Objective Force*, in *Army Magazine*, October, 2001, p. 128.

² William Grisoli, *Army Transformation*, Department of the Army Transformation Office, Carlisle: US Army War College, February, 2002.

Communications and information technology

The “*revolution*” the majority of the armed forces currently undergo needs for a proactive approach to the fighting forces logistic support. Nowadays, a logistics system that integrates all its parts in a complex network that includes early warning capabilities, ordering logistics support requirements and common action cannot be conceived without the existence of an integrated communications system.

The trend worldwide, visible especially in great commercial companies, is to reduce inventories and rely on the development of a database able to provide real-time information coupled with rapid transportation to meet customer’s demands. Substantial cost savings in acquisitions, warehousing, packaging, and transportation are achieved due to reduced inventories.

Great companies prefer to maintain a significant part of their inventory in motion within the supply flows. To be able to manage these flows companies employ global communications systems that provide them, in real time, with the exact data regarding commodities movement and deliveries³.

In the future, with the help of communication and information technology, logisticians will be capable of providing the necessary logistic support in any operation, at the right time and in the right place for the beneficiary. This way, it will not be necessary to appeal to “*historical*” data, practice that currently burdens the activity of many logistics structures and that is time and energy-consuming. Logisticians will have real-time and relevant information and they will be able to make the best decisions to optimise forces readiness. The global communication system and the information technology will make it possible for the decision factors to practically “*see*” what happens in any theatre of operations, due to the existence of the virtual battlefield, and to make the necessary corrections in due time.

This is the reason why the wireless communications providers make efforts to enhance the physical data transmission capacity, through increasing the number of satellites, and to improve the information transmission speed, through the continuous enhancement of technology. This genuine competition between providers leads to cost reduction for the equipment and services, as well as for operating them, having evident effect on the budgets of companies⁴.

Initially, this type of services was developed for the use of the world market but, in time, it has become evident that the system can be successfully exploited by the armed forces at not only the strategic level but also the operational and tactical ones. Information and communication technology, as well as the potential

³ Roger Houck and William Cousins, *Communications Technologies for the Revolution in Military Logistics*, in *Army Logisticians*, January-February, 2000, pp. 95-97.

⁴ *Ibidem*.

for development it enables, provides opportunities that could not be thought of some years ago with regard to receiving, transmitting, storing and retrieving the information that is necessary for a logistics system to be capable of effectively supporting modern and future armed forces.

Adoption of business practices specific to the civilian sector

The methods and tools used in the private sector, which allow for the company to elevate above the competitors, are known in the specialised literature in the field as the “*commercial best practices*”. They enable the company business success, guaranteeing top-class services for all the beneficiaries of that particular commercial agent.

The methods, tools and economic standards in the civilian sector have aroused the interest of the experts in the field of logistics, as it is well-known that lately they have been required to do more and more with fewer and fewer resources. Under these circumstances, it is evident that adopting some commercial practices from the civilian sector, as well as their adapting and implementing in the military sector will generate benefits with regard to providing the forces in the theatres with the necessary logistic support.

Analysing the experience of world-class companies, it becomes clear that many of them have significantly reduced their stocks, without affecting the customers’ demands, based on the information transmitted in real time, coupled with rapid transportation. Achieving a communication system able to transmit information in real time, substantial cost savings are made, as the extra cost of acquisition, warehousing, packaging and transportation is eliminated, much of the inventory being in motion in the so-called “*logistics pipeline*”.

To manage the diminished inventory, commercial companies employ wireless communications operators, at global level, to provide them with the exact situation on shipments and deliveries.

Analogically, it is estimated that, in the future, due to information technology mechanisms, logisticians will be able to assure the necessary logistic support at the right time and in the right place. To this end, they will not rely too much on “*historical*” data, as they will have real-time information that will provide them with the opportunity to make intelligent decisions and to optimise the force capacity to fight.

The market for wireless communications, both voice and data, is growing continually. The number of communication satellites that orbit the Earth is estimated to be over 2 000, by 2010. In this regard, there is a fierce competition among providers

of such services, which will make it possible for different applications for the military use to be developed, in logistics included. These technologies will assure the capability of receiving, transmitting, storing and saving information within a logistics support system that meets the estimated requirements.

The methods and applications used by an economic agent to position at the top of a domain, without affecting the standard of the services provided to the customers, are known as the best commercial practices. The emergence of these practices has been determined not only by the decrease in the raw materials and materials but also by the thirst for profit, which is to do more with less.

Due to this aspect, adapting these practices to be used in the military sector is of real interest to the logistics community that is more and more asked to provide more with limited resources.

Among the best practices that can be successfully tailored to meet the military logistics requirements, the following may be mentioned: the integrated supply chain management, the analysis of the industrial view of logistics, electronic commerce, automated identification technology, direct vendor delivery, load optimisation and outsourcing.

The current information technology and software solutions assure the necessary tools, visibility and connectivity to achieve and facilitate the supply chain management as well as its integration and optimisation. Electronic commerce is one of the best commercial practices that lead to enhanced productivity, through the increase in the number of commercial transactions, data and information exchange in real time and the timely reconfiguration of commercial processes, as well as through their structural change and automation.

With the increased ability to manage huge volumes of transactions and the ability to amass, analyse and control large quantities of specific data, economic agents have improved efficiency and accuracy and reduced costs, although they have been able to provide more rapid, more reliable and more convenient services.

Not only electronic commerce but also information distribution among different entities and structures facilitate contracting, forecasting and workflow management. Currently, the Internet provides information regarding different items and their production, in the posted electronic catalogues, and many sites provide interactive services, such as online ordering. Thus, purchasing commodities via the Internet together with the existing electronic catalogues contribute to the enhancement of the product cycle management, to the elimination of administrative costs and to the increase in the velocity of distribution, substantially reducing the cycle times throughout the supply chain.

The above-mentioned commercial practice may be very well tailored to the military requirements, while the supply and distribution system may work very well within the own Internet network. The automated identification technology may be put in practice through the use of bar codes, radio frequency tags, satellite tracking, “smart” cards and laser cards. Commercial satellites monitor the transportation assets. Bar codes and the associate visibility assure a high level of agility for both producers and vendors. The visibility of products and assets in storage, in transit or in process also results in the diminution of inventories, order times, transportation time, as well as in the enhancement of responsiveness.

The revolution that currently becomes manifest in the concept of forces sustainment may be accelerated through investigating the opportunities provided by the civilian commercial practices.

The solutions provided by the modern logistics management allow for the military body to enhance readiness, to reduce the costs associated to a certain product life cycle, to modernise the existent armament systems and equipment, and to better manage stockpiles.

The solutions suggested by military experts also include conceptual approaches that have a pronounced scientific character such as:

- *Battelle Strategic Asset Management* represents a system that integrates information technology, latest generation sensors, software and business processes that cannot be duplicated. The system provides integrated logistic support combined with the permanent weapons system sustainment, visibility of supply processes, and continuous technology refreshment for all the branches of the military service⁵.

- *Logistics Joint Administrative Management Support Services* provide complete logistic support and management services through teams of multidisciplinary experts. The main requirements in the field of logistics management generally include: order management, inventory management, warehouse management, transportation management, equipment assessment, inventory surveillance, repair and maintenance, shelf life extension, technical assistance, functional process improvement, contract field team support, establishment of optimal IT architecture, integrated logistics support, acquisition programmes management, automation of data proceeding processes, quality assurance and control, training service support personnel⁶.

⁵ *Logistics Management*, nationalsecurity.battelle.org/capabilities/logistics.aspx

⁶ Lieutenant Colonel Aundre F. Piggee, *Transformation – Revolution in Military Logistics*, United States Army War College, USA, 9 April 2002, p. 130, at www.iwar.org.uk/rma/resources/logistics

Outsourcing is also one of the best practices that may be tailored to meet the military requirements. Through outsourcing the services within the logistics functions, costs are lowered, personnel are reduced, access to top personnel is assured, and old-fashioned technologies are eliminated. Through outsourcing certain logistics functions, costs and personnel are reduced, and access to top personnel and cutting-edge technologies is assured. According to a specialised institute, currently, over 85% of the companies in the civilian sector appeal to outsourcing, the main reason being cost and performance. This way, companies focus their efforts on key domains such as service enhancement, profitability and responsiveness⁷. The existent technology and the available expertise allow for the armed forces to integrate these modern business requirements in the military. To this end, it is necessary for them to capitalise on the experience of experts in logistics. Moreover, the engagement, support and involvement of all those with responsibilities in the field are also necessary⁸.

The objectives set for the armed forces cannot be successfully achieved with the currently available infrastructure and resources. The armed forces must partner with world-class logistics providers when appropriate and become world-class providers themselves by leveraging the best industry has to offer. The challenge is to determine which of the possibilities already tested by the companies in the civilian sector may be integrated in the military system, with maximum benefits⁹.

The opportunities provided by the civilian commercial sector may be focused on the establishment of a military logistics system able to assure safety in functioning, available for all the stages of the operations and easy to regenerate. Moreover, it is easier to achieve such an architecture of the logistics system that allows for the access to information at all the command and execution levels, the establishment of a single point of contact for contracting and distribution at the theatre of operations level, and the enhancement of the possibilities to assess and maintain the equipment and assets.

Distribution-based logistics may be considered the final product of the revolution in military logistics modern armed forces currently undergo. It is defined as an innovative system of policies, doctrines and concepts. In this regard, it is necessary for the logistics processes to be rethought and for the organisation to be restructured. Moreover, it is necessary to develop new systems of sensors and equipment

⁷ *Ibidem*, p. 138.

⁸ *Ibidem*, p. 139.

⁹ *Ibidem*.

assessment and an advanced information, support, command and control system, as well as to train personnel to operate all these systems.

The necessity for the armed forces transformation aligns with the trends in many of the international bodies that undergo profound and sometimes dramatic changes. The Romanian Armed Forces have to cope with the same changes and to transform the logistics structures to meet the future challenges. To this end, re-engineering, extended outsourcing of certain services, when it contributes to high performance and low cost, new technologies incorporation and especially rising above old mindsets related to troops sustainment, which, to a certain extent, continue to be manifest under different forms, are all necessary.

The objective of the revolution in logistics is to enhance the logistics processes through implementing/incorporating modern management practices that facilitate the access to new technologies. The elimination of some intermediate links in the supply chain will result in achieving a lean logistics system and in lowering financial pressure. They will determine the elimination of excess stocks, responsiveness and best solutions to mitigate the impact of possible defects, even before they become manifest.

Moreover, the revolution in logistics has a major influence on the equipment and assets readiness. The use of modern assessment techniques, the proactive monitoring of the specialised structures readiness level, online acquisitions, real-time distribution, total logistics system visibility are but a few of the attributes that will mark future logistics. In order to reform the logistics system it is necessary for the responsible factors in the military to collaborate not only with the other state institutions, with reliable economic agents in the state or private sector, but also with the external partners¹⁰.

In general terms, logistics transformation depends on the successful integration of the logistic system with the other related systems, which will result in not only the achievement of a “*common logistics picture*”, but also in the implementation of real-time and proactive logistics management. This lies at the root of the future predictive, anticipative and responsive logistics system able to meet the requirements of modern armed forces.

English version by
 ***Diana Cristiana LUPU***

¹⁰ Roger Houck, *Adequate Logistics Footprint*, in *Army Logistician*, May-June, 2000, p. 97.

LOGISTIC SUPPORT AND ITS CONTRIBUTION TO THE SUCCESS OF MULTINATIONAL OPERATIONS

Lieutenant Colonel Dr Bixi-Pompiliu MOCANU

The efforts of the logistic community within NATO to accelerate the transformation of logistics brought about another series of changes, not only from a doctrinal and operational point of view but also from the perspective of the attitude towards the fighters' needs.

According to NATO, the major challenge for the Alliance in the next few years will be to counteract the asymmetrical threats in a world that is constantly changing. To give a credible response to these challenges, NATO logistics should be able to provide a global capability meant to support forces with expeditionary nature and for a long period of time outside NATO's area of responsibility. For the military specialists, this goal cannot be achieved without an increased level of integration between the logistic systems of NATO's member countries.

Keywords: *armed confrontations; asymmetrical war; battlespace; multinational forces; force projection; operational effort*

The military conflicts that have occurred after the dissolution of the communist bloc, more precisely after 1990, have highlighted a series of aspects related to their causes, preparation, development, completion and especially the associated consequences. The lessons learned from them have emphasised the fact that war, as any other social phenomenon, has evolved as far as the doctrinal, conceptual, procedural and actional aspects are concerned, taking into consideration the internal as well as the external risk factors that are present at the geopolitical and geostrategic level. These are the reasons why we may appreciate that modern warfare is mainly characterised by¹: different thresholds of violence; different weight attached to confrontation in multiple domains and environments; proper laws and principles to apply; alternation of forms and procedures to conduct war; specific organisation and strict specialisation of participating forces and assets; limitation of actions in time and space; observance of special rules and juridical norms.

Lieutenant Colonel Dr Bixi-Pompiliu Mocanu – Joint Logistics Command.

¹ A. Baboş, I. Bărbulescu, *Războiul secolului XXI*, www.actrus.ro/buletin /2_2000/articol9.html

Taking all these aspects into consideration, we appreciate that the future warfare will be defined by the following characteristics: direct armed confrontations will have a narrow scope, being based on simple strategies appropriate to the established objectives; the differences between the state of peace and that of war will be discrete, and their meanings will not oppose each other; the use and engagement of non-violent means and actions will grow exponentially; the engaged forces and assets will belong to the category of those considered “*ecological*”; the confrontations in the area of information warfare will weigh heavily, being channelled towards countering the adversary’s intentions.

Undoubtedly, the future warfare will be conducted in the information environment, and it will bear, in essence, the mark of the new technical and armament systems, as well as of the latest outcomes of the technological revolution, which will lead to a change in the techniques, procedures and methods of conducting military actions, and implicitly in their physiognomy and in the configuration of the battlespace. In this context, we consider that although the military actions organisation and planning will, undoubtedly, depend on the performance of the personnel filling command positions in the military system, the decision-making processes regarding the way of executing military operations will be assisted by specific information technology, while their practical execution will be achieved using high-performance technical assets having artificial intelligence and high-precision hitting capabilities and firepower.

It is considered that there are three main directions related to the way conflicts manifest at the beginning of the 21st century, highlighting the following aspects²: a limitation with regard to the warfare (armed conflicts) typology to those that are convenient for the economically and militarily developed states; the preservation of a wide array of armed conflicts (new and old types) in the strategic practice of the countries that are less developed; asymmetric conflicts.

Although there is a genuine debate on the theme of modern warfare asymmetry, many experts in the military field consider that the association between the terms *warfare* and *asymmetry* (asymmetric warfare) does not really mirror the existent reality. It is motivated by the fact that an important asymmetric component is present in any wars (military conflicts)³, as without asymmetry

² I. Bărbulescu, *Caracteristicile principale ale războiului la începutul secolului XXI*, www.armyacademy.ro/reviste/3_4_2002/r6.pdf

³ General-maior dr. Liviu Habian, *Asimetrii cu potențial conflictual și conflicte asimetrice*, in *Cunoaștere și progres*, the 6th Scientific Paper Session, “Nicolae Bălcescu” Land Forces Academy, Sibiu, 2002, pp. 15-20.

it would be impossible for conflicts to appear and develop. This viewpoint is grounded in aspects that substantiate asymmetry as follows: different finality of the strategic military objectives of the parties involved in the conflict; the quality and quantity of the engaged forces and assets; techniques, methods and procedures that are different from the doctrinal standpoint etc.

For our perspective, we consider the evolutions on the political, economic, social and military planes, at the geopolitical and geostrategic level, based on the necessity of assuring a state of security at global level, require for such military conflicts to be resolved especially through the participation of international security organisations, such as the United Nations Organisation, the Organisation for Security and Cooperation in Europe, the North Atlantic Treaty Organisation or the European Union.

Taking into consideration the experience gained in the theatres of operations in former Yugoslavia, Afghanistan and Iraq as far as the physiognomy of military actions and the configuration of the battlespace are concerned, a series of characteristics is highlighted, which will become more and more evident and prominent in time. In this regard, the strategic changes in Europe, the enlargement of NATO defence area, the Alliance assuming out of area missions have imposed the conduct of military actions far from the national territory as a top-ranking obligation. Through their expeditionary and multinational character, these types of military actions have brought the issue of sustaining forces for long periods of time in the forefront, and implicitly, have required for new ways of logistic support to be found, either through each participant country national capabilities or through bi- or multilateral agreements.

To assure sustainability for periods lasting between 6 and 12 months, the participant countries have "*obliged*" to assure logistic support flows permanently far away from the common infrastructure. On the other hand, the enlarged logistics area and the existent lines of communication become factors that contribute to the vulnerability of the actions carried out by own forces, irrespective of the measures to support the actions and to protect the forces. From the logistic standpoint, the multinational force sustainability becomes an extremely complex set of measures conditioned by a lot of economic, financial and human factors that should be taken into account. It is evident that to overcome many of these difficulties as far as the logistic support is concerned, taking into consideration the extent to which NATO involved in Afghanistan, a series of measures have been taken at the Alliance level, meant to create new logistic support capabilities that allow its forces to carry out operations across the full spectrum of conflicts.

To assure the necessary and sufficient logistic support efficiently and effectively, considerable efforts have been made, at NATO level, regarding the following domains and directions⁴:

- the achievement of an integrated supply chain;
- the definition and simplification of standard processes;
- the use of most valuable products and services;
- the achievement of the necessary capabilities for a joint-type force;
- the technically unlimited access to information;
- the integrated data-based working environment;
- the definition and use of critical success factors;
- the enhancement of the acquisition-supply-maintenance-transportation-distribution cycle times;
- the management of the entire life cycle through the integration of procurement and adjacent logistics processes;
- the achievement of the set objectives in the field of deployment and logistic support for all types of operations;
- the achievement of *Total Assets Visibility – TAV*, through the *NATO Logistics Information System – LIS*, completely integrated and secured;
- the achievement of the set levels of quality and efficiency concomitantly with cost reduction.

It is appreciated that, within NATO, the courses of action to mitigate the risks the multinational forces logistics system may be exposed to in NATO- and even EU-led operations are aimed to⁵:

- interconnect the logistics system to the troops command and control system, allowing them to “see” the same picture of the battlefield and to rapidly make viable decisions;
- modernise the distribution system to assure the rapid and easy delivery to fully meet the requirements regarding the logistic support, in the right place and at the right time;
- pre-position the resources in the mission area, which would surely lead to the improvement in the forces capacity to move wherever in the world;
- integrate the NRF supply chain in the NATO supply chain, taking into consideration the two directions of such a connection;

⁴ Locotenent-colonel ing. Petru Tălmăciu, *Transformarea logisticii*, in *Observatorul militar*, no. 15 (18-24 April 2007), p. 16.

⁵ C. Almășan, *Dimensiunea multinațională a forței de răspuns a NATO (NRF) și impactul său asupra integrării lanțului de distribuție*, in *Stabilitate și securitate regională*, International Scientific Paper Session, “Carol I” National Defence University, București, 9-10 April 2009, Section 6, Logistics, Finance and Accountancy, p. 104.

- assure the necessary visibility, from the individual to the unit, large unit, strategic base and backwards, as far as the flow of available resources is concerned.

Currently, starting from the fundamental changes in the military actions physiognomy, it is appreciated that the logistics system should be organised like a network, integrated into the force structure and permanently connected to resources. It is appreciated that the network-like organisation of a logistics system is extremely difficult to achieve. Moreover, it can be effectively achieved only on the national territory or in the area controlled or managed by the own forces. Without excluding such a possibility, it seems that “... *the logistics system integration not only as such but also into the force structure is a solution that would simplify the operation and even the war planning, as it is known that any effective planning should start with resources*”⁶. In this regard, the integrated logistics system will be able to adapt to the exigencies regarding the self-sustainability of the forces in the theatre of operations.

On the other hand, through focusing the logistic support on the troops, the logistics structures need for visibility can be assured, so that they can rely on velocity and flexibility rather than on stockholding. The achievement of these desiderata will assure the rapid protection of forces, due to the existence of some logistics structures that have an as small as possible logistics footprint and that have functional supply and distribution chains available⁷.

In direct correlation with the mentioned facts, there are opinions within NATO that the decrease in the logistic footprint for the structures deployed in the theatres of operations cannot be achieved without a consistent effort meant for the adoption of best commercial practices in the relationships with the economic agents that provide goods and services. Thus, preserving coherent relationships in this field would contribute to the enhancement of competitiveness and to the consolidation of partnerships with the involved economic agents, while the decrease in the stocks and in the number of the involved personnel would lead to the decrease in the logistic footprint for stocks and infrastructure, as well as in the logistics structures personnel. This way, it is considered that costs may be reduced, the logistics structures flexibility may increase, and combatant units may be provided with the logistic support that is necessary for them to be deployed not only at short notice but also everywhere in the world.

⁶ B. P. Mocanu, *Considerații privind evoluția conceptului de logistică. Tendințe actuale*, in *Stabilitate și securitate regională*, International Scientific Paper Session, “Carol I” National Defence University, București, 9-10 April 2009, Section 6, Logistics, Finance and Accountancy, p. 58.

⁷ *Focused Logistics*, www.historyofwar.org/articles/concepts_focused_logistics.html

All these “worries” and challenges within the Alliance logistics community became visible once NATO got involved in Afghanistan. Although it was a real-time reaction to the challenges generated by the new confrontation environment, some of the adopted measures did not exactly meet the troops requirements. Noticing the almost exclusive reliance on airlift to rotate and supply the forces in Afghanistan, NATO has considerably developed the strategic lift planning capability, which will have a beneficial impact on the own forces expeditionary planning⁸.

From the operational standpoint, although there are rules and regulations related to this fact provided by the doctrine, the main logistics effort started to focus on meeting the commander’s intent, in all the phases of the operation, taking into consideration the support velocity (pace) and quality and not the quantity and effectiveness. In this regard, we appreciate that, through the synchronisation of the operational effort with the logistic one and through the access to the common operational picture as far as the two compartments are concerned, the necessary information is provided so that the following aspects could be assessed/quantified: the evolution of the commander’s intent throughout the development of military actions, the changes in the tactical and operational conditions, the multinational force assets and equipment readiness etc. Last but not least, a more effective logistic support planning process is assured due to the real and timely information.

Taking into account the ever-changing situation on the battlefield, we think that considering all the statistical data is not enough to provide the combat forces with the necessary logistic support in the future military actions. That is why the logistic support should become more and more proactive, it should dynamically adapt to the ever-changing situation and, last but not least, it should anticipate the fighting structures requirements.

The efforts of the specific communities within NATO to accelerate the logistics transformation process have brought about another series of changes, related not only to doctrine, procedures and actions, but also to the attitude towards the fighter’s needs. Thus, the concept of “*logistics common operating picture*” has been implemented, effects-based logistics operations have been engaged, and the available capabilities have been focused on meeting the commander’s intent. Last but not least, major attempts have been made to meet, from the actional perspective, the requirements related to the new physiognomy of the battlefield; thus, the elements of the logistics disposition as they used to be known, the logistics process and the support lines associated to hierarchical echelons have been given up.

Today, we speak about logistic support of joint forces, integrated logistic support, reduced logistics footprint, total asset visibility, real-time support

⁸ D. A. R. Palmer, *Provocarea transformățională a Afganistanului*, www.nato.int/docu/review/2005/issue2/romanian/art2_pr.html

capabilities, based not only on anticipation but also on requirements (not the classical ones) facilitated by sensors, supply chains to the point of effect from the nearest point of supply in the nearest source of supply (no matter the echelon or the category of forces it belongs to), supply chain management, reverse logistics or about logistic effort expressed in effects.

Nowadays, modern logistics assures the alignment of troops' requirements with the economic agents through the logistics bases in the theatres of operations, connecting the point of effect with the source of supply and thus providing the desired autonomy. The decisions regarding the establishment of supply and distribution sources are made within the logistics bases, taking into consideration the operational situation, while the data that lie at the basis of adopting one supply method are related to the desired effects and not to the known distribution rules.

This way, it is considered that the commander's intention, including the ways in which fighting forces express depending on the desired effects, becomes one of the most important factors that influence the practical approach to the logistic support. The implementation of the commander's intent in the logistics support plans, in the actions conducted by the logistics forces, is today manifested in all the areas of responsibility of the logistic support and directly relates the force capabilities to the available assets and equipment. We consider evident that when the logistics transformation process is completed, the specialised structures will be able to meet the troops' requirements no matter the type of military action, time, season, and weather conditions.

The flexibility and effectiveness of modern supply and distribution chains will contribute to the achievement of an optimal relationship between demand and supply, based on the enhanced autonomy of the logistics structures in the battlespace and on an increasing adaptability at the level of stocks. Thus, we consider that logistics will be able to equally meet the "appetite" for materials of the different fighting large units, units and subunits, irrespective of the category of forces they belong to, and not only their own needs but also the ones of the allied forces in the theatre of operations.

If, at the tactical level, the structural and operational changes in logistics large units and units, can already assure a high pace in conducting military actions in the theatres of operations, when the involvement level of the *Joint Logistics Command – JLC* is considered, from the operational level above, we think that this action should be directed to coordination more than to execution. What should be available to such a command is the above-mentioned joint supply chain that should have multimodal, nodal and functional capabilities available. In this regard, the JLC supply and distribution network should have total asset visibility and an integrated and vertical picture of the supply and distribution chain, so that it could fully support the multinational force commander's intent.

A series of questions may be raised here, such as whether logistics, through the available capabilities, will meet the requirements that come from the troops. We consider that, through integrating the logistics command and control system in the one of the combatants, through providing the logistics structures and the available equipment with the new *Sense and Response Logistics Capability – SRLC*, *Blue Force Tracker – BFT* etc., this questions will have an answer, the total support respectively. Through connecting the logistics system to the troops command and control system, through the access of the logistics decision-makers to the information from the battlefield, meeting logistics requirements will be grounded in a pertinent, accurate and reliable analysis.

At the level of NATO leadership, it is considered that the major challenge for the Alliance in the years to come will be to counter asymmetric threats in an ever-changing world. To provide a credible response to these challenges, NATO logistics should be able to support joint and expeditionary forces globally, outside the North Atlantic Alliance area of responsibility, for a long period of time. In the military experts' opinion, this desideratum will be impossible to achieve without a high level of integration between the logistics system of NATO member countries. Integrated logistics is an essential characteristic of a viable, efficient and effective logistic system that allows for joint deployment and support of expeditionary forces wherever in the world. We agree with the opinions according to which integrated logistics can provide a multinational force structure with the necessary effects-based capability. In this regard, the integrated logistics network may substitute the national supply and distribution chains and may provide all the participant countries with the quality of being a potential source of resupply (for the forces that belong to other states involved in the multinational force). The climax of this effort will be the achievement of an effects-based logistic system able to support the multinational force actions, irrespective of the conditions.

From the decision-makers standpoint, due to such an integrated logistics system, commanders will be provided with total inventory in motion visibility and with the necessary information regarding the quantities of materials in warehouses.

In our opinion, all these transformations in logistics prove that logisticians have always been and they will continue to be connected to the needs of fighting forces, on only one "*condition*": to be treated as equal partners, as military men who do not want the success of military actions to be credited to them but only to be respected by those whose success they have contributed to.

English version by
 *Diana Cristiana LUPU*

AIR FORCE LOGISTICS IN THE NEW SECURITY CONTEXT

Lieutenant Colonel BEng Nicolae BUGA

Motto: “A real knowledge of supply and movement factors must be the basis of every leader’s plan; only then can he know how and when to take risks with those factors, and battles are won by taking risks”.

Napoleon

The new security context, as described in the London Declaration, has required the reorientation of the use of air forces. The importance has shifted from permanent regional forces to extremely mobile units, capable of rapid response, ready to operate inside or outside a region. This task, as the author points out, is adequate for the air means, on condition that they are provided with proper logistic support throughout all the phases of the operation.

In this respect, the author mentions that logistic support can be provided, as much as possible, by means of Host Nation Support, yet, the creation and procurement of own logistic support deployable modules are essential, as these can be used to overcome the possible shortcomings encountered in unequipped or poorly equipped bases.

Keywords: *support structures; deployable modules; command and control; deployment operations; force multiplication*

The air power has the unique ability to concentrate forces and to carry out the manoeuvre on long distances, in a short time. The successful use of this ability depends, among other things, on the capacity to provide logistic support (a critical element – the provision of large amounts of fuel) and proper infrastructure, given the circumstances in which the armed systems of the air forces are more and more complex and sophisticated, from the technical point of view. Logistic planning must take into account these features that are specific to air power logistics. Consequently, the stocks, on classes and categories, must be provided, ever since peacetime, through the careful supply and optimal distribution of resources and supplies. The air force logistic support, its specific principles and procedures must be tailored to meet the requirements of air units and support structures. At the same time, special attention must be paid to the compatibility

Lieutenant Colonel BEng Nicolae Buga – the Air Forces Staff.

and interoperability with the logistic support structures of other components in order to cut costs and time of supply.

Generally, the difficulty in providing logistic support for the air component has many aspects, varying from the one specific to aircraft, on the one hand, to the ones regarding *Ground Based Air Defence (GBAD)*, on the other hand. Normally, *GBAD* systems have their own elements of full support, which need a relatively reduced infrastructure, being limited by own supply capabilities.

The New Security Context – New Approaches to Logistic Support

The new security context, as described in the *London Declaration*, has required a reorientation of the use of air forces. The importance has shifted from permanent regional forces to extremely mobile units, capable of rapid response, ready to operate inside or outside a region. This task is adequate for the air means, on condition that they are provided with proper logistic support throughout all the phases of the operation.

Logistic support can be provided, as much as possible, by means of *Host Nation Support – HNS*, yet, the creation and procurement of own logistic support deployable modules are essential, as these can be used to overcome the possible shortcomings encountered in unequipped or poorly equipped bases. These modules may include airdrome services, fuel transport and supply, manipulation of air cargoes, medical care, feeding, provision of accommodation and technical spaces, facilities for operation and maintenance.

Until recently, the maintenance and support of air force units were provided by the logistic units from the main operating basis, in which there was a sophisticated infrastructure for supporting aircraft and weapon systems. In addition, logistic command and control elements were located in fixed command centres.

To operate from unequipped bases or locations, a new approach to the logistic system is needed. This seeks to lower the costs through the maximum use of local resources, whenever possible. Moreover, multinational cooperation must be used at maximum.

Essentially, the conception of logistic support for the air forces is based on the fact that the countries that send troops will deploy their air forces with own logistic support that is sufficient for initiating operations and will settle the resupply arrangements to support them. The level of deployed support will take into account the available *HNS*, the *Logistic Lead Nation – LLN* or the *Logistic Role Specialist Nation – LRSN*, as well as bilateral logistic arrangements, if necessary.

In the field of multinational logistics, it is vital to set some guiding lines in the context of a coherent logistic conception that establishes the responsibilities of each element regarding planning and leading multinational logistic operations.

Essential Factors In Deployment Operations

The air forces have permanently developed the support conceptions in order to compensate for the inherent fragility of logistics, as well as to increase striking power.

A critical aspect in the logistic planning process, at any level, consists in determining the total amount of necessary fuel. As far as aircraft and helicopters are concerned, this depends on their diversity, configuration and the type of mission in various stages of the conflicts. The fuel supply system should consider these requirements. The fuel supply requirements should be identified from the early stage of operational planning and, if necessary, the refuelling capability should be enhanced through the provision of the *Tactical Fuel Handling Equipment – TFHE*.

Another critical domain is the air munition deployment, stockage, preparation and hardpoints, which can generate serious operational and logistic limitations that must be considered during the logistic planning process. The analysed factors include the armament load, dimension and handling features during transportation, the safe distance from explosives that must be respected in the transit areas, stockage and maintenance areas and armed aircraft dispersal areas.

In the *Main Operating Base – MOB* and in the hardstands of *GBAD*, there are capabilities for carrying out the “O” and “I” levels of maintenance (the first and the second line). In the case of deployment in *Deployed Operating Bases – DOBs*, one can decide the limitation of the maintenance capability to only the “O” level (the first line) – reparation through *Line Replaceable Unit – LRU*.

Maintaining and repairing own aircraft, *GBAD* structures, as well as all facilities and means is national responsibility. To support compatible weapon systems, bilateral or multinational arrangements can be signed, whenever possible.

The big amount of materials that is necessary for providing logistic support in case of deployment, starting from stockage and manipulation of combat technique and materials, provision of food, procurement and provision of services of any kind, requires their division/palletisation on categories. For maintenance, the situation is different, considering that, usually, it is cheaper to perform “I” and “D” levels of maintenance (for the second and third line) within the *MOB*, because of the high costs involved by the deployment of related equipment, parts and materials.

It is probable that the *Deployed Operating Bases* are not in the *Area of Operations – AOO* and, for that reason, they may not be well supported.

Support Provided to Force Elements

The logistic support conceptions and procedures must express the effectiveness of the military organisational system and the capacity of logistic provision of own elements for the initial period. The conceptions will include the cooperation arrangements, the authority and the role of expert in a logistic domain, elements through which a flexible engagement of logistic means will take place. The requirements will be met through striking a balance between the provision and stockage of logistic means in peacetime, and the resupply capability, thus ensuring a timely and continuous logistic support for sustaining a wide range of military options. This sustainment capability must be supported by an adequate transport capability, a proper positioning of technique and materials and an efficient planning and coordination of movements.

Force-Multiplying Factors

Using *Aircraft Cross Servicing – ACS* and *En-Route Bases – ERB* are instrumental in multiplying the force. These factors can be used to improve flexibility, to overcome the limitations imposed by aircraft range, as well as to increase the number of aircraft sorties.

Other three force-multiplying factors are:

a) *Air-to-Air Refuelling (AAR)*. During operations, to increase aircraft flight autonomy, it is necessary for large amounts of fuel to be supplied from tanker aircraft, the missions being assigned to the *Air-to-Air Refuelling Co-ordination Centre – AARCC*.

b) *Air Transport (AT)*. During crisis (conflict), air transport means that are provided by the force-contributing states can be allocated to a NATO commander who will exert operational/tactical control over them: *Operational Control/Tactical Control – OPCON/TACON*. If these means are deployed in the theatre of operations, normally they are sent to the *Joint Force Air Component Command – JFACC*, and the missions are assigned by the *Regional Airlift Co-ordination Centre – RALCC* together with the *National Movement Co-ordination Centre/Joint Transport Co-ordination Cell – NMCC/JTCC*. Moreover, an *Intra-Theatre Airlift System – ITAS* can be created, formed from all or from part of the existing transport means, in support of the deployed forces. The unique command is the main requirement to provide maximum efficiency of transports and to minimise the risks of duplication of tasks or even fratricide in the *Area of Responsibility – AOR*. For *Out of Region/Out of Area – OOR/OOA* operations, the states should send information regarding the transit loading based on the *Automated Data Processing – ADP* system, through the *National Logistics Liaison Team – NLLTs*.

c) *Assets Tracking*. A collective equipment tracking system provides a timely and exact record of the available resources and makes it possible for the efficiency of their use to increase.

Multinational Logistic Support

Normally, air forces have their own logistic resources. Nevertheless, the states will adopt logistic solutions based on cooperation, whenever possible, for all types of operations. The existing reciprocal support arrangements will be used, which can be extended to comprise other participants, if necessary. Reciprocal logistic assistance, as well as a series of cooperation and direct support agreements for certain weapon systems must be included in the conception of logistic support. Moreover, determining and using the maintenance and support equipment that must be deployed will be coordinated in such way so it could eliminate, if possible, the duplication and the use of host nation support. The “*multinational*” and/or “*joint*” feature should be used as much as possible, especially when they are cost-efficient and beneficial for the entire mission. *Logistic Lead Nations (LLN)* and *Logistic Role Specialist Nations (LRSN)* play a critical part in optimising the multinational air logistic support. The states will determine how to refund the received assets and services: reimbursement, replacement in kind, direct payment or equal value exchange.

The logistic domains and functions to which the principles of multinational and/or joint logistics can be applied are the following: movement control in a theatre; use of lines of communications; distribution towards the theatre of operations and inside the theatre of operations; management of airports of debarkation; air transport; rations and water (first class); fuels and gas (third class) – the adoption of the conception regarding the unique fuel will simplify the procurement and distribution of fuel between states; medical care; *GBAD* support; contracting (procurement); asset tracking; other services (whenever possible, the unique management principle will be used); the sharing of airbases by more nations; the disposal of hazardous waste.


Selective Bibliography

***, *Manualul pregătirii și executării misiunilor militare în afara teritoriului statului român de către contingentele naționale*, Centrul Tehnic-Editorial al Armatei, București, 2005.

***, *NATO Principles and Policies for Logistics*, in *NATO Logistics Handbook*, Brussels, 2007.

***, *AJP-4 – Allied Joint Logistic Doctrine*, December, 2003.

***, *ALP 4.3 – Air Forces Logistics Doctrine and Procedures*, September, 2002.

English version by
 **Iulia NĂSTASIE**

THE ROLE OF TRANSPORT INFRASTRUCTURE IN PLANNING JOINT OPERATIONS LOGISTICS

Lieutenant Colonel Dr Marian MAZILU

The experience of the conflicts of the last century and the unprecedented development of the armed forces illustrate very obviously the great importance that is attached to the complex use of all categories of means of transport for the successful outcome of the military actions. In the author's opinion, meeting the extremely huge transport requirements of the armed forces in the conditions of the modern war is unconceivable without the complex use of all categories of lines of communications and means of transport – road, rail, naval, air and special ones.

In most military confrontations, railway and road transports were mostly used, the other means of transport, naval, air and through pipes, playing a secondary part, most of the time as supplements to the others.

Keywords: *lines of communications; unconventional weapons; area of operations; combat means; national communication system; transport structure*

Transport infrastructure provides the dynamism of the action without being its dynamic element but only its material support. As an important element of the military action, transport infrastructure represents a *sine qua non* of its efficiency. It cannot be considered and approached in an isolated manner, but only in close connection with its multiple and complex utilities, in a broad, civil-military, spectrum.

Transport infrastructure is not done by itself. It has always represented a problem, influencing the functional fields of logistic support and, implicitly, the military actions. It has never fully met the requirements of modern combat, being rightly considered as the artery of theatres of war. That is the reason why it is paid special attention. This is inevitable, because, in a way, the infrastructure is expected to keep pace with the new civilisation leap and even to outstrip other components of economic-social development.

That is why we reckon that transport infrastructure plays an important part in tailoring

Lieutenant Colonel Dr Marian Mazilu – the Land Forces Staff.

the military system to meet the new requirements of the security and defence strategies. As Romania's national security strategy is more and more acquiring a European profile, and the strategic objective aimed at the integration of our country in the European Union has been reached, transport infrastructure has gradually entered the European configuration, thus meeting the concept of common European security that is taking shape on the horizon of the third millennium.

Transport infrastructure is essential to the transport process; it is the material support that makes it possible for various transport, product and personnel means to be deployed. A well-organised and safe transportation in any environment is highly important in gaining success in any military confrontation. The increasing importance of transport in the circumstances of modern combat is determined by meeting both the rising needs of the economy, whose volume of production for defence within production logistics will increase and the needs imposed by consumption logistics as well as carrying the military actions per se, in which force and means manoeuvres from one direction to another and providing their logistic support will be instrumental in obtaining victory.

In most military confrontations, rail and road transport used to be the most important, the other means of transportation, by water, air and through pipes, playing a secondary part and, most of the times, supplementing the others.

Increasing the troop's manoeuvre capacity and the highly dynamic nature of joint military actions have determined the increase in logistic transports. Transports take place on several directions, often in large volumes and in a very short time, in the circumstances of the permanent danger of some elements that are specific to transport infrastructures to be destroyed or taken out of service.

Towards the end of the last century and the beginning of the current one, combined logistic transports have begun to be widely used, especially the air and naval ones. The huge amount of deployed technique and materials, necessary for the actions carried out by the Alliance forces in the theatres of operations in Iraq, Afghanistan and Bosnia-Herzegovina, represent the true example of the efficient combination of all means of transportation, transforming the provision of logistic support for combat forces in genuine logistic operations.

In the 21st century conflicts, the success of the military operations is determined by the efficiency of the process of resources generation and regeneration. Transports acquire special importance, the forces combat and manoeuvre capacity highly depending on their well organisation, planning and execution.

The considerable increase in the aircraft range and the possibility of broadly using unconventional weapons, missiles and weapons of mass destruction have triggered, among other things, the increase in the vulnerability of lines

of communication. If, in the past war, the lines of communication within the area where military actions were led had certain stability, in the circumstances of joint military actions, these will be as exposed to enemy attacks as the communications in the areas of combat actions. In fact, the destruction of enemy land communications may represent a priority in military actions.

Thus, as the volume of transport needs increases, the vulnerability of lines of communication increased. That is why, in the circumstances of the continuously rising transport needs, a problem occurs with regard to maintaining the lines of communications viable. In our opinion, this aspect is perhaps as important as the military action, in its whole, the need for providing the movement being determining for the fulfilment of the mission. The growing dependence of modern armed forces upon transports of all kind requires the rapid averting of any obstacle of any nature generated by the enemy on the lines of communication. The destructions caused by enemy air and land attacks on the lines of communication that are used in the entire area of combat actions must be immediately eliminated, the recovery of damaged sectors being made, as much as possible, at the same traffic capacity as before they were damaged.

The impact of the technological boom on the combat technique and means of the latest years, combined with the highly dynamic and manoeuvrable nature of joint military actions have determined the continuous increase in the role of mobile transport categories, both in providing troops manoeuvre and in material transports. Undoubtedly, the rapid development during the latest years of auto and air means of transportation, which takes place faster than the one of railroads, will add to this.

The experience of the conflicts in the last century and the unprecedented development of armed forces show rather clearly the great importance of the complex use of all categories of means of transportation for successfully carrying military actions. Meeting the huge demand for transportation of the armed forces in the circumstances of a modern war is unconceivable unless the complex use of all categories of lines of communications and means of transportation – road, rail, naval, air, as well as special ones (through pipes etc.). Today, one cannot ask which category of means of transportation is predominantly used during a joint military action. Depending on the missions, the concrete situation and the nature of the field, the status of transport infrastructure and the rolling stock, there will be one category or another that will have the most advantages, at a given moment. The problem is not substituting or opposing a means of transportation to another means of transportation but, on the contrary, their multilateral and advantageous use, taking into account the characteristics of each of them. Not just the action

per se in which the participating forces are involved at a given moment but especially the need for units and large units deployment and redeployment from one area of operations to another urgently require this use. Therefore, the fundamental principle of the organisation of military transports within a joint operation is the combined use of various means of transportations in keeping with a plan and under a single command.

As far as transport infrastructure is concerned, military actions acquire, throughout their conception and development, new aspects and more and more diversified requirements. In joint operations, the theory and practice in the field of military transport must not be seen only as a system of measures regarding the organisation of the use of some means of transportations that are considered as being the most advantageous at a given moment. Studies and research must first of all deal with the problem of the standardisation, cooperation and interoperability between various categories of transportation means of the categories of armed forces that take part in the joint operation, as well as between them and the ones of the NATO member states within the common development of military actions.

At the same time, with regard to NATO operations, as well as to operations carried under the aegis of the UN, especially during contingents deployment or redeployment, the problem of the interoperability of technical means is certain to arise, during embarkation and disembarkation, but especially during common transports.

The essence of the continuity of the transport process during joint operations is represented by the combined use of various means, the provision of interoperability and its functioning, concomitantly with the thorough organisation and planning of transports.

The configuration of lines of communications must make it possible, depending on the situation, for the optimal routes of military interest to be chosen, at the same time, providing ways to conceal the forces. On the national territory, the lines of communications, both road and rail ones, that cross the main passages in the Carpathian Mountains provide possibilities for large units and units to go from one area of operations to another, with certain restrictions.

We reckon that, irrespective of the level of execution, from the military point of view, the *“recipe for success”* of a joint action consists, besides the capacity to correlate the optimal effort of the participating forces, in organising the action and tailoring it, depending on the possibilities provided by the existent infrastructure, as well as in tailoring the infrastructure to meet the requirements of the actions, whenever possible. The sum of the opportunities provided by the infrastructures always resides in the result of the military action.

Providing the logistic support that is necessary for troops must take place through the maximum capitalisation on the possibilities offered by the existent infrastructure, because, considering the specific of the actions that characterise the 21st century, the short time of execution and their nonconformist feature, it is difficult to presume that the time, funding and workforce necessary to tailor infrastructure to meet the needs of military actions will be available. That is precisely why we reckon that the success of the military actions of this century must be based, at least from the perspective of using the infrastructure, on two fundamental principles, as follows:

- *adaptability of the action to the existing infrastructure;*
- *modernisation and optimisation of national infrastructure so that it meets real social and military requirements.*

From this perspective, it is important to correlate the elements of the two aspects, so that, ultimately, the ratio between the existing capabilities and the action could be as small as possible, having as few determinations as possible on military actions.

As a general conclusion, the situation of transport infrastructure, expressed through the density and modernisation indicators that are rather low currently points out the gap between the potential advantages that derive from Romania's very favourable geographical location and the delay in preparing the territory for defence. Therefore, we can definitely state that transport infrastructure can influence the logistics of joint operations through its "actions" or "inactions" on the functional domains of logistic support, thus being able to cause major malfunctions in providing it.

Starting from the statement according to which the relation between transport infrastructure and military actions will have to represent a major matter when making decisions by state institutions that are involved in the field of national security and armed defence of the country, with the purpose of optimising the territorial infrastructure, we will further make some suggestions that may be considered when establishing the courses of action:

1. Without claiming to cover the entire domain of reference, precisely because the array of critical infrastructures remains permanently open and variable, we suggest amending the provisions of the *Guide to the Identification of the Critical Infrastructure Elements in the Economy* with elements specific to the field of transportation, which influence the military action. In this respect, we reckon that the following aspects are determining for the country's critical infrastructure:

- the road network of national importance, as well as its vital infrastructural elements (works of art of strategic importance etc.);
- the rail network, with all related elements (works of art of strategic importance on the network; railway junctions; central operation sections;

railway networks supply with electricity, fuels and other vitally important materials; traffic command, control and directing; railway communication systems etc.);

- national air transport network, with all related infrastructural elements (airports; energy, water and gas supply systems; fuel depots; aircraft hangars and parks; control towers; air traffic control and navigation systems; other systems that contribute to flight safety and security);
- naval transport infrastructure (ports and their related infrastructure; the Danube-Black Sea Canal; dams; infrastructure elements specific to navigation safety and security);
- the national communications system infrastructures (phone networks and their nodes, communication centres, transport equipment, optical fibre routes and relays etc.);
- national information networks infrastructures (computer networks and databases of objectives with strategic importance, television networks etc.);
- special transports infrastructure (oil and natural gas pipes networks, either national ones or part of continental transport networks etc.).

2. Drafting a national *Catalogue of Critical Infrastructures* that concretely determines the infrastructural elements that are vital to the society, depending on *degrees of risk and providing concrete measures for their protection*. In this respect, we believe it is necessary to establish a few main courses of action, as follows:

- drafting a national strategy for protecting critical infrastructures, in keeping with international recommendations in the field. Establishing certain clear rules in this instance is necessary, considering the impact the destruction of an objective may have, able to have an effect on the regional security or generate malfunctions in the country's economy and, implicitly, to affect the economy of the other European countries. Thus, an accident, outside the limits of the project, at the Cernavodă Nuclear Power Plant might have catastrophic effects on the population and the surrounding environment, while disabling some segments of the transcontinental transport pipes might cause negative effects on the economy of several countries. At the same time, the European Union membership requires that great responsibilities are assumed as far as regional security is concerned;
- creating the *Critical Infrastructure Catalogue*, through making the inventory of infrastructure elements, on fields of activity, each one with its vulnerabilities, cross-border implications and actual solutions for providing their security.

3. In the field of transport infrastructure, the favourable conditions provided by Romania's geographical location must be capitalised on, sense in which one should seek to balance the infrastructure at various territorial levels (counties, regions),

on the one hand, and to tailor it to meet European standards, on the other hand. In this respect, it is necessary for the following aspects to be considered:

- more rapid construction of highways networks and new routes that should lead to increased road capacity and safety on the main directions of traffic growth and, at the same time, the provision of interconnection to the main European road transport corridors. We believe that the national programmes for the construction, development and modernisation of national roads, stipulated in the *Road Strategy for the Development of Transport Services for 2005-2015* and in *Law no. 363/2006* regarding the approval of the *National Plan for the National Territory Organisation* – Section I – Transport Networks, must be correlated with the requirements arising from the Capabilities Catalogue, by virtue of providing host nation support by Romania, especially on the main routes near the border. In this respect, first of all, it is necessary for the works regarding the rehabilitation of the infrastructure of access to the essential military elements of the Capabilities Catalogue (polygons, airports, ports), as well as their modernisation to be executed in order to meet any demand;
- the more and more alert continuation of the works for establishing communications to avoid towns, industrial areas or for moving some works of art on the main watercourses, necessary for traffic decongestion;
- the projection and achievement of some works with a view to increasing the carrying capability of the main works of art, the rehabilitation and modernisation of the existing ones to deal with the categories of the special technique the Romanian armed forces and the NATO forces are equipped with. This is indispensable especially for the paneuropean transport corridors that cross Romania, for the communications that connect Romania's main air ports of embarkation (APODs) and sea ports of embarkation (SPODs), as well as the main ways of access over the mountains.

4. Improving and upgrading the regional military monographs of the transport infrastructures with data that meet the current information requirements that are necessary to plan joint operations in all the areas of operations, including with data regarding the elements of the critical infrastructure. This monograph should provide concrete answers to problems such as:


- the existence of the lines of communications in the region, especially of the ones with increased movement capabilities; the degree of viability; the volume of means and materials that are necessary for a medium reparation, as well as the movement possibilities it provides in different conditions of time, season and weather; the sectors that limit or hinder the circulation of certain categories of military technique in various periods of the year;

- the existence and number of works of art created across mountains, the measures necessary for protection and defence, as well as their technical details (maximum travel speed, capacity for bearing the weight, height, width, gauge, dimensions and tonnage limitations);
- the regional repartition of transport infrastructure on types of infrastructures and its maintenance state;
- the possibilities of changing and ensuring continuity of movement in the situation when its major objectives are destroyed;
- the specialised forces and means that are necessary for providing the viability of transport infrastructure and establishing who is in charge of resuming functioning;
- the existence of exploitation roads and the possibilities to provide the needed road communications;
- the road, rail and maritime nodes and the minimum measures that must be taken to provide their security and viability;
- the regional possibilities for executing repair and maintenance works at the lines of communications, as well as the possibilities for providing campaign services for the effectives that are necessary to resume their functioning or formations of the lines of communications functioning, which control and direct the movement in the respective areas (forest districts, local administration, infrastructures that are specific to local public administration etc.);
- the minimum of technical means specific to forest exploitation that can be employed, when necessary, for both reorganising some sectors on the forest and rail communications in the area and unblocking the military and specific technique immobilised in certain heavy points on the routes.

Last but not least, we should mention the minimum necessary technical and material means that are indispensable for resuming the functioning of the obligatory crossing points over watercourses, as well as the critical points in their execution.

Selective Bibliography

- Dr. Grigore Alexandrescu, dr. Gheorghe Văduva, *Infrastructuri critice, pericole, amenințări la adresa acestora. Sisteme de protecție*, Editura UNAp.“Carol I”, București, 2006.
- Benone Andronic, Bixi Pompiliu Mocanu, *Sprijinul logistic al grupării de forțe de tip divizie*, Editura UNAp.“Carol I”, București, 2005.
- Colonel prof. univ. dr. Adrian Cernăianu, *Comunicațiile rutiere, influențe asupra manevrei de forțe și mijloace*, Editura UNAp.“Carol I”, București, 2005.
- Alexandru Manafu și colectiv, *Integrarea europeană, infrastructura teritorială și logistica apărării naționale*, Editura Centrului Tehnic-Editorial al Armatei, București, 2003.
- Locotenent-colonel prof. univ. dr. Mircea Udrescu, *Logistica corpului de armată în operație*, Editura AISM, București, 1993.

English version by
 **Iulia NĂSTASIE**

INTEGRATED DEFENCE RESOURCE MANAGEMENT IN THE CONTEXT OF MILITARY TRANSFORMATION

Lieutenant Colonel Vasile ENE

Military transformation, both within NATO and within the armed forces of the member countries, seeks to adapt the armed forces to the new security environment and, at the same time, to control possible evolutions in this environment.

In this context, as the author considers, the Romanian Armed Forces transformation is aimed at generating a modern, interoperable, flexible force structure, which is equipped with state-of-the-art technique, has a high degree of mobility and sustainability and is able to accomplish the entire range of assumed missions. The objectives assumed within this process consist in: creating command, combat, combat support and logistic support structures that are capable of fulfilling missions through concentrating the effects; developing a procurement and equipment process that meets the requirements of the other armed forces of the NATO member states; tailoring the legislative, conceptual and operational framework to meet the one that exists within the Alliance.

Keywords: *market economy; military confrontation; industrial society; security environment; courses of action; integrated management*

NATO's military transformation is necessary in direct response to the more and more complex challenges

and threats that have occurred at the strategic level, especially for the latest ten years. This process is permanently supported by the increasing need for the Alliance force to be multinational and joint, deployable whenever and wherever, coherent from the interoperability point of view. Thus, it is necessary for NATO to have capabilities that enable it to extend the number and sort of the operations, for which it may be required, in a broader geographical area as compared to the traditional borders.

The security interests and objectives of the European states do not generate states of conflict, the security environment being positively influenced by the European and Euro-Atlantic integration processes, the enlargement of the community of states that share and promote the values of democracy and market economy, the increasing regional cooperation. The risks

Lieutenant Colonel Vasile Ene – the Land Forces Staff.

of the occurrence of a traditional military confrontation on the European continent have significantly diminished.

Nevertheless, there are a few instability and crisis phenomena at the sub-regional level that persist, as well as some tendencies of some states fragmentation, marginalisation or isolation. Countries in Central, East and Southeastern Europe face economic, social and political difficulties, associated with the process of transition towards a society based on the principles of democracy and market economy, which can generate numerous risks to the security of the states in the region.

Under the impact of the scientific and technical revolution and as a consequence of some (economic, political, juridical social, ecological etc.) determinations, the current type of war and its essence – the armed confrontation – will gradually disappear from the interstate relations.

The dominant image of the industrial society that lasted over 100 years is changing because of the advent of the so-called information society. Its effects on the way of waging wars are less predictable in the current framework of the military thinking. The development of information technology will change the nature of future confrontations so much that it will determine the appearance of new doctrines and strategies, derived from other military structures, from other ways of waging war.

The progress in the information technology will bring about fundamental changes in the way of approaching, organising and carrying any kind of conflict. The efficient management of human, financial, material etc. resources, as well as the need for corroborating them in an integrated system become, given the current circumstances, major desiderata of the military research in the field. Thus, modern conceptual approaches, such as the *revolution in military affairs* or the *integrated defence resource management*, will be part of the contemporary military vocabulary, as well as an active part of the Romanian military system transformation process.

Integrated Approach to the Concept of Romania's Defence Capability Transformation

The adoption of the *Romanian Armed Forces Transformation Strategy* requires the adoption of the concept of NATO's transformation, through which, under the proposal and permanent coordination of the Allied Command Transformation, a continuous reevaluation of the military bodies from all Alliance member states will take place, in order to increase reaction speed and structural viability, in a security environment characterised by fluidity and hostility.

Military transformation, within both NATO and its member countries armed forces, seeks to tailor the armed forces to meet the new security environment and, at the same time, to control possible unexpected evolutions in this environment.

In this context, the Romanian Armed Forces transformation is aimed at creating a modern force structure, which is equipped with state-of-the-art technique, interoperable, flexible, has a high degree of mobility and sustainability and is capable of fulfilling the entire range of assigned tasks.

The objectives sought in this process consist in: creating certain command, combat, combat and logistic support structures that are capable of ensuring the fulfilment of missions through the concentration of effects, as a result of the implementation of the concepts of *Network-Centric Warfare* and *Effect-Based Operations*; creating a procurement and equipment system that is compatible with the one of the NATO member states armed forces, concomitantly with improving the preparation and training systems; standardising the legislative, conceptual and operating framework to meet the Alliance one.

In our opinion, the courses of action to enhance Romania's defence capability are determined by our country's vulnerabilities and strengths. In this respect, the approach to the concept of transformation in an integrated system must be aimed at reducing vulnerabilities up to elimination, at the same time with maintaining and, if necessary, developing the strengths depending on the situation.

The Alliance's mission to face all threats, as well as the nature of the constitutional responsibilities that fall upon it require the Romanian Armed Forces to develop capabilities that could make it possible for them to carry out operations on the national territory, in NATO's area of responsibility, as well as in a broader strategic environment, permanently influenced by factors that impose the change. In this respect, *"the Romanian Armed Forces transformation's main objective is the creation of a modern, entirely professionalised structure, that has a high degree of mobility, is efficient, flexible, deployable, sustainable, capable of acting jointly and of being engaged in a broad range of missions, both on the national territory and abroad"*¹.

At the level of the force structure, the fundamental purpose of the armed forces transformation is the fulfilment of the capabilities through which Romania will be able to meet the current and future challenges in the security environment. These will ensure the fulfilment of the specific requirements stipulated in the Constitution, the engagements assumed by Romania towards NATO, the European Union, as well as within regional initiatives and coalitions.

¹ *Strategia de transformare a Armatei României*, Bucureşti, 2007.

That is why we believe that the forces that will be engaged in future military conflicts will have to meet, first of all, certain organisational requirements, such as: joint and modular structure; permanent information support; joint logistic support; integration of tactical security elements; inclusion of specialised combat elements (CIMIC, PSYOPS etc.); own or especially prepared dispersal, training, embarkation/disembarkation bases; especially designed long distance transport and supply means; generation of an active force reserve.

On the other hand, the architectural structure of the forces is determined by functional requirements, among which: command and control elements with increased competences; information received directly from participating nations; direct relations between disposition elements of the groups of forces; mobility and capacity of rapid interchange of the role of different components (disposition elements); communication streamlining between own command points and the central command point, as well as with local elements (authorities) involved in the cooperation; the provision of an increased striking/action (combat) potential.

Defence is a fundamental matter of Romania's national security and consists in the range of decisions, measures and actions that the previously established state authorities and institutions adopt and put into practice, by means of the armed forces, both inside the country and abroad, in order to promote and preserve national interests, in keeping with the domestic legislation and the international treaties Romania is part of².

Defence is planned, organised and carried out with the purpose of preventing and rejecting an armed aggression on the Romanian territory or on the one of other states that are member of the alliances and coalitions Romania is part of, in order to meet the international engagements of the Romanian state, as well as to support national authorities in managing internal crisis.

The modernisation of the defence system is a major requirement for Romania, given that it is a "de facto" member of NATO and the EU and that entails the adoption of all political, economic, social and military measures needed for its components to reach optimal parameters, so that they could be capable of acting in accordance with the requirements of *Romania's National Defence Strategy*.

Integrated Defence Resource Management

An integrated management system is a model of global management that makes it possible for the range of activities of a body to be assimilated in a whole. This means the integration, in the same organisation of processes, of multiple

² Cf. *Strategia națională de apărare a țării*, publicată în Monitorul Oficial, Partea I, nr. 799 din 28.11.2008.

internal and external exigencies: quality, security, environment, legal and regulating exigencies and other results of the reference systems of own activity.

(Human, material and financial) defence resource management within the Ministry of National Defence is made in a modern, integrated approach. The essence of this type of management is represented by the concept of *integrated defence planning*, which designates the process of development coordination and of specific capabilities maintenance with the purpose of attaining the objectives of defence policy.

In order to reach the purposes of defence policy, specific objectives and priorities are established, in keeping with the domains of defence policy, the areas of interest (national, regional, NATO, EU etc.), as well as at the organisational levels. All these specific objectives and priorities are harmonised within the activity of integrated defence planning.

It is clear that integrated management is not possible, given the current modern circumstances, without efficient software and hardware that can draw near the continuous information flow, and all this takes place in the *network centric warfare*, where interrelation, permanent and extremely operative exchange of information, personnel awareness and increasing speed of command lead to the efficient and effective accomplishment of the mission.

These concerns are very topical especially that we witness a change in the *Network-Centric Warfare* itself, given that asymmetry increases, the post-conflict period is extended and the *CIMIC (Civil-Military Cooperation)* has become indispensable, being a modern concept used in all stability operations, which involves the existence of a unique and transparent database that makes it possible for decisions to be made in real time. The continuous information flow is one of the prerequisites of using the integrated defence management in support of the successful accomplishment of multinational operations. Information collection, analysis, dissemination and sharing will be critical.

Applying the *Planning, Programming, Budgeting, Evaluating System* and the programme budgeting in the Ministry of National Defence will acquire higher values, significantly contributing to the effective planning and use of resources, depending on the specific objectives and the established priorities, the commitments assumed by Romania within NATO and the EU and the requirements for reaching the performance indications within the management system evaluation. The efficient cooperation of the structures involved in defence resource management will determine the drawing up of programmes that are realistic in financial terms, focused on results and ensure the control of the funds spent, with increased transparency.

A very important prerequisite, if not a fundamental one, in accomplishing the objectives of integrated defence management correlated with international missions is the managerial interoperability with the allies. In these circumstances, one can speak of the existence of a veritable *system of systems*, therefore, when they all must be included in a unique integrated system, the managerial concomitance is attained.

NATO personnel requirements, both quantitatively and qualitatively, high costs for supporting the troops in theatres of operations, significant differences between the technologic level of the military equipment of the Romanian Armed Forces, to which material, preparation, training and education constraints add, are clearly defined benchmarks that must be considered when the priorities are established during the transformation and integration process.

The allied military forces will operate in a multilateral environment together with other countries and in close cooperation with a broad range of international, national and non-governmental organisations. The future military operations, related to other information, economic, social, legal and diplomatic initiatives, will need to be implemented in a measured, cooperative fashion.

*

The internal transformations are closely connected to the developments of the security environment and the status of our country as a NATO and EU member and implicitly call for the structural and conceptual adaptation of the military institution.

For the consolidation of Romania's role in NATO and the EU and the development of an adequate strategic profile within these organisations, of contributor to regional and global security, the Ministry of Foreign Defence continues the reform of the military body, developing a credible, modern and efficient defence capability. Moreover, the improvement of the mechanisms for the consolidation of the civil and democratic control over the armed forces, in keeping with the principles and values of constitutional democracy, is highly important.

Romania's NATO membership requires the harmonisation of the national defence policy with the evolutions within the Alliance and a substantial participation in the conceptual elaborations at NATO level will consolidate our country's profile in the organisation. An active role played by Romania within NATO is a prerequisite for the promotion of national interests at the inter-allied level and for the integration of Romania's security preoccupations in the decision-making process of the North-Atlantic Alliance.

Romania' defence policy, having the basic strategic objective of full integration in the European and Euro-Atlantic security organisations, is achieved through strengthening the relations with Western countries and enhancing bilateral and multilateral cooperation with the countries in its geographical area, as well as through meeting the standards imposed by the new technologies and doctrines used by NATO member states.

We reckon that scientific research in the fields of security, defence policy and integrated defence resource management is aimed at developing analyses, studies, programmes, survey reports, documentaries and scenarios needed for the fundament of the political-military decisions, the development of a security and defence culture, the exchange of ideas within the national and international scientific community to the benefit of the integration in the Euro-Atlantic security structures.

Bibliographical References

- Philippe Braillard and Gianluca Maspoli, *La révolution dans les affaires militaires, paradigmes stratégiques, limites et illusions*, <http://www.diplomate.gouv.fr>.
- Teodor Frunzeti, *Soluționarea crizelor internaționale*, Editura Institutul European, Iași, 2006.
- General dr. Mureșan Mircea, general de brigadă (r.) dr. Gheorghe Văduva, *Războiul viitorului, viitorul războiului*, Editura Universității Naționale de Apărare "Carol I", București, 2006.
- Alvin and Heidi Toffler, *Război și antirăzboi*, Editura Antet, 2000.

English version by
 **Iulia NĂSTASIE**

HOST NATION SUPPORT – A Booster for the Deployable Forces Capability –

Lieutenant Colonel BEng Cornel COMEAGĂ

The new logistic and operational conceptions and capabilities specific to deployable forces and expeditionary operations require the transformation of the classic operational context and enable the forward deterrence, through small-sized forces and backup.

Operations Iraqi Freedom and Enduring Freedom have already shown the importance of the increase in command readiness, as well as the terrible impact the network and force dispersal can have on the rapid force projection and the rising efficiency in the conditions of the modern battlefield.

In the new context, in order to achieve the desired kinetic or non-kinetic effects, the author reckons that the allied forces and coalitions will preponderantly use packages of forces and capabilities rigorously configured to meet the operational requirements. This will contribute to increasing the efficiency of operations and the flexibility and adaptability of command as well as to pronouncedly evening out C2 hierarchies.

Keywords: *capabilities; logistic support; expeditionary operations; stability and support; sending nations*

Imagine a geometrical centre of the European continent. The contemporary hot areas or the ones with major conflict potential are inscribed in a circular sector of about 80°, which, having a radius of approximately 5 000 km, includes the Caspian Basin and the Kashmir area in the east and Sudan and the other Sub-Saharan failing states in the south. Thus, it is obvious that, even through a simplistic approach to the problem, no matter the nature of the military operations, either combative or stability and support ones, providing the military presence of troops in the mentioned regions involves the strategic deployment and redeployment and, therefore, the *forces projection* in areas of operations that are located in remote regions, in austere living conditions and climate, as well as the *support and sustainment* of these forces during the mandate in order to reach the objectives and successfully fulfil the mission. This approach, centred on the military action per se, dominated the military thinking and practice towards the end of the last decade, and the *expeditionary operation* or the *expedition* was defined as the military operation carried out by armed forces to accomplish an objective in a foreign country. At the same time, the *expeditionary force*

Lieutenant Colonel BEng Cornel Comeagă – The Directorate of Logistics, the General Staff.

was and continues to be defined by some American handbooks as “a force organised to accomplish a specific objective in a foreign country”, and its utmost feature was *strategic mobility*¹. Unfortunately, no matter how vanguardist the concepts outlined at the end of the last century seemed, they are partially outdated today. The terrorist attacks on 11 September 2001 have brought out a new combatant without uniform, who is simply unwilling to comply with the rules of the ethics of war in the way we understand them. Thus, conventional war proves to be totally inadequate for the confrontation with the new threats, and the simple translation across time of the ethos and the expeditionary practice of the humankind are not enough anymore.

The modern approach is focused on capabilities and thus requires the use of kinetic and non-kinetic capabilities to determine the enemy to accept a predefined final state. The war focused on capabilities entails the efficient engagement of all instruments of power and determines an essential change of mentality at all levels – tactical, operational and strategic. The essence of the war focused on capabilities consists in its capacity to adapt to the nature of the new strategic environment. Contemporary leaders and organisations must be able to measure and clarify own and enemy effects and actions and must have the essential capacity to direct all available capabilities depending on the constraints of the contemporary strategic environment and in relation to the actors involved in conflict.

Given these circumstances, *Host Nation Support – HNS* proves to be an essential factor in any operational scenario, because, in the broad context of the concept of multinational modern logistics, it represents a solution for increasing efficiency and reducing the costs of logistic support. Moreover, essential infrastructure capabilities (aerial ports of debarkation, sea ports of debarkation, rail points of debarkation, lines of communications etc. – *APODs*, *SPODs*, *RPODs*, *LOCs*), which enable the deployment and logistic support of expeditionary operations, are over 80% ensured through *HNS*.

HNS planning, as part of the logistic planning process, can determine the reduction of the dimensions of the logistic structures or the components of national support elements (*NSE*), which are needed for sustaining the forces deployed in theatres of operations.

Regarding the variation of the available *HNS* depending on the dimension, the types of contemporary operations (according to the ones identified currently at the level of the Alliance) that can be allocated to deployable force and therefore can be included in the broad domain of expeditionary operations, *figure 1* provides us with some data.

¹ Strategic mobility – the capability to deploy and sustain military forces worldwide in support of national strategy, Joint Publication 1-02, *Dictionary of Military and Associated Terms*, Department of Defense, 12 April 2001 (As Amended Through 17 March 2009), p. 525, http://www.dtic.mil/doctrine/jel/new_pubs/jp1_02.pdf

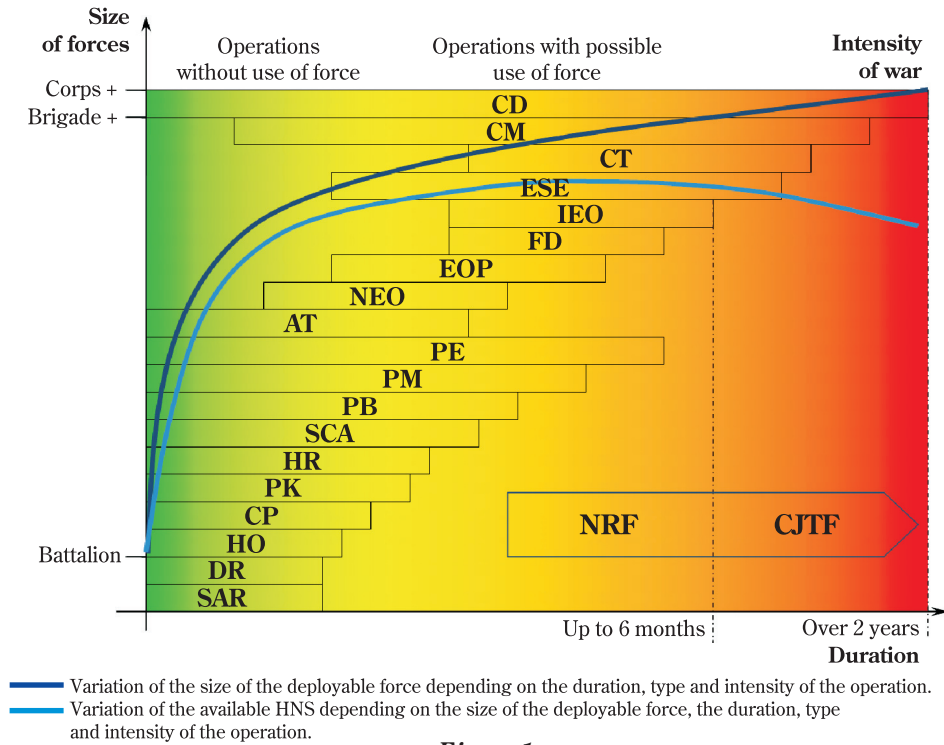


Figure 1

Terms explanation

- | | |
|--|---|
| CD – Collective Defence | PM – Peacemaking Operations |
| CM – Consequence Management | PB – Peace Building Operations |
| CT – Counterterrorism | SCA – Support to Civil Authorities Operations |
| ESE – Enforcement of Sanctions and Embargo | HR – Humanitarian Relief Operations |
| IEO – Initial Entry Operations | PK – Peacekeeping Operations |
| FD – Force Demonstration | CP – Conflict Prevention Operations |
| EOP – Extraction Operations | HO – Humanitarian Operations |
| NEO – Non-combatant Evacuation Operations | DR – Disaster Relief Operations |
| AT – Antiterrorist Operations | SAR – Search and Rescue Operations |
| PE – Peace Enforcement Operations | NRF – NATO Response Force |
| DJTF – Deployed Joint Task Force | CJTF – Combined Joint Task Force |

Even if, as it can be noticed, the willingness of nations to provide *HNS* decreases at some point, as the size of forces and the duration of the military operation increase, it is expected that the Alliance will flexibly use both concepts (*NRF and CJTF*), in keeping with the current level of ambition, to rigorously cover Art. 5 or non-Art. 5 missions and will focus on the actions and effects of the campaign to influence the behaviour of actors and determine them to accept the planned final status.

Operational Context

The new logistic and operational conceptions and capabilities specific to deployable forces and expeditionary operations require the transformation of the classic operational context and enable the *forward deterrence*, through small-sized forces and backup. Operations *Iraqi Freedom* and *Enduring Freedom* have already shown the importance of the increase in command readiness, as well as the terrible impact the *network* and *dispersal of forces* can have on the *rapid force projection* and the increase in the efficiency, given the conditions of the modern battlefield.

In the new context, in order to achieve the *desired kinetic or non-kinetic effects*, the allied forces and coalitions will preponderantly use *packages of forces and capabilities* rigorously configured to meet the operational requirements. This will contribute to increasing operations efficiency and command flexibility and adaptability, as well as to pronouncedly evening out C2 hierarchies. The new operations will need, in turn, flexible logistic support, pragmatically focused on packages of capabilities, totally different from the classic logistic support, structured on echelons. Logistics does no longer refer to the military domain only, it *involves, through the functional domain of HNS, all the capabilities and resources existing in the joint operating area (JOA), including the civil ones*. Therefore, the complexity of the *HNS* planning activities determines a special approach in the conceptual plane, since, in most cases, the resources made available to the *sending nations (SN)* go beyond the area of responsibility assigned to the defence, even if the nature of the actions related to this broad domain is purely military.

HNS and Strategic Expeditionary Manoeuvre

The forces projection through the strategic expeditionary manoeuvre represents the ability to timely cover the entire previously mentioned spectrum and proves an actor's (state, alliance etc.) capability to alert, mobilise and rapidly deploy enough military force [combat forces, combat support elements (CS), logistic elements and combat service support (CSS)], wherever in the world, with a view to promoting its interests and thus reaching the planned objectives. In the USA, the subject is elaborated on starting from the '90s in the *JP 4-01* joint publications regarding the mobility support system, in the *JP 4-09* joint publications regarding global distribution and, especially, in the series of *FM 100-17* army handbooks. Currently, some of these publications are in full process of revaluation and republication.

As far as the Alliance is concerned, the ability to project sufficient military power is aimed at discouraging the enemy and undermining its plans. Strategic expeditionary manoeuvre requires that forces with a high operational level are

generated and made available, capable of being deployed at the given time and moment. AJP-3.13 is focused on the operational level, defines and analyses strategic deployment and *reception, staging, onward movement and integration (RSOI)* through the perspective of the principles and the system of operational planning, execution and completion, being a very useful document for CJTF and/or DJTF commanders in this respect.

As a process, *RSOI* has five distinct stages: the strategic deployment as such, the reception, temporary staging, onward movement and integration of forces in the theatre of operations. In regard to the special impact the *HNS* can have on the development of expeditionary operations, we should analyse the second deployment model mentioned by the AJP-3.13: *Staging Area (SA)*, followed by *RSOI* in a *Forward Missile Base* and then the transfer in the *Area of Operations – AOO*.

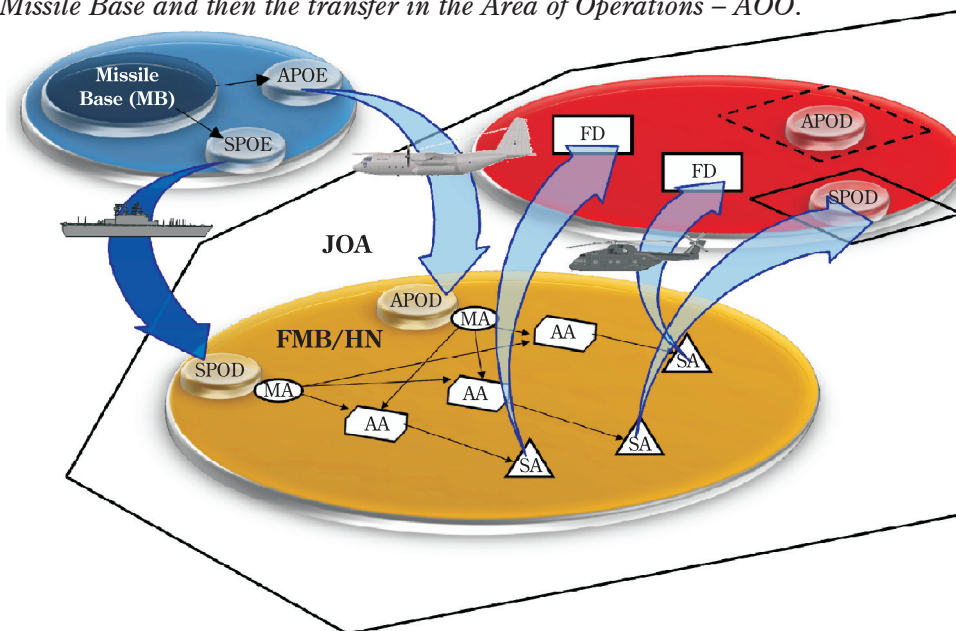


Figure 2

Terms explanation

MB – Missile Base	HN – Host Nation
APOE – Aerial Port of Embarkation	MA – Movement Area
SPOE – Seaport of Embarkation	AA – Assembly Area
APOD – Aerial Port of Debarkation	SA – Staging Area
SPOD – Seaport of Debarkation	FD – Final Destination
FMB – Forward Missile Base	JOA – Joint Operations Area
JRA – Joint Rear Area	JEA – Joint Enabling Area


The model can be applied especially to high profile operations. The responsibility for the *Staging Area* in the *Forward Missile Base* falls entirely upon the *Third Country*

Nationals (TCNs). The military technique and equipment are generally transferred through naval means, while the military resource is transferred through aerial means. The *Forward Missile Base* made available by the *Host Nation* provides excellent conditions for the development of *the Reception, Staging, Onward Movement and Integration*. The *Transfer of Authority (TOA)* takes place, in this case, in the *Forward Missile Base*. The model can be applied to any of the *NRF* high profile expeditionary operations and does not require the existence of a secured *JRA/JEA* for the development of *Reception, Staging, Onward Movement and Integration*. The transfer in the *Area of Operations* is usually made through amphibious operations in the littoral areas or through *Force to Objective Manoeuvres (FTOM)*, in which case the insertion of forces at tactical level takes place vertically, by means of *Vertical Takeoff and Landing (VTOL)* aircraft. Normally, the operation will seek to establish and provide C2 in the *Ports of Embarkation (SPODs and APODs)* and will then focus on any of the final destinations.

Even in the case of expeditionary operations that use national missile bases and, therefore, do not depend on the *HNS*, in most cases, as the conflict unfolds and the logistic requirements are reassessed, support solutions are sought with the involvement of the potential *Host Nations* situated in the proximity of the *theatre of operations*.

BIBLIOGRAPHY

- ***, *AJP-4(B) – Allied Joint Doctrine for Logistics*, draft awaiting ratification, 2006.
- ***, *AJP-4.5 – Allied HNS Doctrine and Procedures*, 2005.
- ***, *AJP-3.13 – Allied Joint Doctrine for the Deployment of Forces*, draft awaiting ratification, 2007.
- ***, *The Army Future Force: Decisive 21st Century Land Power*, US Army Training and Doctrine Command, August, 2003.
- ***, *Expeditionary Operations. Overarching Conceptual Vision and Framework – draft 01*, Allied Command Transformation (ACT), January, 2007.
- ***, *Joint Vision 2020*, Joint Chiefs of Staff, Washington DC, June, 2000.
- ***, *Military Transformation: A Strategic Approach*, Art Cebrowski, Director, Office of Force Transformation, US Department of Defense, Washington DC, fall 2003.
- ***, *New Capabilities: Transforming NATO Forces*, The Working Group on the NATO Capabilities Gap, The Atlantic Council of the United States, Washington DC, 2006, September, 2002.
- ***, *Operational Sense and Respond Logistics*, Office of Force Transformation, US Department of Defense, Washington DC, 6 May 2004.
- ***, *Transforming NATO Forces: European Perspectives*, a Compendium of Papers Presented at a Conference with the same name, on 18 October 2002, The Atlantic Council of the United States, Washington DC, 2006, January, 2003.

English version by
 **Iulia NĂSTASIE**

PERSPECTIVES ON LOGISTIC SUPPORT IN THEATRES OF OPERATIONS

Lieutenant Colonel Costel DUMITRU

Providing logistic support for the national contingents that carry out missions in the multinational theatres of operations, as far as NATO is concerned, represents a national responsibility, sustained for standardisation, efficiency and effectiveness by an integrated multinational logistic support that takes place through a specialised logistic support, of one nation in a certain domain, through the logistic support of the leading nation.

Currently, to provide the logistic support that is needed for contingents, Romania is in charge of: the technique and material stockage, in keeping with NATO classes of supply; specific spare parts; maintenance; ammunition and explosives; lubricants and special fluids; medicines and medical materials; pieces of equipment; consumable supplies, as well as transportation of contingents in/from theatres of operations.

Keywords: *multinational operations; operational logistic support; strategic airlift; medical evacuation; consumable supplies*

The end of the *Cold War*, the rapid development of technology, trade and financial investments have not

brought about the long-awaited peace nor have they made the world become more stable, therefore, considering the challenges of the new century, the issues of war and peace must keep the attention of the military as well as the politicians. Moreover, although one can currently witness a certain *détente* in the political-military relations and a significant reduction of the danger of a destructive war to breakout, we can state that we are in the broad, profound and contradictory process of establishing a new political, economic and international security order, which will inevitably lead to the emergence of new risk factors.

Currently, Romania is actively involved in NATO-led international missions, especially in the theatres of operations in Afghanistan and the Balkans, with battalion-, detachment-, company- or platoon-level national forces/contingents, which, in order to fulfil the assigned missions and successfully complete multinational operations, always need national logistics that meet NATO standards, are strongly anchored in reality,

Lieutenant Colonel Costel Dumitru – Joint Operational Command.

created in a modular-flexible manner and capable, at all times, of providing the living and combat requirements of the military, in keeping with the assigned missions.

National Logistics in Multinational Operations

Considering that logistics is a component of the operating military systems, one may reckon that, in the context of NATO, in order to provide a structure with logistics, it is necessary for the consequences that derive from the general principles of the armed fight – *freedom of action; focus of logistic effort on decisive directions; unity of logistic actions; spreading of logistic forces and assets; logistic manoeuvre; economy of forces and means*, and from the logistic principles: *responsibility; provisions; authority; cooperation; simplicity; prediction; economy; flexibility; visibility and transparency; mobility; promptitude*, as well as from the US armed forces logistic principle – *survivability* to be applied and respected.

In multinational operations, under NATO command, national logistics, as well as the logistics of any other Alliance member, is characterised by: rigorous logistic planning, continuous logistic personnel planning and generation, logistic operative command and control, responsibility, authority, cooperation, forces movement and operative transport, use of host nation support and civil resources, efficient medical support, standard equipment and funding. These are currently the challenges that national logistics must cope with in each field:

- *in the field of logistic planning* – the concepts, structures and procedures of logistic support are and must further be dimensioned in keeping with the specifics of the missions of national contingents. The logistic planning activity is part of forces and operations planning and the use of host nation support is a vital and indispensable part of the planning process, which must be permanently harmonised with the NATO one;
- *logistic personnel planning and generation* require that logistic personnel are provided/dimensioned in accordance with the structures/effectives they support and the missions, because it is only in this way that an operative, efficient and timely logistic support can be achieved; generating and training them must be done in time, based on certain realistic conceptions, plans and programmes meant to form specialists in logistics;
- *command and control in the logistic domain* require that the commanders of national contingents are provided, within their military staffs, with competent personnel, capable of operating and controlling both own logistics and the ones of the other nations with which they cooperate; the systems of information and communications between the military

staffs of national and multinational headquarters must provide efficient and compatible interrelations, and the logistic reports must be transparent, in order to provide NATO commanders with the possibility of knowing and supplying support requirements;

- *responsibility* – at present, in the theatres of operations, nations are responsible of providing their own logistic support. In close cooperation with the other participating nations, it is determined the way in which forces logistic support is provided, and this could be national or/and multinational. Nations maintain control over own resources, and the settlement of the issues specific to logistic components can be assigned to a nation that plays the role of leader or a nation that plays the role of specialist, on one or more logistic components; the leader nation can also assume the responsibility of coordinating the logistics of other nation, within its domains of functional and regional responsibility;
- *authority* – the commanders of NATO/national contingents have the authority to reallocate the logistic resources provided by the nations to support the forces under their command;
- *cooperation* – in the logistic domain, it takes place between the Romanian structures/contingents and the similar ones belonging to other nations, the military and the civil sector, within nations and between nations, at all levels, to ensure the optimal use of resources. In this respect, there are employed methods such as: multinational integrated logistic support, specialisation of a nation in a certain logistic domain, logistic resources procured through common funding, as well as the use of the principle of the leading nation. As a consequence of these methods, at present, it is ensured the logistic support needed for all national contingents that participate in the theatres of operations in Afghanistan and the Balkans;
- *transportation* – a characteristic of the national logistics, as well as the alliance/coalition ones is the insufficient strategic airlift assets, which are needed for rotation and operative resupply of contingents (missions and assets handover/takeover, gradual procurement of stocks). The solution, at present, consists in drawing up and supporting in common certain plans of procurement of strategic airlift assets, cooperation between nations, through the reorganisation of the hierarchy of national priorities, more efficient exploitation of civil resources and adequate coordination of transports, resupplies and force redeployment, so that they meet the general priorities of the commanders of NATO headquarters;
- *the medical domain* – a priority for the medical domain is providing the medical armoured means, especially for Afghanistan, needed for the evacuation

of the military wounded in missions, and the indispensable medicines and medical materials. The military evacuation is carried out with the support of coalition partners, the nations being responsible for maintaining the health of the forces for multinational peace support operations, and, through the transfer of authority, NATO commanders take charge of the health of the allocated forces;

- *standardisation* – material and services standardisation has a direct impact on the support and combat capabilities. The minimum objectives assumed currently refer to the interoperability of special equipment, interchangeability of combat materials as well as the use in common of the procedures.

Logistic Support in Theatres of Operations

Providing logistic support for the national contingents that carry out missions in multinational theatres of operation, in the conception of NATO, represents a *national responsibility*, sustained for standardisation/homogenisation, operativity and efficiency by a *multinational integrated logistic support* that is achieved through the *specialised logistic support* of a nation in a certain field and through *the logistic support of the leading nation*.

At present, to provide the logistic support needed for contingents, Romania is assigned to provide the following: technique and material reserves, in keeping with NATO classes of supply; specific spare parts; maintenance; ammunitions and explosives; lubricants and special fluids; medicines and medical materials; equipment items; consumable goods, as well as contingent transportation in/from the theatres of operations.

To complete the necessary logistic support, in accordance with the agreements and understandings Romania is part of, the leading/specialised nations provide: certain categories of technique and specific spare part; fuels; certain transport missions, especially inside theatres of operations, as well as in/from theatres of operations; food, accommodation and related services; basic facilities for recreation, equipment maintenance, connections with the country, as well as medical evacuations and role 2-3 medical support.

The perspectives on providing logistic support in the supply field consist in the fact that the national contingent supply needs for the entire mission will be determined through methods that are specific to the “*level of effort*”, through standard supply methods, as follows: *push*, *pull* and *directed*.

- the “*push*” supply method is applied if the necessary of the national contingent is provided based on the *Average Consumption Rate – ACR*; this method

is specific to supplying the national contingent during the first 30 days of the mission, which provides the continuity of the consumption, and the eventual supranormative stocks will be regulated through ulterior resupplies;

- the “pull” method is aimed at providing the necessary supplies for the contingent based on the demands it sends weekly/periodically, through the logistic report, at the *national support element (NSE)* and the logistic structures of the *Combined Joint Task Force – CJTF*, in keeping with previously established national or multinational responsibilities, in order to provide the troops resupply system; this method is used especially during the mission;
- the “directed” method is focused on providing the necessary based on variable consumptions and needs, through the agency of a “proactive” system, which used the information from national contingents; this system is used during mission and is based on the data regarding the level of the stocks and the actual needs of contingents for accomplishing their mission.

During mission, in order to maintain the planned level of stocks, as well as to provide the necessary materials, consumed, lost, contaminated or destroyed, the national contingent is periodically, regularly resupplied by the national support element, whose role in the theatre in Afghanistan will further increase, based on a weekly logistic report. *NSE* must be permanently provided with well-determined stocks, capable of meeting the operative needs of all national contingents. This is periodically resupplied from the country, by the Supply and Transport Unit/Joint Logistic Command (JLC), which purchases the material assets with funds made available by the military staffs of the branches of the armed forces. For the national contingents in the theatre in the Balkans, resupplying takes place through planning and carrying out transports by the Joint Operations Command (JOC), on demand, the assets also coming from the Supply and Transport Unit or other structures of the military staff of the branch of forces.

Another concept used within the North-Atlantic Alliance, in the domain of force groups resupply, is aimed at the (aerial) *vertical manoeuvre*, used in all kinds of ground, season and weather. Directly connected to resupply is *aerial delivery*, which involves troops and materials airborne transportation (insertion) and resupply during missions.

For an efficient, timely and realistic supply, we also believe that the logistic bodies of the contingent must bear in mind: the supply possibilities, the nature and position of supply sources; the level of stocks and logistic support and, last but not least, the consumption rates and norms.

Transporting a national contingent in/from an international theatre of operations is a complex activity, which gives the contingent mobility and ways of accomplishing

the assigned tasks. The mobility of a force represents its capacity to go from one location to another, without losing the ability to fulfil the assigned tasks.

To coordinate the transports of national contingents, in keeping with the priorities and the resources of airports and ports of embarkation/disembarkation, NATO and the participating nations use the *ADAMS system* as an instrument for planning the deployment. The final product of the planning system is the *Multinational Detailed Deployment Plan*, through which the coordination, visualisation/control and standardisation of transports are made, the working speed is increased and the conflict situations occurred during the planning process are solved. Thus, to deploy a national contingent in a theatre of operations, JOC sends each trimester to the Joint Logistic Command, 40 days before the trimester starts, the "*Forces Deployment Plan in/from the Theatre of Operations, for the ... Trimester*". The Movement Coordination Centre enters the data in the ADAMS format of the deployment plan and sends them, 30 days before the trimester starts, to SHAPE.

J4/SHAPE draws up the *Multinational Detailed Deployment Plan*, and, at the same time, deals with all the deployments in which two or more nations plan to use, simultaneously, the same embarkation/disembarkation points.

As far as *troop infrastructure, quartering and accommodation* in theatres of operations are concerned, national contingents need and use permanent installations, constructions or facilities, used to command and control military forces, as well as facilities necessary for troops debarkation, flow, deployment and extraction from theatres. These facilities consist in constructions, ports, airports, ways and means of communication, shelter, as well as other utilities.

To manage these properties in the theatres of operations, made available to the national contingents by the *Multinational Force (MF)* and the *Host Nation Support (HNS)*, there is a team of experts at the Multinational Joint Logistic Centre/MF (MJLC) who provide advice on property matters (*REAT*). The specific organisation of *REAT* is flexible, in accordance with the importance and complexity of the mission and given by the number of national contingents, which need properties and transport capabilities in order to accomplish the objectives. This team permanently cooperates with national contingents and, in order to facilitate its counselling mission, its members meet with the commanders of the national structures for every matter regarding management and ecological aspects connected to the property made available. *REAT* presents a complex database regarding a military location/basis, using both "*still pictures*" and "*videotapes*" for the lands and constructions possessed, and makes them available to the persons in charge of the activity of receiving and settling complaints. Moreover, *REAT* provides

on-demand-counselling to the *National Support Element* personnel, for issues regarding quartering, accommodation, infrastructure.

Another feature of national logistics is the use of *Host Nation Support – HNS*, which consists in the civil, logistic and military assistance provided by a host nation to national contingents/Alliance and NATO bodies, which are in transit or stationed, to accomplish missions. By the use of *HNS*, the total costs for the operation are much reduced, the efficiency of the logistic support is increased and a high level of effectiveness is reached. The basis of this assistance results from the reciprocal understandings between the Alliance/NATO bodies or the nation whose forces are deployed and the host nation, which are materialised through a Memorandum of Understanding, technical agreements and implementation arrangements.

In a theatre of operations, pre-established arrangements made for support with the assistance of the host nation can greatly reduce the use of national logistic means and the ones of the coordinating/contributing nations, multiple savings being thus made. In addition, this can determine the reduction of the needs for strategic lift, as well as the provision of workforce, local security and police forces.

At present, *Host Nation Support* can be used especially in the theatres in the Balkans and Afghanistan; because the economic situation of these countries is rather precarious, the *HNS* is very reduced.

The analysis of the standard operating procedures in multinational operation primarily shows that the successful outcome of operations and the accomplishment of missions by a national contingent largely depend on the ability of its logistic structures, as well as of the ones that are part of the multinational force, to provide operational, effective and high quality logistic support.

Therefore, for national contingents to further accomplish in good conditions missions in the theatres of operations, the following requirements must be met:

- providing the contingents with *modular, flexible and mobile* logistic structures, *with capacity of quick reaction* (that rapidly adapt to the specifics of missions), consisting of well-organised and trained logistic personnel;
- achieving an *integrated, flexible and functional* logistic system, *capable of meeting the needs for the provision* of all categories of military technique and assets (at the ordered time and place), as easier as possible and with minimum expenditure;
- *organising and providing the S4 structure* of the national contingent/battalion with qualified/specialised, very well trained personnel, capable of planning, organising and realising the logistic support in all the functional fields of logistics;

- *standardising the stocks provision process*, for the mission, by the national contingent and *HSN*, as follows:
 - national contingent = 30 days, necessary for providing logistic support during the deployment in theatre;
 - *HNS* = 150 days, for providing periodical logistic support, in keeping with the weekly logistic report sent by the national contingent during mission. This will make it possible for discontinuity in the supply process to be avoided and for airlift to be planed more efficiently, considering the limited national airlift resources, as well as the great difficulties in obtaining transit approval for dangerous ammunitions and materials;
- continuing the process of *modular reorganisation of HSN*, in accordance with the conditions in the theatre in Afghanistan, so that it meets the following requirements: the periodical provision of stocks to national contingents, for all classes of material provision, to avoid malfunctions and supranormative stocks; the provisions of 2-3 level maintenance interventions; the provision of medical evacuations towards the 3rd support line, as well as of the evacuation of the dead, during mission; the planning and organisation of transports in the transit base (reception; stationing/storage, transmission/sending towards forward-integration), in the theatre of operations, as well as from the theatres of operations in the country.

To conclude, one can reckon that, just like multinational operations are part of the modern military actions from the beginning of the millennium, with obvious particularities, so do the related logistics require research, studies and analyses, to discover the qualitative changes in the field and to continuously adapt to meet the level of the requirements in the multinational theatres of operations, so that national contingents can accomplish the assigned missions in due time.


Selective Bibliography

***, *AJP-4 – Doctrina logisticii aliate întrunite*, Bruxelles, 1998.

***, *Doctrina logisticii operațiilor întrunite*, Statul Major General, București, 2008.

***, *Doctrina pentru operații întrunite a Armatei României*, Statul Major General, București, 2009.

***, *Principii și politici NATO privind logistica*, Bruxelles, 1997.

English version by
 **Iulia NĂSTASIE**

STRATEGIC SEALIFT WITHIN NATO AND THE EU

Lieutenant Commander Metin OMER

In order to cover the needed air, naval and land transportation as well as to provide greater mobility, namely to alternately use the lift assets depending on necessities, the strategic lift structures have mainly focused on two directions for the future, as follows: providing a multinational feature through the accession of several countries to the same initiative and the use of their lift assets and of the offer to rent own lift capabilities; providing a multimodal feature through the optimal use of air, naval and land lift assets with a view to covering the necessary transportation.

Thus, both in NATO and in the EU, there are two strategic lift structures about to be completed, on which the author elaborates in the current article: Multinational Coordination Centre of Europe and Athens Multinational Sealift Coordination Centre.

Keywords: *common defence; command and control; theatre of operations; transport contract; force deployment; naval transport; consumable supplies*

The Prague Summit, which took place between 21 and 22 November 2002, represented a significant moment for NATO and Europe. The decisions made by the Alliance leaders then permanently put an end to the divisions that marked Europe in the 20th century and generated a modernisation process that would provide NATO with the capability of managing the challenges to security in the 21st century as efficiently as it did with the threats of the last century. Within this process, NATO leaders reaffirmed their engagement to preserve the Alliance as the central institution for common defence, for consultations on security issues and multinational military actions.

In Prague, the Alliance adopted a series of measures meant to pay their contribution to equipping NATO for the entire range of modern military missions, considering that the traditional forces, with reduced mobility, adapted to the *Cold War*, were no longer of use. This meant that the Alliance would have to generate forces that were capable of moving quickly and on longer distances, of more efficiently applying the military

Lieutenant Commander Metin Omer – the Naval Forces Staff.

force and of self-sustaining. In this respect, the NATO leaders adopted an approach based on three domains essential for the improvement of Alliance defence capabilities, as follows:

- a new capabilities initiative: *Prague Capabilities Commitment (PCC)*;
- the establishment of a NATO Response Force;
- the improvement of the military command structure.

The Prague Capabilities Commitment differed from its precedent version, *The Defence Capabilities Initiative*, considering that through it, the allies firmly and individually committed themselves, from the political point of view, to enhance the capabilities in more than 400 specific areas. These covered the following eight domains: nuclear, radiologic, biologic and chemical defence, intelligence, target surveillance and identification, air-ground surveillance, command, control and communications, increasing combat actions efficiency, including high-precision guided munitions and capacities to defeat the enemy anti-aircraft defence, strategic airlift and sealift capabilities, air-to-air refuelling and combat and logistic support deployable units.

Sealift Structures in NATO and the EU

Addressing the shortfalls in the strategic lift, as well as indentifying the solutions for deploying troops in any area on the globe have represented a permanent problem for the armed forces of NATO and EU member states. Thus, in 1999, during the Washington North-Atlantic Summit, sealift malfunctioning was admitted.

In order to deal with the problems, 58 initiatives were established on defence capabilities, five of which referred to *Deployability & Mobility – DM*, initiatives that were consequently confirmed during the 2002 Prague Summit, when new states expressed their wish to join these initiatives, Romania being one of them.

A coordinating group, subsequently transformed in the *High Level Group – HLG*, was created, in order to supervise the implementation of these initiatives among NATO member states, consisting of the representatives of these nations.

Based on the initiatives on forces deployability and mobility, DM-2 (*efficiency through coordination*) and DM-5 (*assured access*), a process took place aimed at the reorganisation and creation of certain structures whose features were to eliminate the shortfalls in the strategic sealift. The objective was reached through the as effective as possible use of the available limited resources, as a consequence of the access of the allies to the sealift means made available by them in order to provide forces rapid deployment.

Following the process of putting into practice the two mentioned initiatives, regarding forces deployability and mobility, the NATO multinational strategic sealift structures were created, as follows:

Multinational Implementation Arrangement – MIA *Multinational Implementation Arrangement* was signed in 2003 by nine states interested in providing supplementary sealift capabilities for NATO and/or nations, with the purpose of pursuing the *DM-5* initiative. The structure in charge of the MIA monitoring is the *Multinational Sealift Steering Committee – MSSC*, consisting of the national representatives of the signatory states of the treaty, and the contracting authority for providing sealift means is *NATO Maintenance and Supply Agency – NAMSA*.

Interested nations may apply to join the *MIA* by signing and sending a *Letter of Intent – LOI*, in which the political will of the nation regarding the accession is stated.

The annual financial obligations to the budget of the organisation are divided equally between the members of the structures, consisting in approximately € 450 000/year/member.

According to NATO estimations, the *Multinational Implementation Arrangement* must provide 14 Ro-Ro ships, yet, because of national rental contracts and the limited budget of the organisation, there are practically three ships.

MSSC establishes the procedures through which ships are used and their coordination is provided by *SCC Eindhoven*, a fact specifically mentioned in the Memorandum of Understanding signed when joining the *MIA*.

The pros and cons of joining this multinational strategic sealift initiative are:
Advantages:

- the possibility of using a sealift capability, at a moment decided by the beneficiary, through a notification (reason for which the annual subscription is paid);
- *NAMSA* provides the signing of sealift contracts and the ship whenever and wherever the beneficiary wants (in keeping with the terms of the contract);
- the participation in *MIA* is acknowledged by NATO as an important step in addressing sealift shortfalls, in agreement with the commitments assumed in Prague.

Disadvantages:

- high costs in relation to the necessary national sealift;
- because of the reduced number of ships, overlaps may occur as far as sealift demands are concerned, which leads to the negotiation of the terms of use;

- the national costs are not in proportion to the volume of transports (equal subscriptions for different transportation needs);
- according to the conception of the strategic sealift of the President of the High Level Group, the radical change of the status of this agreement is expected in the following years.

*Multinational Sealift
Group – MSG*

The *Multinational Sealift Group* is another initiative in the sealift field, consisting of nine states interested in meeting the requirements of *DM-2*. Through signing the Memorandum of Understanding, these states have decided to optimise sealift through using the lift capabilities made available to the group by each nation.

With the purpose of fulfilling the requirements of *DM-2*, the group decided, in May 2002, the establishment of a *Sealift Coordination Cell* that became, in September the same year, the *Sealift Coordination Centre – SCC*, located in the Airbase in Eindhoven, The Netherlands. The group's activity is coordinated by the *Multinational Sealift Group Steering Board – MSG SB*, consisting of the representatives of the MSG member nations.

The purpose of the *Sealift Coordination Centre* in Eindhoven, as an operating body of the *MSG* (and of *MLA*), is to improve the Alliance lift capability through increasing the strategic sealift efficiency and effectiveness, through better coordinating the national lift capabilities for taking part in training, exercises, rotations in theatre of operations as well as transportations in crisis situations or at war.

The way the SCC Eindhoven works is based on demand and supply. Thus, based on the demand (a nation must make transports and has no ships) and the supply (a nation makes available the ship or the capability needed for the transportation) sent at the Eindhoven Centre, the nations will negotiate by common consent a transportation contract, through which the supplying nation amortises its costs caused by moving its ship empty or partially loaded and the beneficiary nation pays a substantially smaller price than in the case of purchasing a ship on the trade market. Using such agreements, at the end of 2006, the member nations reported a saving of over € 8,5 million.

Considering that the budget of the organisation is strictly limited to its well functioning, the annual expenditure of SCC Eindhoven was between € 90 000 and 120 000. Until 2005, this budget was fully covered by Norway (in 2003), The Netherlands (in 2004) and the United Kingdom (in 2005) and, from 2006, it has been covered through the equal contribution of each member state. Annually, the contribution is of about € 11 000.

The advantages and disadvantages of joining this multinational strategic sealift initiative are:

Advantages:

- activation costs smaller than in the case of *MIA*;
- the possibility of including own national lift capabilities in the *MSG* programmes and of coordinating them by the SCC Eindhoven, which determines an operating costs cut;
- the existing capabilities have so far covered the demanded transportation;
- joining *MSG* provides the possibility of being included in the SCC Eindhoven;
- considering that the Eindhoven Centre and the *Airlift Coordination Centre – ACC* have the same location and that an office is expected to be created in the future for the *Land Coordination Centre – LCC*, the coordination of multimodal lifts within the same structure can be provided;
- belonging to the *MSG* lift capabilities guarantees the security of the used lift assets;
- joining the group provides the possibility of assuming coordinating positions within the organisation.

Disadvantages:

- an annual participation fee, whether the services are used or not;
- a reduced number of ships compared to the number of members and demands can determine, in the future, the impossibility of identifying a solution for transportation.

*Sealift Coordination
Centre – SCC*

Any EU or NATO member can apply for membership to this centre, placed in Athens, based on a memorandum of understanding signed at the governmental level.

The purpose, objectives and services provided by the SCC Athens:

- the purpose is to deal with the lack of strategic sealift capabilities for forces deployment, the UN-mandate ones included;
- the main objectives are coordination and cooperation between participants regarding the use of sealift assets, as well as provision of coordination and contracting services between the EU and/or NATO member states and international organisations;
- the services are placed at the users' disposal after the signing of the Memorandum of Understanding and consist in de-conflicting, procurement, bookkeeping, coordination and monitoring.

Possibilities: currently, the *SCC Athens* can provide up to 135 various ships (Ro-Ro, container ships, passenger ships, oil tanks and cargo ships).

The advantages and disadvantages of joining this multinational strategic sealift initiative are:

Advantages:

- there is no annual participation fee;
- big number of ships (135 various ships) available for rental.

Disadvantages:

- the membership in this structure is not acknowledged as a national measure taken for providing supplementary lift capabilities;
- the inexistence of air and land components presupposes only transports by means of naval assets;
- the *SCC Athens* has no responsibility or obligation towards the performance characteristics of the acquired lift asset; this means the security guarantee of the rented asset lacks;
- the member states can assume only operating positions, covering the activation costs;
- the lack of actual data about the activity of the organisation.

Tendencies in the Evolution of Strategic Sealift Structures

In order to cover the needed air, naval and land lift as well as to provide greater mobility, namely to alternately use the lift assets depending on necessities, the strategic lift structures will mainly focus on two directions for the future, as follows:

- providing a multinational feature through the accession of several countries to the same initiative and the use of their lift assets or the offer to rent own lift capabilities;
- providing a multimodal feature through the optimal use of air, naval and land lift assets with a view to covering the lift demands.

Thus, both in NATO and in the EU, there are two strategic lift structures about to be completed, as follows:

a) Multinational Coordination Centre of Europe – this new structure is in the process of being completed and implemented through the development of the procedures of accession of the *MSG, SCC and EAC* member nations (*Airlift Coordination Centre*), with the stated purpose of coordinating multimodal lifts both in NATO and in the EU. To provide the multimodal feature, the land transport coordination structure has been completed this year.

b) Athens Multinational Sealift Coordination Centre – AMSCC – this structure is not significantly different from the former *SCC Athens* coordination centre,

meaning that Greek sealift capabilities are still offered for rental and coordination. Yet, after Italy joined the structure, the *SCC Athens* gained a multinational feature, the organisation being, actually, in full process of reorganisation.

*

Analysing the available data and information regarding the tendencies and courses of action for addressing the crisis situations occurred at the international level, as well as the obligations that are incumbent upon our country as a NATO member nation, one may conclude that we will further witness a series of changes in the field, characterised by the following distinctive elements:

- Military actions will have an increasing expeditionary nature and that will entail new requirements regarding the ability to project forces at long distances, in non-European theatres of operations included, as well as the one to provide interoperability and rapidity in carrying out multinational operations.

- The deployed structures will be mobile, will have smaller size, great firepower and will have strategic lift assets at their disposal.

- The Romanian Armed Forces will further pursue the objective of generating deployable forces and capabilities able to self-sustain in the theatres of operations and to react rapidly in the multinational environment.

- Romania must continue the cooperation with other nations in order to develop modern capabilities, including in the field of owning and operating them in common, within NATO and the EU.

To reach these objective, as well as the tasks and responsibilities that fall upon it within the Alliance, in the future, Romania must seek to provide its own strategic lift capability that is needed for the deployment/redeployment of forces in/from the theatres of operations where the military actions it participates in will take place.

Selective Bibliography

***, *Cadran politic Review*, no. 8, October, 2003.

***, *Sfera politicii Review*, no. 123-124, year XIV, 2006.

***, www.nato.int.

English version by
 **Iulia NĂSTASIE**

NATO SECURITY INVESTMENT PROGRAMME

– An Instrument for Maintaining Political-Military Stability –

*Major Antonio DAN-ȘUTEU
Carmen CĂLINESCU*

NSIP projects management is a complex and elaborate activity. It includes permanent communication and coordination with different structures, both national and NATO ones, aimed at planning and projecting requirements, preparing the technical specifications and feasibility studies, obtaining funding from NATO joint funds, organising procurement, monitoring and coordinating the execution, managing the joint formal acceptance inspection.

Up to now, Romania has been assigned to implement NSIP projects that cover the following domains of reference: airfields, military communications and information systems, warning installations and air command and control systems. These projects, as the author emphasises, are in different stages of development, the success of their implementation especially depending on the available financial resources, both at the national and at the Alliance level, which are currently influenced by the effects of the world financial crisis.

Keywords: *political-military stability; capabilities packages; warning installations; crisis response operations; project management*

In the history of military alliances, a solution to counter a major threat through the establishment of a defence resource sharing system funded through the contribution of all the entities that compose that particular alliance has been something exceptional. A reference point is the example of the 10 city-states in Ancient Greece that, in the 5th century BC, established the *Delian League* as a response to the Persian emergent threat. The leaders of this alliance agreed upon contributing to a common defence budget and the associated expenditures could be engaged only following a unanimous decision. Until 1949 – considered to be the year when *NATO Infrastructure Programme* (the predecessor of the *NATO Security Investment Programme*) was established, it was the only example of funding defence capabilities jointly in the history of humanity.

Sharing the roles, risks, responsibilities, costs and benefits best describes the spirit of the *NATO Security Investment Programme – NSIP*.

Major Antonio Dan-Șuteu, Carmen Călinescu – the Directorate of Logistics, the General Staff.

This spirit, accepted as something natural today, came into being in a slow and difficult way, in the first years of the Alliance, the main cause being, of course, the lack of financial resources.

The idea of an investment programme funded jointly took shape in the years that followed the Second World War when many Western European countries that intended to repair the damaged military infrastructure found out they did not own enough financial resources.

During that time, the joint international project funding was a new idea difficult to accept. The necessity for a joint funding mechanism was identified by the Alliance and led to the establishment of the *NATO Infrastructure Programme* that subsequently, with the complex evolution of the geopolitical context and the technological developments, changed into the *NATO Security Investment Programme*.

NSIP is one of the major achievements in NATO portfolio, being a visible sign of the will of the Alliance member states to work consensually to maintain long-lasting political-military stability.

Joint funding is a powerful concept and tool having major implications at international level. The issue of cost sharing is complex, including diverse planning and influence factors, such as the different NATO member states capacity to pay, the use of the national and joint facilities, benefits, as well as the costs to the host nations and others.

How big is the share of each member country to the *NSIP* budget? In general, no nation pays more than 1% of its defence budget, thus ensuring the financial support for *NSIP* projects to be implemented, which brings mutual benefits for the entire NATO member states community.

The *NSIP* investment goal is to develop capability packages through constituting and developing the minimal operational facilities that are necessary to support the missions of NATO strategic commands, which are recognised as exceeding the defence requirements of each member country.

A capability package is a combination of NATO/nationally-funded capital investment and other associated costs, which allows for the achievement/development of some operational facilities that are in deficit at the Alliance level. One or more *NSIP* projects may be part of a capability package, projects that can cover different domains, such as: airfields, naval bases, communications, information systems, command and control systems, warning installations, facilities to stockpile ammunition, carburant-lubricant installations etc.

It is important to note that *NSIP* is not a budget but a fund that is established within the limits of an annual ceiling approved by the North Atlantic Council – NAC. The *NSIP* financial management system is based on a mutual financial compensation system between states. When the expenditures on implementing the allocated projects are under the level of the own contribution to *NSIP* fund, they are deducted

from the national contribution. Funding over this limit is achieved through the mutual funds transfer between states.

NSIP directly contributes to the enhancement of the interoperability level among the allies, aiming at achieving NATO-standard military capabilities and operational facilities that are strictly necessary for the Alliance military forces and, in certain cases, for *NATO Partnership for Peace – PfP Programme*.

Relatively recently, *NSIP* has enlarged its geographical area of operations outside the member states territory through expanding in *crisis response operations – CRO* (for instance, in Bosnia-Herzegovina, Kosovo, Afghanistan).

The NATO programmatic document for *NSIP* is *NATO Bi-SC 85-1 Directive*, known under the name of “*Capability Packages Directive*”. To complete this directive, NATO bodies have introduced other regulations that are specific to *NSIP* issues and define the juridical-technical-financial-administrative framework that is specific to this domain at the Alliance level.

Once Romania gained the NATO member status, it became the beneficiary of the joint funding managed through *NSIP*. Romania’s participation in *NSIP* is regulated by Art. 108/118 in the *Constitution*, *Law 22/2004 regarding Romania’s accession to the North Atlantic Alliance* and Art. 2 in *Law 473/2004 regarding defence planning*.

To create the general legislative framework for *NSIP* management at national level, *Law 294 on 02.11.2007 regarding NSIP-funded projects in Romania* and the *Order of the Minister of Economy and Finance 3209 on 31.10.2008*, to approve the *Norms regarding the VAT exemption for the delivery of goods and the services carried out to implement NSIP-funded projects in Romania* were adopted.

Through the *Order of the Minister of National Defence MS 63/2009*, the *Responsibilities of the Ministry of Defence regarding the NATO Security Investment Programme implementation in Romania* was regulated, the document providing the judicial framework necessary for implementing *NSIP* projects at the level of own structures.

At the level of the General Staff, the specialised structure – *NSIP Management Office/J4* is responsible for the operational management of *NSIP* projects during their entire life cycle. This mainly presupposes the coordination of the specific initiating, implementing, operating and maintaining processes for the newly-created or modernised facilities, as well as creating the necessary conditions for them to be withdrawn from NATO inventory, in conformity with the political-military decisions made at the Alliance level.

NSIP projects management is a complex and laborious activity. It includes permanent communication and coordination with different structures, both national and NATO ones, to meet the planning and projecting requirements, to prepare the technical specifications and feasibility studies, to obtain funding from NATO joint funds, to organise procurement, to monitor the execution, to coordinate

the execution, to coordinate the *Joint Formal Acceptance Inspection – JFAI*, as well as the *NSIP* projects audit by the *International Board of Auditors for NATO – IBAN*.

Up to now, Romania has been assigned to implement *NSIP* projects that cover the following reference domains: *airfields, military communications and information systems, warning installations and air command and control systems*. These projects are in different stages of development, the success of their implementation depending especially on the financial resource availability, at both national and the Alliance level, which is influenced by the effects of the world financial crisis. Considering the tendency of the states to minimise financial investment during the crisis, the *NATO Investment Security Programme* may be seriously affected.

Because of the close interrelationship between providing the *NSIP* joint financing (which is NATO responsibility) and co-financing (which is a national responsibility), in the event that our country provides these funds only partially or is in the impossibility of financing, the entire process of *NSIP* projects implementation is perturbed or jeopardised.

At the Alliance level, the immediate effect would be the review of the allocation levels as well as of the *NSIP* projects implementation schedule, fact that may concretise in a significant diminution of the funds to be given to Romania.

A relevant example is that of the USA – a state with a major financial contribution to the Alliance – that has declared, within the *NATO Infrastructure Committee*, that, in the future, it will express the agreement for *NSIP* projects authorisation but under the reserve of approving the funds allocation for the implementation of *NSIP* projects depending on how important they are for the Alliance, the projects in support of crisis response operations being a priority. This attitude is motivated by the own difficulties in providing the funds necessary for projects implementation.

At the Alliance level, the existence of an open economic competition between nations regarding funds attraction is recognised. It is therefore necessary for Romania to get actively involved in the existent competition and to demonstrate its abilities to use the financial opportunities provided by *NSIP*, as well as to set the transition from the category of *NSIP* contributing countries to the one of *NSIP* beneficiaries as a priority objective.

Bibliographical References

***, *Bi-SC 85-1 Directive – NATO Security Investment Programme – NSIP Management in Allied Command Atlantic and Allied Command Europe*, NATO, 2001.

***, *Legea nr. 294 din 02.11.2007 – Derularea în România a proiectelor finanțate prin Programul NATO de investiții în securitate*, published in *Monitorul Oficial*, no. 762, 09.11.2007.

***, *Ordinul ministrului apărării naționale nr. MS 63 din 04.06.2009 – Responsabilitățile structurilor Ministerului Apărării Naționale privind implementarea în România a programului NATO de investiții în securitate – NSIP*.

English version by
 *Diana Cristiana LUPU*

NATO LOGISTICS – THE LOGISTICS OF THE FUTURE

NATO MAINTENANCE AND SUPPLY AGENCY

Captain Marius DĂNCIULESCU

Motto: *“The officer who does not know his communications and supply as well as his tactics is totally useless”.*

General George S. Patton

The author elaborates on the main fields in which the Agency is involved; supply; maintenance; management contract; engineering and technical assistance. Most of these logistic services are outsourced, NAMSA playing an important role in consolidating the necessary supplies of the nations, in centralising the activities of logistic management, in carrying out bidding procedures that are competitive at the international level and in controlling the costs and quality of the services rendered by the clients.

NAMSA also provides support for NATO Codification System and there is cooperation online for logistic management, information exchange and material purchase. In the latest years, the Agency has become more and more involved in providing logistic support for NATO and for the operations carried out by the armed forces of the member states.

Keywords: *public purchase; technical assistance; conventional ammunitions; anti-personnel landmines; supply management*

Established in 1958, *NATO Maintenance and Supply Agency (NAMSA)* is NATO's main logistic support agency.

NAMSA's task is to assist NATO member countries, through organising common public procurement, providing spare parts, and maintenance and repair services in support of various weapons systems. This assistance is available whenever two or more nations operate based on the same system and decide to use *NAMSA's* facilities.

The *Agency's* activities are overseen by the NATO Maintenance and Supply Organisation (*NAMSO*), formed by 26 NATO member nations, with the purpose of attaining maximum efficiency in logistics support and of reducing to minimum the costs for these countries, both individually and collectively. Through a Board of Directors, *NAMSO* provides guidance to *NAMSA's* policy and oversees the implementation of these policies.

The main domains in which the agency is involved are: supply; maintenance; procurement; contract management; engineering and technical support.

Captain Marius Dănciulescu – “General Constantin Zaharia” Application School for Logistics.

Most of these logistic services are outsourced, the *Agency's* main role being that of consolidating the requirements of the nations, centralising the logistics management activities, developing competitive bidding processes at the international level and controlling the cost and quality of the services rendered to the customers.

NAMSA also provides support for *NATO Codification System (NCS)*, and there is cooperation online for logistics management, exchange of information and material procurement. In recent years, the *Agency* has become more and more involved in providing logistic support for NATO and for the operations deployed by the armed forces of the member states. *NAMSA* has taken lead in several projects aimed at demilitarisation, destruction of anti-personnel landmines, conventional munitions and light weapons. A series of agreement have been signed by *NAMSA* in support of non-NATO nations, within the *Partnership for Peace (Pfp)*.

• **NAMSO**

NATO Maintenance and Supply Organisation is a production and logistics organisation, established by the North-Atlantic Council, in 1958, through the approval of the *NAMSO Charter*. Its main mission is to maximise the efficiency of logistic support to the armed forces of NATO member countries and to reduce costs, individually and collectively.

The connections with NATO bodies are presented in *figure 1*:

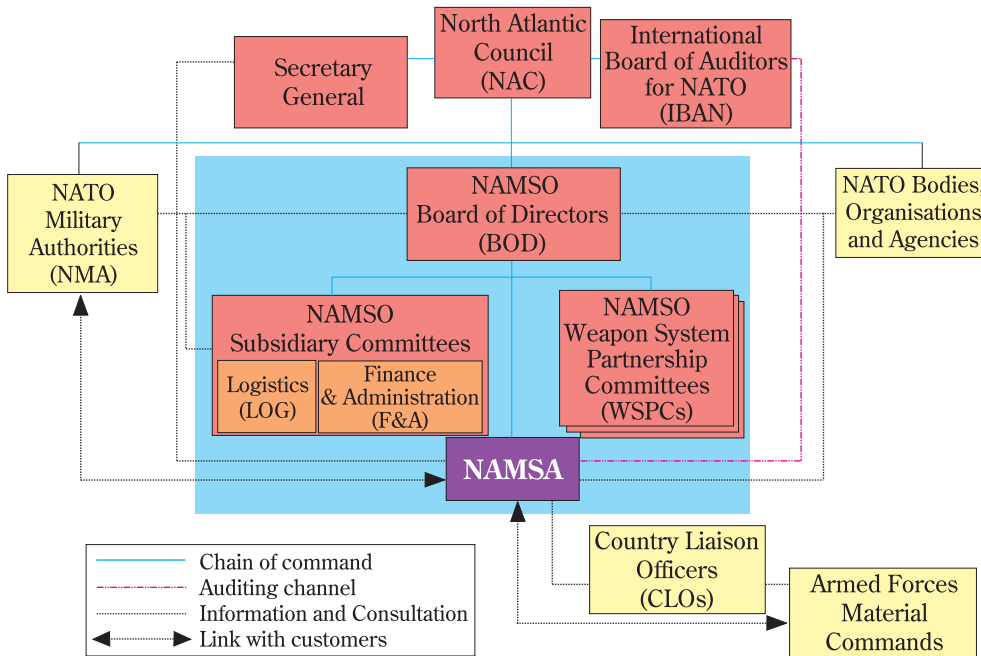


Figure 1: NAMSO Connections with NATO Bodies

NAMSO's member countries are: Belgium, Bulgaria, Canada, the Czech Republic, Denmark, Estonia, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Luxemburg, The Netherlands, Norway, Poland, Portugal, Romania, the Slovak Republic, Slovenia, Spain, Turkey, the United Kingdom and the United States.

- **NAMSA**

NATO Maintenance and Supply Agency is the executive branch of *NAMSO*. *NAMSA*'s expertise and support services cover the entire logistic field, from procurement to deployment.

NAMSA provides support for various activities such as:

- supply management (in which stock management and warehousing are included);
- maintenance (which comprises workshops, laboratories and calibration);
- contract management;
- engineering services;
- logistics documentation;
- random brokerage;
- expedited repair;
- NATO codification system;
- ammunition procurement and demilitarisation;
- port services;
- support for contingency operations;
- international cooperation in logistics (NICOLOG);
- NATO depot and support systems (NDSS);
- NATO Ammunition Database (NADB);
- NATO Master Catalogue of References for Logistics (NMCRL);
- NATO Logistics Stock Exchange (NLSE).

- **Supply Management**

Supply initially involves the selection, procurement and delivery of spare parts in support of new systems and equipment. *NAMSA* uses a series of mathematical models and computer programmes to assist in establishing the necessary quantities.

NAMSA can provide the following services to its customers:

- providing assistance in establishing the logistics requirements for new equipment;
- conducting studies regarding the reliability of preliminary design data;
- determining whether there are critical or non-critical elements, depending on the budget limitations;
- finalising the logistic support through review concepts, selection and establishment of final models, through comparing the requirements regarding quantities and locations;
- reviewing materials movement to confirm that logistic requirements will be met.

➤ **Stock Management and Warehousing**

The stocks of spare parts are held by *NAMSA* for its customers at its main warehouse, in Capellen (Luxemburg), or in the southern area, in the *Operational Centre* in Taranto (Italy), in support of certain weapon systems. This takes place based on a small fee, depending on quantities and turnover. The stocks are made from items that are needed for routine repairs or items exchange, which are issued when another item of the same type is returned for repairs or maintenance.

NAMSA's stock management system allows the rapid identification of necessary items, by means of a special number system, for each category of materials.

➤ **Maintenance**

NAMSA performs a broad range of maintenance services for its customers. Most of them are provided through procurement contracts signed by *NAMSA* with the *Original Equipment Manufacturers (OEMs)* or *OEM-licensed contractors*. In all the cases, *NAMSA* monitors the quality of the work performed, in keeping with the requirements expressed by the customers.

In certain instances, maintenance is undertaken in *NAMSA* workshops or laboratories and not only where the activities of certain armed forces take place.

➤ **Contract Management**

In addition to signing contracts with various companies, to meet the customers' requirements, *NAMSA* can also manage these contracts on behalf of its customers. This particularity is extremely attractive for the beneficiaries, because these contracts very often involve various levels of maintenance (depot, intermediate, repair etc.), actions that can be performed with more than one entity and, thus, transport from and to various facilities would take too much time. *NAMSA* can thus act as "*one-stop shop*" for its customers, by managing these contracts and coordinating the activities with all those involved. Being able to sign a contract with a single entity (*NAMSA*), the customers and suppliers benefit from a reduction of the administrative "*burden*".

➤ **Engineering Services**

Through these services, *NAMSA* assists the process meant to establish the technical specifications and the logistic equipment requirements, takes part in designing reviews and tests, in assessing problems and evaluating the problems and performance of systems and in giving advice regarding the gradual elimination of some pieces of equipment or systems.

➤ **Logistics Documentation Support**

NAMSA manages the logistic documentation for a number of pieces of equipment and weapon systems. The documentation varies from basic user handbooks to complex technical data packages. All these require specialists, including engineers, technicians, logisticians, librarians, technical writers and editors. *NAMSA* also provides regular information bulletins, which consist of details of various equipment modifications.

As part of the documentation management activity, *NAMSA* also distributes updates for users, tailored to their profiles and specific needs, in various maintenance units throughout NATO.

➤ **Expedited Repair**

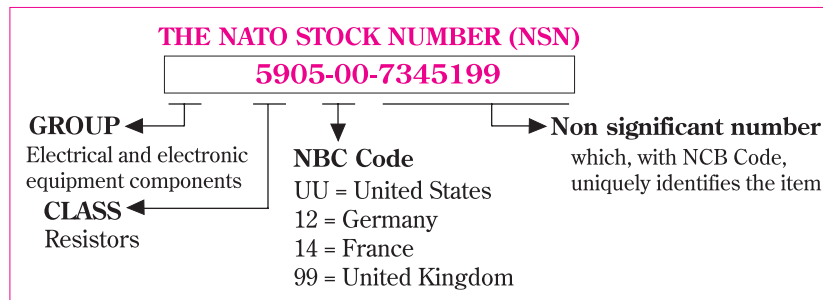
Customers may request *NAMSA* to provide equipment maintenance services that are not supported by the weapon system established by the support partner. These requests are dealt

with by the Expedited Repair Service. This service uses *NAMSA*'s source-file to identify potential sources of supply. This file contains approximately 10 000 active and procurement sources in *NAMSO* member countries.

This service is launched by a customer's request. After an international bidding process organised by *NAMSA*, a contractor is selected, the customer approves, and, after the contract is signed, *NAMSA* provides the connection between the two sides, as well as the transportation of the required equipment from the source to the customer.

> **NATO Codification System**

NATO Codification System (NCS) enables the member countries to exchange information regarding approximately 16 million supply items. This system was designed to facilitate the exchange of information for logistics operations through the use of a common, uniform system for: identification, classification, stock numbering.



In NATO, the responsibility for the *codification system* is exercised by the *Group of National Directors on Codification*. This group signed a memorandum of understanding with *NAMSA*, in which there were specified the codification services to be provided by *NAMSA* to all users.

These services include: maintaining a codification database; facilitating the exchange of information among codification users; publishing *NATO Master Catalogue of References for Logistics (NMCRL)*; providing codification support to NATO agencies, military commands and other NATO bodies; providing secretarial support.

> **Ammunition Procurement and Demilitarisation**

Ammunition procurement is one of the domains in which substantial savings can be made through the consolidation of users requirements. Whenever a customer requests a certain type of ammunition, *NAMSA* inquires its other users whether they have (or will soon have) a requirement for the same type of ammunition. If the answer is positive, a request for tenders is made for higher quantities, which results in lower prices. *NAMSA* makes the arrangements necessary for the transportation of ammunitions, directly from the producers to each customer. *NAMSA* never stores ammunition in its facilities.

NAMSA has developed the *NATO Ammunition Data Base (NADB)*. This CD-ROM contains details regarding all ammunitions used by NATO member countries and is a valuable instrument for the ammunition procurement system.

NAMSA provides contracts for the disposal of surplus ammunition and, in some cases, recovers some materials resulted from the demilitarisation.

Demilitarisation projects refer to the following categories of ammunitions: guided missiles and projectiles; various calibre ammunitions; grenades and mortar ammunitions; mines; pyrotechnics and lachrymatory ammunition; white phosphorus; depleted uranium; bombs.

➤ **Port Services**

This service was established in 2001, with the mission to provide services and supplies to NATO and partner vessels, mainly in foreign ports (fuel, tugs, pilots, trash and sewage removal, food, water etc.)

The coverage is provided for all major ports in the following areas:

- Baltic Sea: Estonia, Finland, Latvia, Lithuania, Poland, Russia and Sweden;
- North Sea: Belgium, Denmark, Germany, The Netherlands, Norway and the United Kingdom;
- Atlantic Ocean (East and West Coasts): Canada, France, Ireland, Portugal, Puerto Rico, Spain and the United States;
- Mediterranean Sea: Albania, Algeria, Bosnia-Herzegovina, Croatia, Egypt (including the Suez Canal), France, Greece, Israel, Italy, Jordan, Lebanon, Malta, Morocco, Spain, Tunisia and Turkey;
- Black Sea: Bulgaria, Georgia, Romania, Turkey and Ukraine;
- Persian Gulf: Bahrain, Iraq, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates;
- East-African Coast: Djibouti, Kenya, Somalia and Tanzania;
- West Africa: Angola, Benin, Cameroon, Cape Verde, Cote d'Ivoire, Democratic Republic of Congo, Equatorial Guinea, Gabon, Gambia, Liberia, Nigeria, Republic of the Congo, Senegal and Togo.

➤ **NATO Logistics Stock Exchange**

NATO Logistics Stock Exchange (NLSE) is a set of instruments developed by *NAMSA* with a view to assisting customers and suppliers in putting into practice the cooperative logistics concepts in the field of acquisition and management. These instruments enable the customers to arrange for the exchange of spare parts and to manage held stocks. Moreover, *NLSE* provides sales catalogues of spare parts and submits bids with the purpose of supplying the specific elements required by the customers. *NLSE* consists in a set of databases and a web interface. The databases contain, among other things, information about parts logistics, information regarding the customers and their current and future requirements, as well as details regarding the suppliers and what they can offer. The web interface provides an easy way for customers and suppliers to exchange information in a safe and controlled manner.

The main functions currently provided by this information system are: reporting and exchanging excess assets; reporting stocks to improve their management; using the assets in common, to enable common management of stocks; processing NATO mutual emergency support requests; financially settling all transactions.

➤ **Support for NATO Nations and NATO Bodies**

As NATO's main logistics agency, the *Maintenance and Supply Agency* provides cooperative logistic support to its customers based on three principles: *consolidation, centralisation and competition*.

Thus, *NAMSA* consolidates identical or similar logistic requirements of two or more customers. This means ordering large quantities, which results in lower prices.

By placing the requirements within *NAMSA*, the customers have the advantage of addressing a single entity rather than a multitude of suppliers. Because of *NAMSA*'s international bidding processes, a wider market is covered, thus the best quality being provided at the lowest price.

➤ **Support for PfP Countries**

After a memorandum of understanding between *NAMSA* and a Partnership for Peace member state is signed, the state can participate as associate member in *NAMSA*'s activities, thus benefiting from all the services rendered by the Agency.

*

The fact that Romania is a full-fledged NATO member brings about a new approach to the activities and actions undertaken by the armed forces, among which, of course, the logistic branch. At the same time, this quality has transformed us into a mobile force, which has shifted from peace to crisis or war. Therefore, three main courses of actions have been established:

- investing in the national logistic system and its components;
- developing cooperation procedures between the civil and military sector at the national level in order to provide the logistic system;
- harmonising and standardising the supply equipment and systems with the NATO ones in order to provide interoperability.


This is one of the reasons why our country has decided to join *NAMSO*, thus becoming a direct beneficiary of the services rendered by the Agency.

BIBLIOGRAPHY

- James H. Henderson, *Military Logistics Made Easy: Concept, Theory, and Execution*, Author House, USA, Bloomington, Indiana, 2008.
- James V. Jones, *Integrated Logistics Support Handbook*, McGraw-Hill Professional Publishing, 2006.
- Thomas M. Kane, *Military Logistics and Strategic Performance*, Frank Cass Publishers, 2005.
- Moshe Kress, *Operational Logistics: The Art and Science of Sustaining Military Operations*, Kluwer Academic Publishers, 2001.

***, *NATO Logistics Handbook*, NATO Headquarters, Brussels, 1997.

***, *NATO Maintenance and Supply Organisation*, Defense Logistic Agency, 2009.

English version by
 **Iulia NĂSTASIE**

A LOGISTIC ECHELON OF THE ROMANO-BYZANTINE ARMY IN THE SIXTH CENTURY – *quaestura exercitus iustiniani* –

Dr Alexandru MADGEARU

Quaestura exercitus was in charge of funding and supplying the Danube troops. This military structure, created in 536, was a sort of logistic echelon of the Romano-Byzantine army. As far as we know, there is no other similar structure. It was needed, in the author's opinion, because of the gap occurred between the supply necessities and the possibilities at the local level of the troops deployed in Scythia and Moesia Secunda. The quaestor collected the taxes from rich provinces both in cash and in kind, in order to send them to the soldiers, and the distribution centre was in Odessus.

As far as food supply is concerned, recent research has shown that the amphorae discovered in large number in the fortification in the Danube area are connected to the transports of goods organised by quaestura exercitus. They were mainly used for olive oil, as proven by the waste discovered in some cases, as well as for wine.

Keywords: territorial continuity; fiscal losses; Danubian provinces; logistic structure; military-administrative division

The Roman army supply with grain and other food (meat, wine, oil) as well as with clothing and other materials was done through the distribution of rations, named *annona militaris*, which were part of the military pay and resulted from the taxes in kind owed by the population from all the provinces. There was a big network of state workers who dealt with collecting these products and sending them to the army. *Annona militaris* was established in the 3rd century to replace the former *stipendium* that was paid to the military in cash¹.

In times of drought or depopulation caused by barbarian attacks, collecting taxes was difficult. Such a situation occurred in the Lower Danube provinces – Moesia Secunda and Scythia, in the 530s. In that time, the Romano-Byzantine Empire was led by Justinian (527-565), an emperor who tried and partially managed to bring back to the Empire the Western provinces lost in the 5th century. On the Danube border, during Justinian's ruling,

Dr Alexandru Madgearu – the Institute for Political Studies of Defence and Military History.

¹ P. Kehne, *War- and Peacetime Logistics: Supplying Imperial Armies in East and West*, in P. Erdkamp (ed.), *A Companion to the Roman Army*, Oxford, 2007, p. 330.

the programme of reconstructing fortifications and building new ones, that started and yielded good results during Anastasius I, continued. Border consolidation was necessary because the attacks of the barbarian population from the North of the Danube were increasing. Besides the Kutrigurs (Turkish population), in the first decades of the 7th century, the Slavs appeared in the area.

The two Danube provinces had a precarious economic situation, because of often invasions. Just a few years before, in 513, an uprising started in the army and drew in a big part of the civil population from these provinces specifically because of Anastasius' decision to collect no longer than annually these contributions in kind². To make sure the army in Scythia and Moesia Secunda received supplies, Justinian made a less usual decision on 18 May 536: the creation of an administrative and military structure, named *quaestura exercitus*, in which the two Danube provinces were associated with the Cyprus Islands, the Cyclades and the Caria region in Asia Minor³. All these provinces were part of the Prefecture of the East. Its seat was in Odessus (Varna), and its commander (with military, civil, and judicial attributions) was *quaestor* Bonus. The original text of the Edict given on 18 May 536 was kept only in abstracts made by jurists Julianus, Theodorus of Hermopolis and Athanasius⁴. Yet, another Edict was entirely preserved, the one given on 18 August 537, in which Bonus was given orders regarding his judicial attributions⁵. Similar data can be found in *De Magistratibus*, written by Joannes Lydus: Justinian "named a prefect the commander of the troops in Scythia and gave him three more provinces: Cyprus (...), the entire Caria and the Ionian Islands (...) and the Emperor wanted them be led by the Prefect of Scythia"⁶. Its position was similar to the one of a prefect (prefectures were the biggest military-administrative units the empire was divided in after the reform made at the end of the 3rd century), and its deputy's seat was in Constantinople⁷.

² A. Madgearu, *Armata din provincia Scythia în apărarea ortodoxiei. Revolta generalului Vitalianus*, in *Revista de Istorie Militară*, 2001, 2 (66), pp. 37-41.

³ *Corpus Iuris Civilis*, vol. III, *Novellae*, recognovit Rudolphus Schoell, Berlin, 1912, pp. 261-262 (*Novella XLI*) *Fontes Historiae Daco-Romanae*, vol. II, București, 1970, p. 381.

⁴ A. Gkoutzioukostas, *Published Lead Seals concerning Quaestura Exercitus*, in *Proceedings of the International Symposium Dedicated to the Centennial of Dr Vassil Haralanov, Held in Shumen in September the 13th-15th 2007*, coord. Ivan Jordanov, Shumen, 2008, p. 110.

⁵ The decree on 18 August 537 (*Lex ut Bonus*) was not the document through which the *quaestura* was created, as incorrectly presented in M. Zahariade, *Scythia Minor. A History of a Later Roman Province (284-681)*, Amsterdam, 2006, p. 32. In that document there is a reference to a previous decision, a decree that was not sent.

⁶ Joannes Lydos, *Peri archon*, II. 29 (*Fontes Historiae Daco-Romanae*, vol. II, p. 495).

⁷ S. Torbatov, *Quaestura Exercitus: Moesia Secunda and Scythia under Justinian*, "Archaeologia Bulgarica", 1, 1997, 3, pp. 78-79.

Historians wondered why this structure was created from provinces without territorial continuity, taken from three dioceses (Dioceses of Thrace, of Asia and of the East), in which a commander seated in Odessus had to be in charge of islands such as Cyprus and the Cyclades, which were not important at that time for defending the empire. Because all these provinces were at sea and because in Cyprus there were important shipyards, they reckoned that the measure was meant to strengthen the Danube fleet⁸. This point of view is only partially true. The great British historian John Bagnell Bury noticed that the association with some of the richest provinces was able to provide the funds necessary to maintain the Danube troops, because, as mentioned previously, repeated destructions affected the economic potential of Moesia Secunda and Scythia⁹.

In this respect, one must mention the tax exemptions that would be later given for the villagers in these provinces through the Edicts from 566 and 575. In the first edict, it was mentioned the tax exemption for “*prefect Justinian and the military units in Moesia and Scythia*”, and, in the second, for “*the command of the islands and military units in Scythia and Moesia*” – both being references to *quaestura exercitus*¹⁰. In the first edict, the commander is named *eparch* (the Greek version of *praefectus*), which shows that, after a while, the position was even assimilated with the one of the prefecture commander, although the territory was smaller.

The solution provided by Justinian was meant to compensate the fiscal losses from the threatened areas through the contributions of the provinces that had not been endangered by invasions. Actually, the support was not only financial, because these islands, big wine and olive oil producers, could provide these products, which were part of the *annona*, to the military men in the Danube provinces. The wine and the oil were transported in amphorae, with the military fleet that went to Odessus and in the other maritime and river harbours of the two provinces.

⁸ E. Stein, *Histoire du Bas Empire, tome II. De la disparition de l'empire en Occident à la mort de Justinien (476-565)*, Paris, 1949, pp. 474-475.

⁹ J. B. Bury, *The History of the Later Roman Empire from the Death of Theodosius I to the Death of Justinian*, vol. 2, London, 1923 (reprint New York, 1958), pp. 340-341. Similar arguments in R. Vulpe, I. Barnea, *Din istoria Dobrogei. II, Romanii la Dunărea de Jos*, București, 1968, pp. 428, 452; M. Hendy, *Studies in the Byzantine Monetary Economy, c. 300-1450*, Cambridge, 1985, p. 404; E. Oberländer-Târnoaveanu, *Aux origines économiques du Moyen âge au Bas-Danube: Notes sur l'évolution des échanges monétaires dans la zone rurale de Dobroudja et au nord-est de la Bulgarie aux VIe-Xe siècles*, in *Studia historica et theologica. Omagiu profesorului Emilian Popescu* (ed. C. C. Petolescu, T. Teoteoi, A. Gabor), Iași, 2003, pp. 214-215.

¹⁰ Novella CXLVII and Novella CLXIII (*Fontes Historiae Daco-Romanae*, vol. II, 385). To read the interpretation of these two sections, see S. Torbatov, *op. cit.*, pp. 79-80.

That is why the main purpose of creating this new military structure was supplying the Danube troops¹¹.

Since *quaestura exercitus* was in charge of funding and supplying the Danube troops, one can say that this military structure created in 536 was a sort of logistic echelon of the Romano-Byzantine army. As far as we know, there is no other similar structure. It was needed because of the gap occurred between the supply necessities and the possibilities at the local level of the troops deployed in Scythia and Moesia Secunda. The quaestor collected the taxes from rich provinces both in cash and in kind, in order to send them to the soldiers, and the distribution centre was in Odessus¹². In the time of Justinian, a soldier received an *annona* of 5 *solidi* (1 *solidus* = 4,55 grams of gold), a centurion 15 *solidi* and a tribune 40 *solidi*¹³.

As far as food supply is concerned, recent research has shown that the LR2 type amphorae discovered in large number in the fortification in the Danube area are connected to the transports of goods organised by *quaestura exercitus*. They were mainly used for olive oil, as proven by the waste discovered in some cases, as well as for wine. One of the production centres for this type of amphorae was in Chios¹⁴. LR2 type amphorae were practically discovered in all the fortifications along the Danube, Halmyris (Murighiol, Tulcea County) included, where the Institute for Political Studies of Defence and Military History has been conducting research since 1981.

The goods transported by this logistic structure carried the lead seal of traders from the 6th century. These seals were discovered in many locations on the littoral and the banks of the Danube, in Scythia and Moesia Secunda, but not inside the Balkan provinces. As Florin Curta noticed, this particularity given by the way these seals were spread was given by their connection to the territory controlled by *quaestura exercitus*. In other words, this logistic structure purchased various goods from traders and sent them to the military men deployed at the borders. There were also other seals found that belonged to those who worked in this structure. First, there were several seals of eparch (Chrestos, Photios, Theodosius), then the seals of some *chartularioi*, who seem to be some secretaries at the eparch's office¹⁵.

¹¹ A. H. M. Jones, *The Later Roman Empire, 284-602. A Social, Economic and Administrative Survey*, Baltimore, 1986, I, p. 280, 482-483; II, p. 844; C. Wickham, *Framing the Early Middle Ages: Europe and the Mediterranean, 400-800*, Oxford, 2005, pp. 77-78, 781.

¹² S. Torbatov, *op. cit.*, p. 80.

¹³ W. Treadgold, *Byzantium and its Army. 284-1081*, Stanford, 1995, p. 150.

¹⁴ O. Karagiorgou, *LR2: a Container for the Military Annona on the Danubian Border ?*, in D. Kingsley, M. Decker (ed.), *Economy and Exchange in the East Mediterranean during Late Antiquity. Proceedings of a Conference at Somerville College, Oxford, 29th May, 1999*, Oxford, 2001, pp. 129-166.

¹⁵ F. Curta, *Quaestura Exercitus Iustiniani: the Evidence of Lead Seals*, "Acta Byzantina Fennica", New Series, 1, 2002, pp. 9-26.

The investigation regarding the seals was further carried by Andreas Gkoutzioukostas, who discussed the seals of a certain Theodorus, *praefectus insularum*. This title of prefect of the islands equalled the one of prefect of the quaestura, which comprised the Cyclades and Cyprus. Moreover, he signalled the existence of some other people's seals that can be associated with *quaestura exercitus*: besides *chartularioi*, there were other workers with financial attributions, namely *numerarii* and *scriniarii*¹⁶.

After its creation, *quaestura exercitus* was involved in the logistic provision of the campaigns that took place on the Danube border against the Slavs and then the Avars, until it was abandoned (most probably, the last fortifications were left behind after the big attack in 614). However, the supply made through *quaestura exercitus* was not always sufficient; in the treatise on military art belonging, most probably, to Emperor Maurikios and written at the end of the 6th century it was recommended that supply should take place on enemy territory¹⁷. One should take into account that the fleet was not always able to sail upstream the Danube; if a campaign took place in wintertime, then the ships would not be able to break through or their access would be very difficult. There were campaigns carried in wintertime between 594 and 595 and between 597 and 598, and Phokas' riot took place in November 602¹⁸.

A special mission was the one in which the fleet subordinated to the questor took part in 578. At that time, the Avars were not yet in conflict with the Romano-Byzantine Empire and that is why Emperor Tiberius Constantinus (578-582) succeeded in determining them to launch a campaign against the Slavs that occupied the Wallachian Plain. In order to do that, the Roman fleet transhipped the Avars to the south of the Danube, and these crossed the provinces Dacia Ripensis, Moesia Secunda and Scythia, in order to attack the Slavs by surprise, crossing the river through one of the Dobrujan crossings¹⁹. According to a fragment from the lost work of Menander Protector, *On Envoyship*, this mission was assigned to Ioannes, who "*was commander of the islands and in charge of the cities in Illyricum*". This position of "*commander of the islands*" of a commander at the Danube cannot

¹⁶ A. Gkoutzioukostas, *op. cit.*, pp. 111-118.

¹⁷ F. Curta, *op. cit.*, p. 17.

¹⁸ A. Madgearu, *Continuitate și discontinuitate culturală la Dunărea de Jos în secolele VII-VIII*, București, 1997, pp. 21-23, 180.

¹⁹ C. Chiriac, *Expediția avară din 578-579 și evidența numismatică*, in "*Arheologia Moldovei*", 16, 1993, pp. 191-203.

be anything but *quaestura exercitus*. In this case, Ioannes also was praetorian prefect for Illyricum²⁰.

After abandoning the Danube border, the commander of the fleet that supplied the *quaestura exercitus* was most probably moved to Samos, where, consequently, the fleet of the maritime province *Karavisianoï* would be created. In the wreck of a ship sunk around the 630s near Yassi Ada, numerous amphorae were found and it is believed that they were part of a transport sent by the *quaestura exercitus*²¹.

Although it was created as a new military-administrative division of the Romano-Byzantine Empire, *quaestura exercitus* can definitely be considered a structure with logistic functions, whose missions mainly entailed troops supplying and maritime and river transportation.

English version by
 **Iulia NĂSTASIE**



²⁰ *The History of Menander the Guardsman. Introductory Essay, Text, Translation, and Historiographical Notes* by R. C. Blockley, Liverpool, 1985, pp. 192/193 (fragm. 21) and note 261 (p. 280); S. Torbatov, *op. cit.*, p. 84.

²¹ P. G. van Alfen, *New Light on the 7th-c. Yassi Ada Shipwreck: Capacities and Standard Sizes of LRA1 Amphorae*, in *Journal of Roman Archaeology*, 9, 1996, p. 211.

EUROPE HAS A CENTRAL ROLE TO PLAY IN THE MIDDLE EAST

Marc OTTE

The author draws attention to the problems of the Middle East, advocating for the need for projecting the EU model of integration and cooperation in order to deal with the issues in the area, reckoning that Europe can and must play a central role in the coming transformation of the Middle East. In this respect, he mentions that the region is now acutely symptomatic of the unpredictable way the international system has changed faster and more radically than anyone could have expected, being influenced by the emergence of new players as well as considerable governance deficits, which are leading to the creation of failed states etc.

In line with General de Gaulle's "simple ideas" to the "complicated East" approach, Mr. Otte puts forward a few propositions regarding the peace process in the Middle East, all leading to the institutionalisation of relations between countries in the Middle East, along European, Asian or even Latin American lines, that has to be pursued as a long term goal and as a political backdrop for peacemaking.

Keywords: Middle East; Palestinian-Israeli conflict; two-state solution; peacemaking; Iran; Afghanistan

When General de Gaulle said that he was setting off with "simple ideas" to the "complicated East", he encapsulated the predicament of Westerners trying to make sense of the problems and the deep-rooted motivations of all the players in the Middle East.

De Gaulle's comment can also help to shed light on the reasons why the West and its allies have of late seemed unable to articulate anything other than purely reactive strategies, leaving the initiative to their adversaries. In Iraq, in Palestine, in Lebanon and in Afghanistan, not to mention the Sudan, failure looms as the military and civilian resources of both NATO and the EU come under very real stress.

Consider the Israeli-Arab conflict. The standard view is that the parameters for a solution are well known and that all it would take to implement them is leadership and political courage. Yet, even as both Israelis and Palestinians keep on telling the pollsters that a two-state solution is their preferred option, Israeli voters recently ushered in a government that has still to explicitly endorse the two-state solution.

The article was featured in the journal *Europe's World*, summer 2009, <http://www.europesworld.org/NewEnglish/Home/Article/tabid/191/ArticleType/articleview/ArticleID/21436/Default.aspx>
Marc Otte – EU Special Representative for the Middle East Peace Process.

And opinion polls among Palestinians show that the popularity of those who advocate military “*resistance*” is again on the rise.

What is it that the rest of the world seems to be missing ? Is there really lack of leadership and political courage all round ? Are the people simply losing hope in the feasibility of the more or less obvious solutions to their problems ? Do they find the costs too high ? Are outsiders, as is too often the case, only listening to what they want to hear ? Or maybe only to whom they want to listen to ? Are the local parties happy to oblige, so as not to damage relations with their patrons and protectors ?

Deeper interconnections between issues of increasing complexity now dominate the changing strategic landscape in the Middle East, especially as its boundaries now extend in the mindsets and strategies of those concerned all the way from the Mediterranean to Afghanistan and Pakistan. And by that definition, the region is now acutely symptomatic of the unpredictable way the international system has changed faster and more radically than anyone could have expected.

First there is the emergence of new players, who are challenging the assumption that Western values are necessarily the model for the future shape of international relations. In some new and future system of agreed universal values, democracy, human rights, rule of law, focus on fulfilment and responsibility of the individual may have to live side by side with other principles.

The new players include a host of non-state actors who have become strategic threats and act in concert with states that reject the traditional rules of conduct in international relations. By supporting the worst forms of terrorism and actively seeking to acquire weapons of mass destruction, their aim is to increase their own disruptive potential.

At the same time, considerable governance deficits are leading to the creation of failed states or failed societies at the local level, and at the global level preventing solutions for such problems as the international financial system, global warming, international migrations, competition for resources and so on. This becomes fertile ground for the radicalisation of large segments of societies across the globe, fuelled by social disruptions and preyed upon by reinvigorated religious fundamentalists, extreme nationalists and those who preach messianic ideologies.

The Middle East has evolved into one of the main battlegrounds in the confrontation between the Western model and “*the other*”. Iran is obviously the elephant in the room, but the rising power of Iran is not enough to explain the prospect of the Middle East becoming a black hole of globalisation and a central threat to world peace.

For centuries, change in the region has for better or for worse always included a fair degree of intervention from outside. Any reflection on the future role of outsiders

should apply the principle of “*first, do no harm*”, as Aaron David Miller reminded us in his recent book “*The Too Much Promised Land*”. Regional players have often proved apt at bringing disaster on themselves without there being any need for the outside world to aggravate matters with yet more misguided policies.

Now, a new wind is blowing from Washington, capturing the attention of friend and foe alike. Barack Obama’s message is that talking to one’s enemies does not necessarily mean appeasement. Comprehensive peace, including the two-state solution is the objective, and this is increasingly understood to be in the US national interest. Failure to solve the Arab-Israeli conflict would further destabilise the region. The Obama Administration’s determination to achieve results and not to engage in further lengthy processes is a call for everybody to contribute positively.

This new US commitment is improving the odds on a genuinely sustained and comprehensive conflict resolution effort that could change realities in the region. This new approach should be parallel rather than sequential, thus creating mutually reinforcing processes. This means there will be no room for picking and choosing, no possibility of “freezing” one issue in order to tackle another that could be perceived as more important. It should also be inclusive, involving all the players like Turkey and, ultimately, Iran.

Without changing the essentially bi-lateral character of peace negotiations, the creation of an overall international umbrella should be envisaged so as to shepherd negotiations, agree on goals, calendars and benchmarks to assess progress, tie parties to conflicts into binding commitments regardless of developments in domestic politics, establish monitoring by outside referees, articulate contributions by the international community to the implementation of final settlements and discuss the creation of a regional system in the post conflict situation. That would serve to mobilise all players more effectively and send a powerful message of legitimacy and unity of the international community for those who would choose to remain outside. The regional dimension provides guarantees that bilateral and partial deals will last because they are consolidated by regional economic integration and security arrangements.

An internationally agreed forum should mandate the establishment of the mechanisms to set all this in motion. The international economic crisis should be a powerful motivation to set the Middle East on the track of modernisation. The Arab world was represented at the G20 and now needs to find the financial and human resources to become an active participant in negotiating global reform. The financial packages and policy measures agreed at the G20 in London must be used to consolidate peace in the region, and therefore need to be developed by the regional players in conjunction with the international community. The new roles

being assigned to the *IMF* and the *World Bank* should also be used to create a new template for the region, just as the *Marshall Plan* paved the way for Europe's economic and political integration. The trade dimension has to be addressed, too, with regional trade arrangements and *WTO* membership for all the countries in the region placed on the drawing board. European models like *CSCE* and *OSCE* could perhaps be replicated and adapted to regional conditions.

In short, the institutionalisation of relations between countries in the Middle East, along European, Asian or even Latin American lines, has to be pursued as a long-term goal and as a political backdrop for peacemaking.

What happens in the Middle East fundamentally affects European interests, and the *European Security Strategy* emphasises that point. Europe has been involved for a long time and has no choice but to remain so because the future of the Middle East is not some distant strategic concern but is a neighbourhood issue. The spill-over of conflict and instability there is an immediate problem for European societies. Europe is not just a payer but a full player in diplomatic, security and economic affairs, whether we all of us like it or not.

The EU has been a pioneer in developing multilateral instruments like the *Barcelona Process* a decade ago, and today the *Union for the Mediterranean* and the *European Neighbourhood Policy*. History has taught us Europeans that projecting the EU's model of integration and cooperation is still one of our best assets in stabilising our neighbourhood and widening the areas of rule of law and prosperity. Europe can and must play a central role in the coming transformation of the Middle East.



SECURITY AND ELECTIONS IN AFGHANISTAN

– Why the Two Must Go Together –

Dr Wadir SAFI

The author writes about the important role played by security in the post Cold War era and the need for the countries in the world to follow democratic paths, in general, as well as about the security in Afghanistan, in particular, which takes centre stage in the context of the forthcoming elections in the country.

In this respect, he mentions a series of factors that may impede on the free and fair nature of the elections: the interference of foreign countries, the lack of a secure and effective environment, the fact that the real power is in the hands of irresponsible gunmen owners, the prevailing injustice in society, the percentage of illiteracy etc.

He concludes by mentioning Afghanistan's need for a secure environment, in which people can feel free and think comfortably and express their ideas independently, as well as for self-determination, with Afghans choosing the right socio-economic-political path for their own economic, social, cultural and historical-traditional prevailing conditions.

Keywords: *elections; secure environment; increasing illiteracy; foreign interference; democratically elected regime*

Back in 1964, Afghanistan finally got a constitution. It guaranteed peoples' rights, but merely on paper. In its decade of democracy, Afghanistan was calm, and there was no threat to its independence, territorial integrity or sovereignty.

Despite this, parliamentary elections at the time were full of illegitimate interferences from above. Efforts were made to bring in the supporters of the King. This led to more interference by foreign countries. Finally, this opened the way for military coups and foreign aggression supporting specific regimes in Afghanistan.

What happened after that, in the last 30 years in Afghanistan, has resulted in more atrocities, loss of human resources, increasing illiteracy, economic dependence, an autocratic mentality and religious fundamentalism used for political ends.

Taking this into consideration, the question arises: *Can the forthcoming elections be sure to be free and fair in the current security environment ?* The answer is obvious: *No !*

The article was featured in the *NATO Review*, April 2009, <http://www.nato.int/docu/review/2009/Afghanistan-law-order-elections/Security-Elections/EN/index.htm>

Professor Dr Wadir Safi – Senior Legal Advisor at the International Development Law Organisation and Professor, Faculty of Law & Political Sciences, Kabul University.

Our war-torn people live under the shadows of corruption and government bribery. This has resulted in dissatisfaction, mistrust and hopelessness of Afghans in general.



An Afghan election monitor validates a voter registration card.

Why ? First, because only in a secure environment can people feel free and think comfortably and express their ideas independently. These conditions are not yet met in most of Afghanistan's territory or population.

This is obvious from the developments in security, economics, general reconstruction in society, justice and the rule of law. Our war-torn people live under the shadows of corruption and government bribery. This has resulted in dissatisfaction, mistrust and hopelessness of Afghans in general. This, in turn, has caused increased insecurity and siding with the armed enemies of the regime.



*Darko Zeljkovic/NOMAD
Elections are designed to help Afghans
regain control of their country.*

Until these enemies are met and brought to negotiations, through military pressure or active diplomacy (or both), elections cannot be free and fair. Especially if these same enemies have declared their threats of attacks on those who take part in the coming elections. There are many previous practical examples showing they are capable of such acts.

Second, in Afghanistan today the real power in all 34 provinces is mostly in the hands of irresponsible gunmen owners who are linked to high ranking officials in the central government in Kabul. In other words, we see 34 pictures and copies of what we witness in Kabul. Those who oppose their orders or act independently are dead people. And no Commission or official judiciary is capable of bringing these criminals to justice.

This again causes insecurity in a society that has a weak administration. I believe that this forces some victims families to escape and enter the service of armed opposition. They become cheap religious or economic hostages, ready to commit any crime in reaction to what happens in his country. These victims not only do not take part in elections, but also want to disrupt others.

Third, no war-criminal or human rights violator has yet been brought to justice. Many are well-known to the people of Afghanistan. Afghans are still living in a tribalism (and have for decades) because of the lack of an effective government. This was fuelled by pro-Soviet regimes who divided people by ethnicity, language, geography, religion and politics – so that they obeyed more. Different Afghan ethnic groups were even given arms to use against each other.

So, no justice, no peace ! The prevailing injustice in society means people are not secure and cannot trust the regime. This infringes free and fair elections in the country.

Even among the literate, the percentage of politically mature is at a minimum

Fourth, illiteracy. In Afghanistan, the percentage of literacy has always remained low. It has in fact decreased, especially after all the wars. The reasons include the increase of refugees and displacements. Learning to read and write is not helped in an environment which has widespread basic agricultural practices, no modern industry and wholesale economic insecurity. Living day to day is more important in a society that suffers from human trafficking, narcotics smuggling mafia and people submitting to the political and religious wills of others for money. Even among the literate, the percentage of politically mature is at a minimum.

Fifth, the presence of foreign troops is a factor, be it for security or fighting international terrorism. As the armed enemy of the regime and foreign forces fight continuously in Afghanistan, the insurgency starts living in the same homes as the rest of the population. This situation causes casualties more to the civilians than insurgents; if not physically, the majority is affected mentally and psychologically. This causes discontent and opposition to the regime.



*ISAF/NATO
Afghanistan's security will be tested
again during elections this year.*

This, in turn, gives a helping hand to those foreign elements who want to continue the war in Afghanistan for their own national interests.

Sixth, this overt (or covert) interference in Afghanistan's elections by neighbouring and other foreign countries hoping to influence the future government is even more dangerous for free and fair elections. Why ? Because many of the power-addicted personalities

rely more on money and guns from those external forces rather than respecting the real votes of their citizens.

In conclusion, let us not to destroy the image of a real democracy by applying it through a false and fake process. Afghanistan is taking its first steps towards elections. What's needed is self-determination, with Afghans choosing the right socio-economic-political path for their own economic, social, cultural and historical-traditional prevailing conditions.

This is especially important in this post *Cold War* era, where the whole world is encouraged to follow democratic paths, such as holding elections, as a route to future prosperity. This is what the Afghans, in our war torn country, thirst for and it is the only way out of all the evils here. So, security is a must for establishing a true democratically elected regime.



RULE OF LAW DEFICITS AS A SECURITY CHALLENGE: “TOUCHING THE SURFACE”

Dr Sari KOUVO

The author argues that an increased focus on the technical aspects of rule of law reform will not break the negative spiral of the Afghan public's declining trust in the state and increased insecurity without a political will to tackle institutionalised impunity. In this respect, she mentions that, while observing the international community's military and developmental engagement in Afghanistan, she has been particularly interested in the role of law in the shift from conflict to peace, noticing that the common perception has shifted from the rule of law reform being a marginal issue to becoming the issue to be addressed if the state-building process in Afghanistan is to be saved.

To conclude, the author reckons that a renewed commitment to rule of law in Afghanistan should include an increased focus on disarmament and accountability in security sector reform and using the access to justice as a measure for success of justice reform.

Keywords: *state-building; rule of law reform; provincial justice initiative; Afghan justice sector; institutionalisation of impunity*

Visiting a provincial prison in northern Afghanistan some years ago, I met a friendly and engaging prison chief. He told me about the challenges he was facing with corruption among the police, prosecutors and judges and how bad he felt about prolonged pre-trial detention and his administration's shortcomings.

He also emphasised how much he appreciated the cooperation with the *Provincial Reconstruction Team (PRT)* and was eager to show me the refurbishment done with PRT support. In the middle of the conversation the prison chief had to take a call.

After my translator and I left the meeting, my translator informed me that the telephone conversation was about how much bribe a certain prisoner should be expected to pay for his release.

Since the Presidential elections in 2004, I have had the opportunity to observe the international community's military, political and developmental engagement in Afghanistan. As a lawyer, I have

The article was featured in the *NATO Review*, April 2009, <http://www.nato.int/docu/review/2009/Afghanistan-law-order-elections/Rule-of-law/EN/index.htm>

Sari Kouvo – Head of Programme, International Centre for Transitional Justice Senior Analyst, Afghanistan Analysts Network. Her previous positions include Human Rights and Rule of Law Advisor to the European Union Special Representative for Afghanistan and researcher on Afghanistan at Amnesty International.

been particularly interested in the role of law (or the lack thereof) in the shift from conflict to (at best) awkward peace.

During this period, common perceptions about state-building have changed from as “almost on track, give or take a few major challenges” to “almost failed, but possibly savable”. Over the same period of time, the common perception has shifted from rule of law reform being a marginal issue to becoming the issue to be addressed if the state-building process in Afghanistan is to be saved.

My experience with the prison chief is a perfect illustration of the failure of the rule of law reform strategies deployed in the first years of the state-building process: ad hoc and donor-driven reform projects focusing on some law reforms, short-term capacity-building and refurbishing infrastructure.

These efforts affected nothing but the surface of the Afghan security and justice sectors, while a culture of corruption and impunity was allowed to grow stronger. Depending on who the interlocutor is, the security and justice sectors show their different facets. The well-meaning foreigner with her driver and translator and the Afghan peasant who is claiming back his land from the local commander face very different realities of (in)justice.

The international community is finally in a situation where it can “connect all the dots” and overcome the shortcomings of previous reform initiatives.

- The World Bank has been supporting the establishment of a justice window in the *Afghanistan Reconstruction Trust Fund (ARTF)*;
- The *UN Assistance Mission for Afghanistan (UNAMA)* in cooperation with the *UN Development Program (UNDP)* have been beefing up its rule of law unit through establishing the provincial justice initiative and
- Troop contributing nations to the *International Security Assistance Force (ISAF)* have been developing justice components in their security sector and development initiatives.



*NATO/ISAF
KABUL, Afghanistan: ANP
officers graduate
from their training course
in Kabul in June 2008.*

The past two years have seen increased focus on rule of law and have resulted in the emergence of new strategies and actors.

- The *Afghanistan National Development Strategy (ANDS)* includes a comprehensive strategy for justice reform;

When interviewing representatives of the international community about the increased focus on promoting rule of law in Afghanistan, one interviewee noted that the international community is finally in a situation where it can “connect all the dots” and overcome the shortcomings of previous reform initiatives. My meetings and discussions with Afghan legal practitioners show these reforms in a different light; the “dots” may connect, but the map does not correspond with reality.

Tackling Impunity

Without a doubt, the Afghan justice sector is dysfunctional and eroded, and considerable effort is needed to strengthen the technical aspects of rebuilding the security and justice sectors. In Afghanistan today, there are several parallel, and often inherently conflicting, perceptions of governance and rule of law. The governance and the religious laws imposed by the Taliban were extreme, brutal and discriminatory, but they were also only one more governance/rule of law structure forcibly imposed by a centralised government in Kabul, or in Kandahar in the case of the Taliban, whose power and legitimacy remained contested.

After years of conflict and several changes of governments, multiple government-centred (formal) and customary and community-based (informal) systems of governance and law continue to exist in parallel in Afghanistan. The last eight years of internationally-supported state-building have added to the complexities of rule of law and governance in Afghanistan.

The failure to exclude the leaders of armed militias, many of whom have known records of gross human rights abuses, from government structures and the failure to ensure a comprehensive disarmament process have further weakened good governance and rule of law. The presence of leaders who perceive themselves to be above or beyond the law in the government has entrenched the void between myth and reality in the internationally-supported rule of law reforms in Afghanistan.



NATO/ISAF

In Afghanistan, the rule of law continues to be a blend of government-centred (formal) and community based (informal) initiatives.

This is strongly recognised in the Afghan government’s own submission to the *Universal Periodic Review (UPR)* of the *UN Human Rights Council*, where the government stresses that one of the reasons that progress has not been made in implementing its own *Action Plan for Peace, Justice in Reconciliation* is the “*inefficiency of the government apparatus and influence of powerful and former violators of human rights*”.

One of the most extreme examples of the “*institutionalisation*” of the culture of impunity is the adoption of the so-called amnesty bill by the Afghan parliament in spring 2007. Some of the (former) leaders of militias and now members of parliament managed to force the adoption of a law that, with a few exceptions, provided amnesty from prosecution for all those involved in the last two decades of conflict in Afghanistan.

Although the Afghan government stated in its UPR submission that President Karzai has not signed the bill and therefore it is not in force, the bill has served as a reminder of the continuing power of the militia leaders. And it is fair to presume that most of the Afghans who know about the Amnesty Bill still believe that it is a law in force in Afghanistan.

The declining security situation now poses considerable challenges for the implementation of programmes in certain provinces and districts.

Another reason for the institutionalisation of impunity has been inadequate attention to reform at the sub-national level. While some efforts have been made within the central government to address governance and rule of law deficits,

provinces and districts were largely left to fend for themselves during the early years of the state-building process.

Although there is now a much more clearly stated focus on sub-national governance and rule of law (the UN provincial justice initiative being one part of this), the declining security situation now poses considerable challenges for the implementation of programmes in certain provinces and districts.

As a result, throughout the state-building process, the Afghan government’s only presence among large parts of Afghanistan’s poor and illiterate populations has been:

- Prison chiefs like my friend from the north;
- Corrupt police officers ready to harass if they do not receive their bribe;
- Judges whose decision depend on the will of the local strongman rather than on law; and
- Unofficial local governors who find it convenient to serve not only as governor, but also as police chief, prosecutor and judge in their district.



*NATO/ISAF
Graduates of the Focused Border
Development Training Programme,
Spin Buldak, Afghanistan, April 2, 2009.*

Though many observers warn that the elections are unlikely to be free and fair, the hope is that they will be at least credible.

Not surprisingly, these patterns of corruption and crime have undermined the legitimacy of the government and are contributing to growing insecurity: a citizen that

cannot trust the government is unlikely to defend and support it.

Promoting Legitimacy

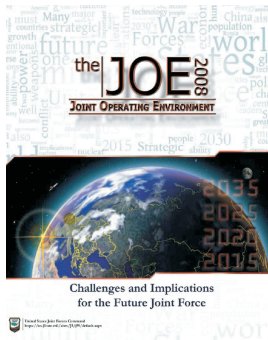
Much emphasis is currently put on the upcoming electoral cycle and its power to restore the Afghan government's legitimacy. Though many observers warn that the elections are unlikely to be free and fair, the hope is that they will be at least credible. Elections, enabling citizens to choose their political leadership, can certainly be a powerful tool for legitimacy.

However, as was already proven in the previous round of elections (presidential elections in 2004 and parliamentary elections in 2005), elections are no silver bullet. If perpetrators of war crimes and people with links to illegal armed groups are allowed to run for office and get elected using strategies way beyond basic election politics handbooks, elections may perpetuate rather than resolve the legitimacy crisis.

Given the extensive political, military and development support that it is providing to Afghanistan, the international community (including ISAF troop contributing nations) is in an excellent position to demand that the Afghan government consult with its citizens and to support justice-focused political debate in Afghanistan. Making demands on the Afghan government does of course also involve taking a critical look at the international community's own strategies (such as has already been initiated by the new US Administration).

However, at a minimum, a renewed commitment to rule of law in Afghanistan should include an increased focus on vetting senior political appointees and political candidates in the upcoming cycle of elections, an increased focus on disarmament and accountability in security sector reform and using access to justice as a measure for success of justice reform.





THE JOINT OPERATING ENVIRONMENT 2008

Challenges and Implications for the Future Joint Force

Part III: The Contextual World

Contexts of conflict and war are the environment created by the confluence of major trends. Contexts illuminate why wars occur and how they might be waged¹.

Colin Gray

A. Competition and Cooperation among Conventional Powers

Competition and conflict among conventional powers will continue to be the primary strategic and operational context for the Joint Force over the next 25 years. For the purpose of the *Joint Operating Environment*, a “conventional power” is an organization that is governed by, and behaves according to, recognized norms and codes – conventions. Such institutions may be political (the state), financial, judiciary, business and economic, academic, and many more.

¹ Colin Gray, “*Sovereignty of Context*”, Strategic Studies Institute, 2006.

Conventions may include the Geneva Convention, the Law of Armed Conflict, United Nations Resolutions, National and International Law, international trade agreements, diplomatic alliances, monetary and banking conventions, and many more. These are groups that are broadly recognized as being legitimate actors, behaving according to broadly recognized rule sets.

The state will continue to be among the most powerful conventional institutions. It has become popular to suggest that the era of states is coming to an end. In fact states, in one form or another, have been the order of most of human affairs since the dawn of history in almost all cultures. The chaos in places such

as Somalia, Sierra Leone, Afghanistan, and Iraq, where the state's structure has been dysfunctional for periods of time, is further testimony to the utility of a working state.

This is not to say that states will not vary from culture to culture, region to region. As well, the state will undoubtedly change in response to the influences of politics, geography, migration, economics and other factors. But though it will mutate and adapt to the international environment's changing conditions, the state will continue to survive as a centralized mechanism through which power is organized and which provides the internal and external security required by its citizens. Some aspects of globalization, and the related rise of non-state powers, will pose difficulties to states in their efforts to preserve their status, but the state will endure as a major power broker into the 2030s.

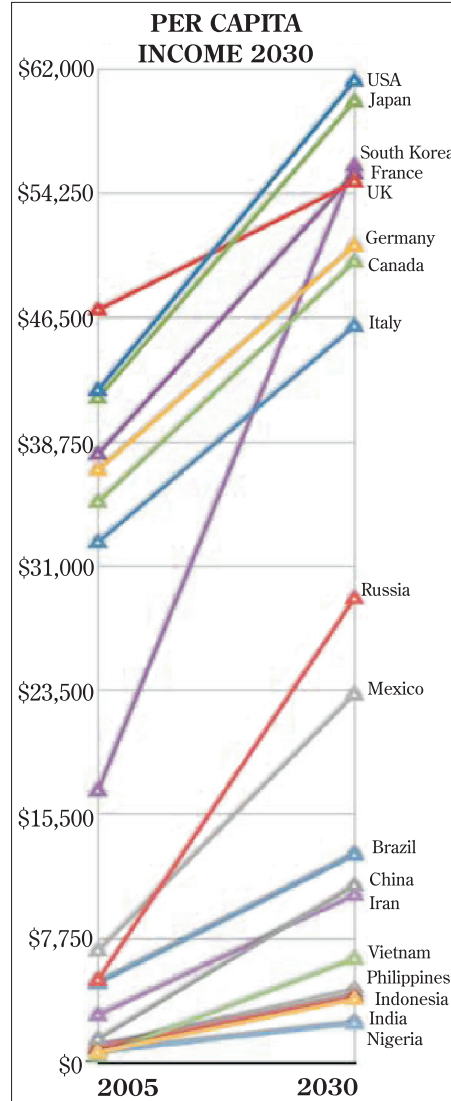
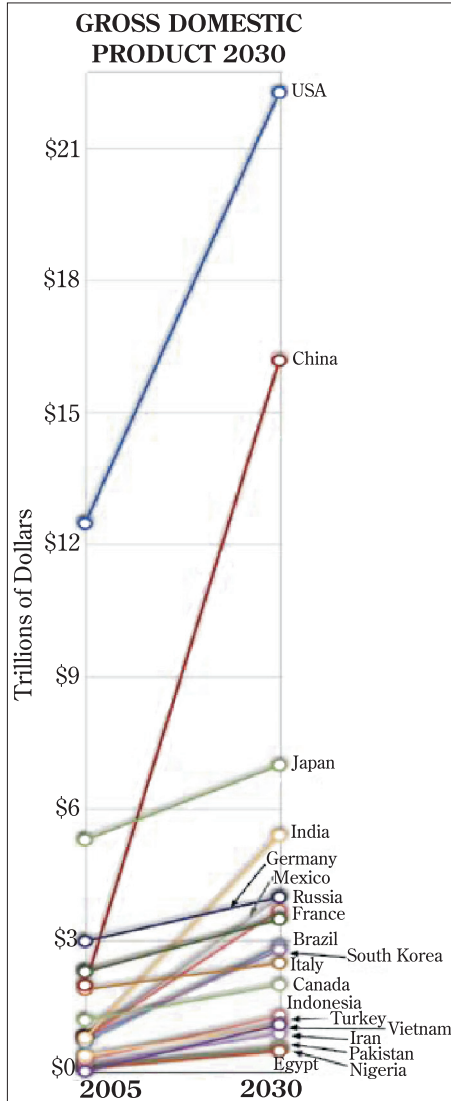
In the next 25 years, the relative balance of power between states will shift, some growing faster than the United States and many states weakening relative to the United States. The variables that affect the growth of states range from wars, to the effectiveness of political leaders, economic realities, ideological preconceptions, and ethnic and religious forces. All will to one extent or another influence the course of future events. Recognizing that reality, present trends suggest that the era of the United States as the sole superpower may be coming to an end. The charts on the next page,

highlighting potential growth in various nations between 2008 and the 2030s, suggest much about the nature of the emerging international arena.

While China's rise represents the most significant single event on the international horizon since the collapse of the Cold War, it is not the only story. Steady, if not rapid economic growth appears to be the norm for much of the world over the coming decades, provided sufficient energy remains available to fuel that growth. Russia and India are both likely to become richer, although Russia's strength is fragile, resting as it does on unfavorable demographic trends, a single-commodity (oil) economy, and a lack of serious investment in repairing its crumbling infrastructure.

As the figures on the next page suggest, based on a GDP per capita basis, a number of countries will be able to field larger conventional militaries over the course of coming decades.

Indeed, the story around the globe is one of substantial potential rearmament. While the rise of Nigeria, Turkey, Brazil, Vietnam, and Egypt may not be as dramatic as what is happening in South and East Asia, their increasing power is and will be remarkable. Admittedly these nations will likely not be able to field globally deployable forces, but they are in a position to build military forces which could either stabilize or destabilize their regions and could significantly challenge the ability



Source: Institute for Defense Analyses

of the United States to project military force into their area.

The critical issue will lie in national will. What has mattered most in the past has been the intent and national goals of states. In the 1930s, the democracies of Western

Europe and the United States possessed the economic strength to crush Hitler's Germany, but lacked the will to rearm – they refused to see the threat. Today, many of these same countries make up the European Union and could field forces as large and capable

as those of the United States, but again they lack the will. Since the end of the Cold War, many European nations have engaged in what could be classified as disarmament. The great question confronting Europeans is whether this trend will continue, or whether some impending threat – an aggressive and expansionist Russia, the internal stress of immigration, or radical Islamic extremism – will awaken them.

It is also conceivable that combinations of regional powers with sophisticated regional capabilities could band together to form a powerful anti-American alliance. It is not hard to imagine an alliance of small, cash-rich countries arming themselves with high-performance long-range precision weapons. Such a group could not only deny U.S. forces access into their country, but could also prevent American access to the global commons at significant ranges from their borders.

Not all conventional organizations will be states. Many transnational organizations will also behave according to a recognized set of conventional rules. Samuel Huntington describes the activity of these groups in this way:

Transnational organizations try to ignore [sovereignty]. While national representatives and delegations engage in endless debate at U.N. conferences and councils, the agents of transnational organizations are busily deployed across the continents, spinning the webs that link the world together².

² Samuel Huntington, quoted in Joseph Nye (with Robert Keohane), *Power in the Global Information Age: From Realism to Globalization*, London, 2004, p. 172.

In this environment, the U.S. must strive to use its tremendous powers of inspiration, not just its powers of intimidation³. How America operates in this world of states and other conventional powers will be a major factor in its ability to project its influence and soft power beyond the long shadow cast by its raw military power.

It will remain first among equals due to its military, political and economic strengths. But in most endeavors it will need partners, whether from traditional alliances or coalitions of the willing. Thus, the United States will need to sharpen its narrative about the unique vision we offer to the world and to inspire like-minded partners to strive and sacrifice for common interests. Alliances, partnerships, and coalitions will determine the framework in which joint force commanders operate. This will require diplomacy, cultural and political understanding, as well as military competencies. Here, the example that Dwight Eisenhower displayed as overall commander of Allied Forces that invaded Europe is particularly useful for future U.S. military leaders.

B. Potential Challenges and Threats

1. China

The Sino-American relationship represents one of the great strategic question marks of the next

³ John Hamre, President, Center for Strategic and International Studies, June 2007.



Source: Department of Defense

twenty-five years. Regardless of the outcome – cooperative or coercive, or both – China will become increasingly important in the considerations and strategic perceptions of joint force commanders.

The course that China takes will determine much about the character and nature of the twenty first century – whether it will be “another bloody century”⁴, or one of peaceful cooperation. The Chinese themselves are uncertain as to where their strategic path to the future will lead. Deng Xiaoping’s advice for China to “disguise its ambition and hide its claws” may represent as forthright a statement as the Chinese can provide. What does appear relatively clear is that the Chinese are thinking in the long term regarding their strategic course. Rather than emphasize the future strictly in military terms, they seem willing to see how their economic and political relations with the United States develop, while calculating that eventually, their growing strength will allow them to dominate Asia and the Western Pacific.

History provides some hints about the challenges the Chinese confront

⁴The title of Colin Gray’s book on the future of war in the twenty-first century.

in adapting to a world where they are on a trajectory to become a great power. For millennia, China has held a position of cultural and political dominance over the lands and people on its frontiers that has been true of no other civilization. The continuities of Chinese civilization reach back to a time when the earliest civilizations in the Nile and the Mesopotamian valleys were emerging. But those continuities and the cultural power of China’s civilization have also provided a negative side: to a considerable extent they have isolated China from currents and developments in the external world. China’s history for much of the twentieth century further exacerbated that isolation. The civil wars between the warlords and the central government and between the Nationalists and Communists, the devastating invasions of the 1930s and 1940s by the Japanese, and the prolonged period of China’s isolation during Mao’s rule further isolated China.

Yet, one of the fascinating aspects of China’s emergence over the past three decades has been its efforts to learn from the external world. This has not represented a blatant aping nor an effort to cherry pick ideas from history or Western theoretical writings on strategy and war, but rather a contentious, open debate to examine and draw lessons from West’s experience. Two historical case studies have resonated with the Chinese: the Soviet Union’s collapse and the rise of Germany

in the late nineteenth and early twentieth centuries. These case studies, written in a series of books, were also made into documentary films and form one of the most popular shows on Chinese television.

In the case of the Soviets, the Chinese have drawn the lesson that they must not pursue military development at the expense of economic development – no traditional arms race. That is the path Deng laid out in the late 1970s and one which they have assiduously followed. Indeed, if one examines their emerging military capabilities in intelligence, submarines, cyber, and space, one sees an asymmetrical operational approach that is different from Western approaches, one consistent with the classical Chinese strategic thinkers.

There are interesting trends in the People's Liberation Army (PLA). The Party has ceded considerable autonomy to the military, allowing the PLA's generals and admirals to build a truly professional force, rather than one constantly hobbled by the party's dictates. This has led to a renaissance in military thinking; one that draws not only from the classics of Chinese writings, but on an extensive examination of Western literature on history, strategy, and war. The internal consensus seems to be that China is not yet strong enough militarily, and needs to become stronger over the long term. But the debate also extends to issues on China's strategic and operational choices: Should it be

offensive or defensive? Should it have a continental or maritime focus, or a mixture of the two? How can the PLA best protect the nation's emerging global interests?

Above all, the Chinese are interested in the strategic and military thinking of the United States. In the year 2000, the PLA had more students in America's graduate schools than the U.S. military, giving the Chinese a growing understanding of America and its military. As a potential future military competitor, China would represent a most serious threat to the United States, because the Chinese could understand America and its strengths and weaknesses far better than Americans understand the Chinese. This emphasis is not surprising, given Sun Tzu's famous aphorism:

Know the enemy and know yourself; in a hundred battles you will never be in peril. When you are ignorant of the enemy, but know yourself, your chances of winning or losing are equal. If ignorant both of your enemy and of yourself, you are certain in every battle to be in peril⁵.

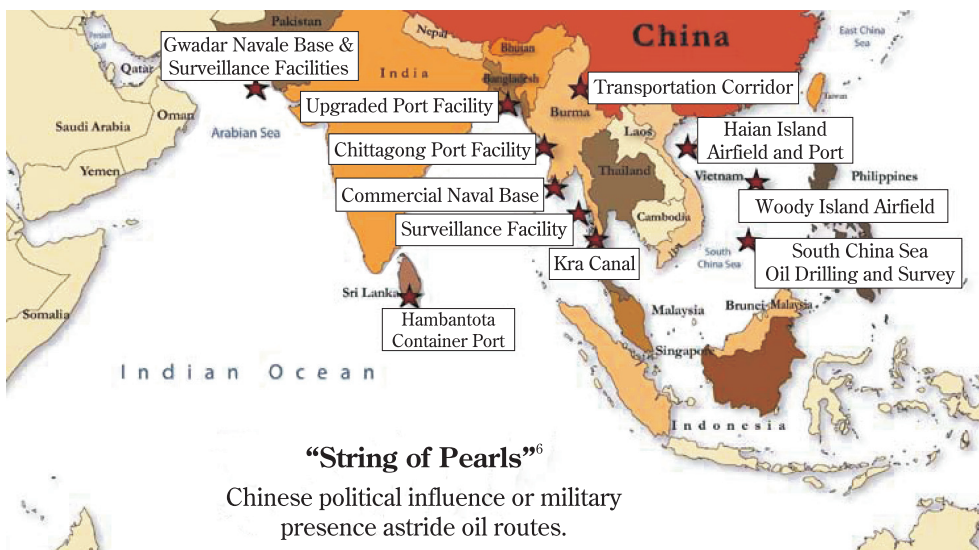
In the Second World War and the Cold War, victory by the allies was achieved in part by the thorough understanding of their opponents, who remained relatively ignorant

⁵ Quoted in Robert Debs Heinl, Jr., *Dictionary of Military and Naval Quotations*, Annapolis, MD, 1967, p. 320.

of the United States and its strengths. The Chinese are working hard to ensure that if there is a military confrontation with the United States sometime in the future, they will be ready.

In regard to a potential military competition with the United States, what is apparent in Chinese discussions is a deep respect for U.S. military power. There is a sense that in certain areas, such as submarines, space, and cyber warfare, China can compete on a near equal footing with America. One does

not devote the significant national treasure required to build nuclear submarines for coastal defense. The emphasis on nuclear submarines and an increasingly global Navy in particular, underlines worries that the U.S. Navy possesses the ability to shut down China's energy imports of oil – 80% of which go through the straits of Malacca. As one Chinese naval strategist expressed it: ***“the straits of Malacca are akin to breathing itself – to life itself”***.



Thinking About China's Potential Military Power

If GDP alone directly translated into military power, in the 2030s China would have the capacity to afford military forces equal or superior to current U.S. capabilities. And while one must temper such calculations by per capita measures, even by conservative calculations it is easily possible that by the 2030s China could modernize its military to reach a level of approximately one quarter of current U.S. capabilities without any significant impact on its economy. There are some important historical excursions to keep in mind.

First, throughout the Cold War the United States sustained military spending levels, as a percentage of GDP, at about twice current levels, or roughly 8% of GDP, without damaging

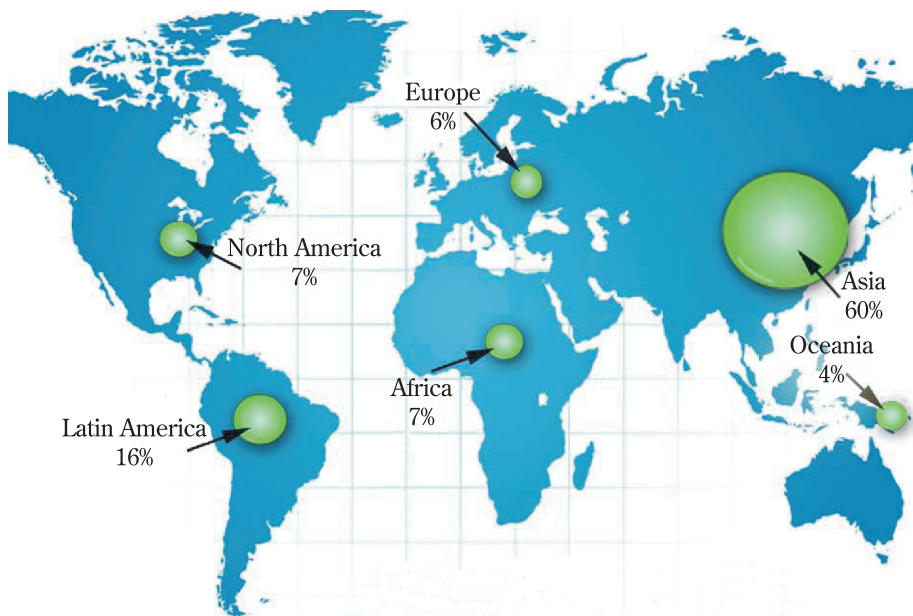
⁶ Christopher Pherson, “Meeting the Challenge of China's Rising Power,” Carlisle Papers in Security Strategy, July 2006.

the economy. If China increased spending to the same level that the United States maintained for decades during the Cold War (8% of GDP) and if U.S. defense spending remained steady as a percent of GDP, China would spend an amount equal to roughly half of America's outlays for defense.

During that period, the Soviet Union proved that a nation can maintain substantially higher rates of military spending for some time before serious economic consequences ensue – the Soviet Union's collapse was due more to the nature of its economic system than to defense expenditures. A similar effort by China could see the Chinese equal U.S. defense expenditures for a multi-decade period. Such an effort would quickly come to the attention of Western analysts, but to what effect? Historically, a more obvious massive military buildup such as that taken by Nazi Germany in the years before the Second World War, did not incite the Western powers to respond.

Chinese writers on military and strategic subjects seem to be in agreement that there is a window of opportunity that will last out to the 2020s, during which China can focus on domestic economic growth and expanded trade with the world to make it a truly great power. China is investing significantly in human and physical capital. Indeed, skilled

Chinese engineers, technicians, and scientists are deeply involved in scientific discovery around the world, and in building the infrastructure upon which its future prosperity and global integration might be built. Above all, however, the Chinese are objective about their own weaknesses as well as strengths and prospects for the future.



Source: Deutsche Bank

What then are the potential courses that China might follow? The challenges that Chinese leadership confronts at present are enormous, and an unsuccessful China is perhaps more worrisome than a prosperous one. A serious global economic down turn might force China in dangerous directions, as was the case with the Japanese in the 1930s. On the other hand, China is confronting major internal problems that could have an impact on its strategic course. Urbanization, pollution on a monumental scale, water shortages, and the possible responsibility to protect a growing ethnic diaspora, in places such as Siberia or Indonesia, represent realities the leadership cannot easily dismiss. Over the course of its history, internal stability along with the threat of foreign invasions have represented the twin political and strategic challenges that Chinese governments have confronted. Moreover, as recent events in Tibet suggest, tensions between the minorities and the central government in Beijing have been building. Yet with China's approach to strategy, there is considerable sophistication in the leadership's understanding of its internal problems.

Taiwan is a wild card, but even here the picture is not clear. A reunification might bring with it the spread of democratic ideals to the mainland and a weakening of the Party's grip on an increasingly educated and sophisticated population.

2. Russia



Source: Washington Times

Russian tanks in Georgia

Russia's future remains as uncertain as its past has been tragic. From one of the world's most populous nations with a bright future in 1914, given its natural resources and rapid growth, the world has watched that potential dissipate and then collapse in the catastrophes of World War I (3-4 million military and civilian dead), civil war (5-8 million), man-made famines (6-7 million), purges (2-3 million), and World War II (27 million), accompanied by sixty years of "planned" economic and agricultural disasters. The 1990 implosion of the Soviet Union marked a new low point, one that then-President Vladimir Putin decried as "the greatest geopolitical catastrophe of the century."

With the collapse of the Soviet Union, Russia lost the lands and territories it had controlled for the better part of three centuries. Not only did the collapse destroy the economic structure that the Soviets created, but the weak democratic successor regime proved incapable of controlling the criminal gangs or creating a functioning economy.

Moreover, the first attempt by the Russian military to crush the rebellion in Chechnya foundered in a sea of incompetence and faulty assumptions. Since 2000, Russia has displayed a considerable recovery based on Vladimir Putin's reconstitution of rule by the security services – a move most Russians have welcomed – and on the influx of foreign exchange from Russia's production of petroleum and natural gas. How the Russian government spends that windfall over the long term will play a significant role in the kind of state that emerges.

The nature of the current Russian regime itself also carries significant concerns. To a considerable extent its leaders have emerged from the old KGB. Thus, their education and bureaucratic culture have inculcated them with a ruthlessness that recalls their predecessors, but without their ideological fervor. This suggests that the strategic perspectives of the regime and its zero-sum focus on security bear watching.

At present, Russian leaders appear to have chosen to maximize petroleum revenues without making the long-term

investments in oil fields that would increase oil and gas production over the long term. With its riches in oil and gas, Russia is in a position to modernize and repair its ancient and dilapidated infrastructure and improve the welfare of its long suffering people. Nevertheless, the current leadership has displayed little interest in such a course. Instead, it has placed its emphasis on Russia's great power status. For all its current riches, the brilliance of Moscow's resurgence, and the trappings of military power, Russia cannot hide the conditions of the remainder of the country. The life expectancy of Russia's

**Russian Claimed Territory
in Arctic Ocean**



Source: University of Durham, UN Marum



Source: Perry-Castaneda Library, Univ. of Texas

male population, 59 years, is 148th in the world and places the country somewhere between East Timor and Haiti.

Perhaps more than any other nation Russia has reason to fear the international environment, especially considering the invasions that have washed over its lands. There are serious problems: in the Caucasus with terrorists; in Central Asia where the stability of the new oil-rich nations is seriously in question; and in the east where the Chinese remain silent, but increasingly powerful, on the borders of eastern Siberia. In 2001, Russia and China agreed to demarcate the 4,300 mile border between them. However, demographic pressures across this border are increasingly tense as ethnic Russians leave (perhaps as many as a half million in the 2000-2010 time frame,

or 6% of the total population) and ethnic Chinese immigrate to the region. Estimates of the number of ethnic Chinese in Siberia range from a low of about 480,000 (or less than six percent of the population) to more than 1 million (or nearly 12%). Russia must carefully manage this demographic transition to avoid ethnic tensions that could erupt into a cross border conflict with China.

Russia is playing a more active, but less constructive role across the Black Sea, Caucasus, and Baltic regions. Russian involvement in each of these areas has its own character, but they have in common a Russia that is inserting itself into the affairs of its much-smaller neighbors. In each, Russia plays on ethnic and national tension to extend its influence in its “near abroad”.

In the Caucasus region, especially Georgia and its Abkhazian and South

Ossetian provinces, Russia has provided direct support to separatists. In other cases, such as the conflict between Armenia and Azerbaijan or in the Trans-Dnestr region of Moldova, Russia provides indirect support to keep these conflicts simmering. These conflicts further impoverish areas in dire need of investment and productive economic activity. They lay astride new and vulnerable routes to access the oil of the Caspian Basin and beyond. They encourage corruption, organized crime, and disregard legal order and national sovereignty in a critical part of the world. In the future, they could exacerbate the establishment of frameworks for regional order and create a new “frontier of instability” around Russia.

Indeed, while many of its European neighbors have almost completely disarmed, the Russians have begun a military buildup, in part to redress the desperately lean years of the 1990s, when the collapse of the post-Soviet economy devastated its military forces. Since 2001, they have quadrupled their military budget with increases of over 20% per annum over the past several years. In 2007, the Russian parliament, with Putin’s enthusiastic support, approved even greater military appropriations through 2015. Russia cannot recreate the military machine of the old Soviet Union, but it may be attempting to make up for demographic and conventional military inferiority by modernizing its nuclear forces, including

warheads, delivery systems, and doctrines. It is also exploring and fielding strategic systems based on what it terms “new physical principles” including novel stealth and hypersonic technologies. With their vast and increasingly capable nuclear arsenal, the Russians remain a superpower in nuclear terms, despite their demographic and political difficulties.

One of the potential Russias that could emerge in coming decades could be one that focuses on regaining its former provinces in the name of “freeing” the Russian minorities in those border states from the ill-treatment they are supposedly receiving. The United States and its NATO allies would then confront the challenge of summoning up sufficient resolve and deterrence to warn such a Russia off.

At present there is a dangerous combination of paranoia – some of it justified considering Russia’s history – nationalism, and bitterness at the loss of what many Russians regard as their rightful place as a great power. It was just such a mixture, along with a series of unfortunate events that drove Nazi Germany on its ill-thought-out course.

3. The Pacific and Indian Oceans

The rim of the great Asian continent is already home to five nuclear powers: China, India, Pakistan, North Korea, and Russia. Furthermore, there are three threshold nuclear states, South Korea, Taiwan, and Japan, which have

the capacity to become nuclear powers quickly. While the region appears stable on the surface, political clefts exist. There are few signs that these divisions, which have deep historical, cultural, and religious roots, will be mitigated. China and Korea hold grudges against Japan. Neither China nor Japan have forgotten the seizure of what they regard as their legitimate territory by the Russians. If one includes the breakup of the British Raj in 1947-1948, India and Pakistan have fought three brutal wars, while a simmering conflict over Kashmir continues to poison relations between the two powers. The Vietnamese and the Chinese have a long record of antipathy, which broke out into heavy fighting in the late 1970s. And China's claim that Taiwan is a province of the mainland obviously represents a flashpoint.

Geographically, there are a number of areas in dispute. The continuing

dispute between India and Pakistan over Kashmir is the most dangerous, in this case between two nuclear armed powers. The Chinese have backed up their claims to the Spratleys, which Vietnam and the Philippines also claim, with force. The Kurile Islands, occupied by the Soviets at the end of World War II, remain a contentious issue between Russia and Japan. The uninhabited islands south of Okinawa are in dispute between Japan and China, both obviously drawn to the area by the possibility of oil. Much of the Yellow Sea remains in dispute between the Koreans, Japan, and China, again because of its potential for oil. The straits of Malacca represent the most important transit point for world commerce, the closure of which for even a relatively short period of time would have a devastating impact on the global economy.

There is at present a subtle, but sustained military buildup throughout the region. India could more than quadruple its wealth over the course of the next two decades, but large swaths of its population will likely remain in poverty through the 2030s. Like China, this will create tensions between the rich and the poor. Such tension, added to the divides among its religions and nationalities, could continue to have implications for economic growth and national security. Nevertheless, its military will receive substantial upgrades in the coming years. That fact, combined with its proud martial traditions



Source: globalsecurity.org

and strategic location in the Indian Ocean, will make India the dominant player in South Asia and the Middle East. Like India, China and Japan are also investing heavily in military force modernization, particularly with an emphasis in naval forces that can challenge their neighbors for dominance in the seas surrounding the East and South Asian periphery. The buildup of the navies by the powers in the region has significant implications for how the United States develops its strategy as well as for the deployments of its naval forces.

4. Europe

The European Union has solidified Europe economically to a degree not seen since the Roman Empire. For the next quarter century, Europe will exercise considerable clout in economic matters. The Union's economy as a whole by the 2030s will likely be greater than that of the United States. From a security standpoint, the NATO alliance will have the potential to field substantial, world-class military forces and project them far beyond the boundaries of the continent, but this is currently a relatively unlikely possibility.

The massive disarmament that occasioned Europe's shift to a "post-conflict" mindset as a reaction to the end of the Cold War will eventually halt, but many European nations have already largely disarmed. The fact that

at present only few Europeans have been willing to place their forces in harm's way in support of the NATO commitment in Afghanistan to any significant extent indicates that many Europeans question the idea that lethal military force has a significant role to play in international affairs

Perhaps this will change with the recognition of a perceived threat. The next 25 years will provide two good candidates: Russia and continued terrorism fueled by global Islamic extremism. Russia has already been discussed. The Baltic and Eastern European regions will likely remain flashpoints as a number of historical issues such as ethnicity or the location of national boundaries, that have in the past led to conflict, continue to simmer under the surface. Russian efforts to place the gas pipeline to Western Europe through the Baltic rather than through Eastern Europe suggests a deliberate aim to separate the Central and Western European NATO countries from the Baltic and Eastern European members of NATO.

Continued terrorist attacks in Europe might also spark a popular passion for investing in military forces. Should violent extremists persist in using this tactic to attack the European continent with increasing frequency and intensity, there might a response that includes addressing this threat on a global scale rather than as an internal security problem.

5. Central and South America

The military problems that arise in South America and Central America will likely arise from within. Many currently plague the continent, particularly drug cartels and criminal gangs, while terrorist organizations will continue to find a home in some of the continent's lawless border regions.

Nevertheless, South America's improving economic situation suggests the region could be in a better position to deal with these problems. Brazil, in particular, appears set on a course that could make it a major player among the great powers by the 2030s. Chile, Argentina, Peru and possibly Colombia will also most likely see sustained growth, if they continue prudent economic policies.

The potential major challenges to the status quo at present are Cuba and Venezuela. The demise of the Castros will create the possibility of major changes in Cuba's politics. The future of Venezuela is harder to read. The Chavez regime is diverting substantial amounts of its oil revenues to further its anti-American "Bolivarian Revolution", while at the same time consolidating his regime's hold on power by distributing oil wealth to his supporters. By trying to do both it is shortchanging investments in its oil infrastructure, which has serious implications for the future. Unless its current regime changes direction, it could use its oil wealth to subvert its neighbors for an extended

period while pursuing anti-American activities on a global scale with the likes of Iran, Russia, and China, in effect creating opportunities to form anti-American coalitions in the region.

Brazil will become a superpower in regional terms. No country in South America is likely to approach its economic power, which will rapidly grow stronger due to its resources in biofuels. The oil fields that have been found off in the Brazilian coast represent a resource that will add to Brazil's economic and political power.

A serious impediment to growth in Latin America remains the power of criminal gangs and drug cartels to corrupt, distort, and damage the region's potential. The fact that criminal organizations and cartels are capable of building dozens of disposable submarines in the jungle and then using them to smuggle cocaine, indicates the enormous economic scale of this activity. This poses a real threat to the national security interests of the Western Hemisphere. In particular, the growing assault by the drug cartels and their thugs on the Mexican government over



Source: Department of Defense

the past several years reminds one that an unstable Mexico could represent a homeland security problem of immense proportions to the United States.

6. Africa

Sub-Saharan Africa presents a unique set of challenges, including bad governance, interference by external powers, and health crises such as AIDS. Even pockets of economic growth are under pressure and may soon regress. Some progress in the region may occur, but it is almost certain that many of these nations will remain on any list of the poorest nations on the globe. Exacerbating their difficulties will be the fact that the national borders, drawn by the colonial powers in the nineteenth century, bear little relation to tribal and linguistic realities.

The region is endowed with a great wealth of natural resources, a fact which has already attracted the attention of several powerful states. This could represent a welcome development, because in its wake could come foreign expertise and investment for a region in dire need of both. The importance of the region's resources will ensure the great powers maintain a vested interest in the region's stability and development. If this engagement goes beyond "aid" to become true "investment", then true stability and security may emerge. Until that happens, the main driver for joint force involvement in Africa will be to avert humanitarian and genocidal disasters

as African states and sub-state tribal groups struggle for power and control among themselves. Relatively weak African states will be very hard-pressed to resist pressure by powerful state and non-actors who embark on a course of interference. This possibility is reminiscent of the late nineteenth century, when pursuit of resources and areas of interest by the developed world disturbed the affairs of weak and poverty stricken regions.

7. The Center of Instability: The Middle East and Central Asia

On current evidence, a principal nexus of conflict will continue to be the region from Morocco to Pakistan through to Central Asia. Across this part of the globe exist a number of historical, dormant conflicts between states and nations over borders, territories, and water rights, especially in Central Asia and the Caucasus. Radical Islamists will present the first and most obvious challenge. The issue here is not terrorism per se, because terrorism is merely a tactic by which those who lack the technology, weapons systems, and scruples of the modern world can attack their enemies throughout the world. Radical Islamists who advocate violence – and not all do – constitute a transnational, theologically-based insurgency which seeks to overthrow regimes in the Islamic world. They bitterly attack the trappings of modernity as well as the philosophical underpinnings of the West despite

the fact their operations could not be conducted without the internet, air travel and globalized financial systems. At a minimum radical Islam seeks to eliminate U.S. and other foreign presence in the Middle East, a region vital to U.S. and global security, but only as a first step to the creation of a Caliphate stretching from Central Asia in the East to Spain in the West and extending deeper into Africa, overwhelming Christian and indigenous religions and ensuring that “Islam’s bloody borders” remain inflamed⁷.

The problems in the Arab-Islamic world stem from the past five centuries, during which, until recently, the rise of the West and the dissemination of Western political and social values paralleled a concomitant decline in the power and appeal of their societies. Today’s Islamic world confronts the choice of either adapting to or escaping from a globe of interdependence created by the West. Often led by despotic rulers, addicted to the exports of commodities which offered little incentive for more extensive industrialization or modernization, and burdened by cultural and ideological obstacles to education and therefore modernization, many Islamic states have fallen far behind the West, South Asia, and East Asia. The rage of radical Islamists feeds off the lies of their often



Source: NASA

corrupt leaders, the rhetoric of radical imams, the falsifications of their own media, and resentment of the far more prosperous developed world. If tensions between the Islamic world’s past and the present were not enough, the Middle East, the Arab heartland of Islam, remains divided by tribal, religious, and political divisions, in which continued instability is inevitable.

Combining Islamic dogma with the internet, intricate financial networks, and the porous borders of weakly governed states, radical Islamists have created a networked organization with global reach. The movement is similar to most insurgencies in the fanaticism of its leaders. But the ability to employ advanced technologies with the aim of causing maximum destruction represents a dangerous new trend in the international environment.

No one should harbor the illusion that the developed world can win this conflict in the near future. As is true with most insurgencies, victory will not appear decisive or complete. It will certainly not rest on military successes. The treating of political, social, and economic ills can help, but in the end

⁷ Samuel Huntington, *The Clash of Civilizations and the Remaking of World Order*, New York: Simon and Schuster, 1996.

will not be decisive. What will matter most will be the winning of a “war of ideas”, much of which must come from within the Islamic world itself.

The economic importance of the Middle East with its energy supplies hardly needs emphasis. Whatever the outcome of the conflicts in Iraq and Afghanistan, U.S. forces will find themselves again employed in the region on numerous missions ranging from regular and irregular war, relief and reconstruction, to engagement operations. The region and its energy supplies are too important for the U.S., China, and other energy importers to allow radical groups to gain dominance or control over any significant portion of the region.

C. Weak and Failing States

Weak and failing states will remain a condition of the global environment over the next quarter of a century. Such countries will continue to present strategic and operational planners serious challenges, with human suffering on a scale so large that it almost invariably spreads throughout the region, and in some cases possesses the potential to project trouble throughout the globalized world.

Yet, there is no clear pattern for the economic and political troubles that beset these states. In some cases, disastrous leadership has wrecked political and economic stability. In others, wars among tribal groups

with few cultural, linguistic, or even racial ties have imploded states. This was the case in Africa and the Middle East, where in the nineteenth century the European powers divided frontiers between their colonies on the basis of economic, political, or strategic necessity and paid scant attention to existing linguistic, racial, or cultural patterns of the tribal societies. These dysfunctional borders have exacerbated nearly every conflict in which our forces have been involved in these regions.

Many, if not the majority, of weak and failing states will center in Sub-Saharan Africa, Central Asia, the Middle East, and North Africa. A current list of such states much resembles the lists of such states drawn up a generation ago, suggesting a chronic condition, which, despite considerable aid, provides little hope for solution. There have been a number of nations that have escaped poverty – their successes resulting from intelligent leadership and a willingness to embrace integration into the global system. To date, the remaining weak and failing nations have chosen other paths.

There is one dynamic in the literature of weak and failing states that has received relatively little attention, namely the phenomenon of “rapid collapse.” For the most part, weak and failing states represent chronic, long-term problems that allow for management over sustained periods. The collapse of a state usually comes as a surprise,

has a rapid onset, and poses acute problems. The collapse of Yugoslavia into a chaotic tangle of warring nationalities in 1990 suggests how suddenly and catastrophically state collapse can happen – in this case, a state which had hosted the 1984 Winter Olympics at Sarajevo, and which then quickly became the epicenter of the ensuing civil war.

In terms of worst-case scenarios for the Joint Force and indeed the world, two large and important states bear consideration for a rapid and sudden collapse: Pakistan and Mexico.

Some forms of collapse in Pakistan would carry with it the likelihood of a sustained violent and bloody civil and sectarian war, an even bigger haven for violent extremists, and the question of what would happen to its nuclear weapons. That “perfect storm” of uncertainty alone might require the engagement of U.S. and coalition forces into a situation of immense complexity and danger with no guarantee they could gain control of the weapons and with the real possibility that a nuclear weapon might be used.

The Mexican possibility may seem less likely, but the government, its politicians, police, and judicial infrastructure are all under sustained assault and pressure by criminal gangs and drug cartels. How that internal conflict turns out over the next several years will have a major impact on the stability of the Mexican state. Any descent

by Mexico into chaos would demand an American response based on the serious implications for homeland security alone.

D. The Threats of Unconventional Power

While states and other conventional powers will remain the principal brokers of power, there is an undeniable diffusion of power to unconventional, non-state, or trans-state actors. While these groups have “rules” of their own, they exist and behave outside the recognized norms and conventions of society.

Some transnational organizations seek to operate beyond state control and acquire the tools and means to challenge states and utilize terrorism against populations to achieve their aims. These unconventional transnational organizations possess no regard for international borders and agreements. The discussion below highlights two examples: militias and super-empowered individuals.

Militias represent armed groups, irregular yet recognizable as an armed force, operating within ungoverned areas or in weak failing states. They range from ad hoc organizations with shared identities to more permanent groups possessing the ability to provide goods, services, and security along with their military capabilities. Militias challenge the sovereignty of the state by breaking

the monopoly on violence traditionally the preserve of states. An example of a modern day militia is Hezbollah, which combines state-like technological and warfighting capabilities with a “substate” political and social structure inside the formal state of Lebanon.

One does not need a militia to wreak havoc. Pervasive information, combined with lower costs for many advanced technologies, has already resulted in individuals and small groups possessing increased ability to cause significant damage and slaughter. Time and distance constraints are no longer in play. Such groups employ niche technologies capable of attacking key systems and providing inexpensive countermeasures to costly systems. Because of their small size, such groups of the “super-empowered” can plan, execute, receive feedback, and modify their actions, all with considerable agility and synchronization. Their capacity to cause serious damage is out of all proportion to their size and resources.

The global effort against terrorist organizations will continue into the 2030s with varying degrees of intensity over time. It will most likely remain at the forefront of U.S. security concerns. At present, the evidence suggests that U.S. efforts have largely decimated the al Qaeda that attacked the United States in 2001. However, the threat has not disappeared, as new radical cadres have formed. These new terrorist groups have learned from al Qaeda’s

shortcomings and mistakes. Moreover, the ability of terrorist organizations to utilize the internet and other means of communications to pass the experiences, tactics, and best training methods will result in a constant flow of relatively sophisticated new volunteers to the fight. The ability of terrorists to learn from their predecessors and colleagues will not confront the hindrance of having to process adaptations and innovations through bureaucratic barriers.

E. The Proliferation of Weapons of Mass Destruction

A continuing challenge to American security will be the proliferation of nuclear weapons. Throughout the Cold War, U.S. planners had to consider the potential use of nuclear weapons both by and against the Soviet Union. For the past twenty years, Americans have largely ignored issues of deterrence and nuclear warfare. In the 2030s, they will no longer have that luxury.

Since 1998, India and Pakistan have created nuclear arsenals and delivery capabilities. North Korea has tested a nuclear weapon and has produced sufficient fissile material to create more such weapons. At present, the Iranians are pressing forward aggressively with their own nuclear weapons program. The confused reaction in the international community to Iran’s defiance of external demands to terminate its nuclear



Source: Korean Central News Agency

development programs is an incentive for others to follow in their path.

In effect, there is a growing arc of nuclear powers running from Israel in the west through an emerging Iran to Pakistan, India, and on to China, North Korea, and Russia in the east. Both Taiwan and Japan have the capability to develop nuclear weapons quickly, should their political leaders decide to do so. Unfortunately, that nuclear arc coincides with areas of considerable instability – regions that because of their economic power and energy resources are of enormous interest to the United States.

Moreover, some in the region might not view nuclear weapons as weapons of last resort. It is far from certain that a state whose culture is deeply distinct from that of the United States, and whose regime is either unstable or unremittingly hostile (or both), would view the role of nuclear weapons in a fashion similar to American strategists. The acquisition of nuclear weapons by other regimes throughout this arc, whether they were hostile or not, would disrupt the strategic balance further, while increasing the potential

for the use of nuclear weapons. Add to this regional complexity the fact that multiple nuclear powers will very likely have the global reach to strike other states around the world. The stability of relations among numerous states capable of global nuclear strikes will be of central importance for the Joint Force. Assured second-strike capabilities and relations based on mutually-assured destruction may mean greater stability, but may effectively reduce access to parts of the world. On the other hand, fragile nuclear balances and vulnerable nuclear forces may provide tempting targets for nuclear armed competitors.

Any discussion of weapons of mass destruction must also address the potential use of biological weapons by sovereign states as well as non-state actors. By all accounts, such weapons are becoming easier to fabricate – certainly easier than nuclear weapons – and under the right conditions they could produce mass casualties, economic disruption, and terror on the scale of a nuclear strike. The knowledge associated with developing biological weapons is widely available, and the costs for their production remain modest, easily within reach of small groups or even individuals.

F. Technology

Advances in technology will continue at an exponential pace as they have over the past several decades. Some pundits have voiced worries the United States will lose its lead as the global innovator

in technology or that an enemy could make technological leaps that would give it significant advantages militarily. That is possible, but by no means a foregone conclusion.

North Korea flaunts its strategic might. It is clear that technology, distinct from weapons of mass destruction (WMD), will proliferate. As anyone who has purchased a home computer knows, technological advances drive down the overall cost of ever-greater capability. The weapons market is no different. More advanced weaponry will be available to more groups, conventional and unconventional, for a cheaper price. This will allow relatively moderately funded states and militias to acquire long-range precision munitions, projecting power farther out, and with greater accuracy, than ever before. At the high end, it has already been seen that this reach extends into space with the public demonstration of anti-satellite weapons. Furthermore, the market for advanced weaponry potentially empowers any small actor or group, as long as they have the cash. Whether a small oil-rich nation or a drug cartel, cash will be able to purchase lethal capabilities. If manpower is a limiting factor, the advances in robotics provide a solution for those who can afford the price. This has the sobering potential to further amplify the power of the “super-empowered guerilla.”

In the globalized, connected world of science and technology, there is less chance that major technological advances could catch American scientists by surprise. In the past, the real issue with technology has not been simply that a particular nation has developed weapons far superior to those of its opponents. Rather, in nearly every case the major factor has been how military organizations have integrated technological advances into their doctrinal and tactical system. It has been the success or failure in that regard that has resulted in battlefield surprise and success. In 1940 French tanks were superior in almost every respect to those of the Germans. What gave the Wehrmacht its unique advantage was the fact that the Germans integrated the tank into a combined arms team. The real surprise of Blitzkrieg lay in the inability of the French to imagine how the Germans might exploit battlefield success with the new technologies available. It was the development of decentralized, combined-arms tactics by the Germans that led to their overwhelming victory, not new, more sophisticated weapons systems.

Thus, what has been unquestionably crucial is the degree of imagination military organizations have displayed in incorporating new technologies into their doctrine and concepts. The fact that the speed of technological change and invention proceeds exponentially

Technology, Doctrine, and Successful Adaptation

Nothing more clearly illustrates the importance of imagination and an understanding of war in the incorporation of technology into military institutions than the utilization of radar over the course of the first two years of World War II. It was not until the 1930s that scientists in the major powers turned their attention to the possibility radio waves could spot the flight of aircraft or the movement of ships at sea. The looming threat posed by enemy bombers in a period of worsening international tensions instigated investigations into such possibilities. By the late 1930s scientists in Britain, Nazi Germany, and the United States had all developed workable capabilities for identifying the height, direction, and speed of aircraft, as well as the number of aircraft.

Not surprisingly, the Germans, given their technological prowess, developed the most sophisticated radars, but the incorporation of that technological capability into their weapons systems lagged behind that of the British. It would be in the Battle of Britain that German failure in imagination would show to the greatest extent. The Luftwaffe had incorporated radar into its capabilities in the late 1930s, but only as a series of ground control intercept sites, each of which operated independently with no direct tie to a larger air defense system. It would not be until the catastrophe of Hamburg in summer 1943 that the Luftwaffe would create an air defense system in which radar formed in integral part of a holistic approach to an air warning system of defense. But the British were already using such a system in 1940. As the scientific intelligence officer, R.V. Jones, recalled in his memoirs:

[The] German philosophy of [air defense] ran roughly along the lines that here was an equipment which was marvelous in the sense that it would enable a single station to cover a circle of a radius 150 kilometers and detect every aircraft within that range ... Where we had realized that in order to make maximum use of radar information the stations had to be backed by a communications network which could handle the information with the necessary speed, the Germans seemed simply to have grafted their radar stations on to the existing observer corps network which had neither the speed nor the handling capacity that the radar information merited.... The British approach... was entirely different. The British radar stations formed the eyes of a systematic approach to the air defense of the British Isles, so that RAF commanders could use their information to guide large numbers of Hurricanes and Spitfires against German bomber formations⁸.

As Churchill noted in his memoirs about the Second World War, "it was the operational efficiency rather than novelty of equipment that was the British achievement"⁹.

⁸ R.V. Jones, *The Wizard War*, British Scientific Intelligence, 1939-1945, New York, 1978, p. 199.

⁹ Winston Churchill, *The Second World War*, vol. 1, *The Gathering Storm*, Boston: Houghton Mifflin, 1948, p. 156.

will make the ability to adapt new technologies into the larger framework of military capability even more critical in coming decades.

A current example of the kind of technological surprise that could prove deadly would be an adversary's deployment and use of a disruptive technology, such as electro-magnetic pulse (EMP) weapons against a force without properly hardened equipment. The potential effects of an electromagnetic pulse resulting from a nuclear detonation has been known for decades. The appearance of non-nuclear EMP weapons could change operational and technological equations. They are being developed, but are joint forces being adequately prepared to handle such a threat? The impact of such weapons would carry with it the most serious potential consequences for the communications, reconnaissance, and computer systems on which the Joint Force depends at every level.

Finally, it is by no means certain that the United States and its allies will maintain their overall lead in technological development over the next 25 years. America's secondary educational system is clearly declining in a relative sense when compared to leading technological competitors, for instance India and China. America's post-graduate educational programs and research laboratories remain

the world's most advanced – magnets for some of the best scientific minds in the world. However, although many foreign students remain in the United States, significant numbers are now returning home. Without substantive changes to improve its educational system, the United States will pay a heavy price in the future.

G. The Battle of Narratives

Modern wars are fought in more than simply the physical elements of the battlefield. Among the most important of these are the media in which “the battle to win the narrative” will occur. Our enemies have already recognized that perception is as important to their success as the actual event. For terrorists, the internet and mass media have become forums for achieving their strategic and political aims. Sophisticated terrorists emphasize the importance of integrating combat activities (terrorist attacks) into a coherent strategic communications program. Radical groups are not the only ones who understand the importance of dominating the media message. A major state synchronizing military operations with a media offensive was on display during Russia's invasion of Georgia. Within days of the invasion, a small coterie of Russians, well known in the West, was placing editorials in major newspapers in the United States and Europe.

The battle of the narrative must involve a sophisticated understanding of the enemy and how he will attempt to influence the perceptions not only of his followers, but the global community. His efforts will involve deception, sophisticated attempts to spin events, and outright lies. As Joseph Goebbels, the evil Minister of Propaganda for the Third Reich, once commented, the bigger the lie, the greater its influence. No matter how outlandish enemy claims may seem to Americans, those charged with the responsibility for information operations must understand how those who will receive the message will understand it. In this regard, they should not forget that the KGB's efforts at the end of the Cold War to persuade Africans that the CIA was responsible for the spread of Acquired Immune Deficiency Syndrome (AIDS) throughout their continent are still reverberating in parts of Africa. Information has been, is, and will continue to be a strategic and political weapon. Its power will only increase as communications technology and the density of global media become more pervasive. At the end of the day, it is the perception of what happened that matters more than what may actually have happened.

Dominating the narrative of any operation, whether military or otherwise, pays enormous dividends. Failure to do so undermines support for policies

and operations, and can actually damage a country's reputation and position in the world. For example, in the aftermath of Hurricane Katrina, America's global standing fell sharply, while many Americans remain convinced their government's reaction was at best inept and at worst a reflection of latent racism. In truth, at the end of the first week after the disaster 38,000 federal troops were supporting the National Guard and local authorities. They were already caring for approximately 100,000 displaced citizens, had fed over a million meals, and had provided medical care to tens of thousands.

Compare the reaction to Katrina to the reaction to the nation's previous most destructive storm, Hurricane Andrew. At the end of the first week after Andrew, not a single federal soldier had gone to work, and less than 1,500 had deployed. Yet, the federal government's reaction to Andrew is graded a success, while the much larger, and infinitely more efficient response to Katrina is almost universally judged a failure. The reason for such perceptions lies in the fact that an inept strategic communications operation lost control of the narrative.

In the battle for the narrative, the United States must not ignore its ability to bring its considerable soft power to bear in order to reinforce the positive aspects of joint force operations. Humanitarian assistance, reconstruction, securing the safety of local populations,

military-to-military exercises, health care, and disaster relief are just a few examples of the positive measures that we offer. Just as no nation in the world can respond with global military might on the scale of the United States, so too are we unmatched in our capacity to provide help and relief across thousands of miles. All of these tools should be considered in this battle to build trust and confidence.

In the future, influencing the narrative by conveying the truth about America's intent, reinforced with supporting actions and activities, will become even harder. As communications technologies become more widely available, an ever-wider array of media will influence global public opinion. The U.S. government and its joint forces will always be held to a much higher standard in this area than our adversaries. Joint force commanders already wrestle with how to deal with a pervasive media presence, widespread blogging, almost instantaneous posting of videos from the battlefield, e-mail, and soldiers who can call home whenever they return to base. In the future they will be confronted with a profusion of new media linked to unimaginably fast transmission capabilities. Just as we have already begun to think of every Soldier and Marine as an intelligence collector, we will also have to start considering them as global communications producers. Today, commanders talk about the

strategic corporal, whose acts might have strategic consequences if widely reported. This still remains a hit or miss affair, less often requiring the presence of the media representative to attract a global reaction.

Even in the past, the success of combat operations has not always been judged on the battlefield. In 1968 the Tet Offensive was smashed by the American military, but the narrative reported in the United States served to undermine support for the war effort. U.S. weapons employment in this battle of the narratives must be in consonance with the message, even if it means sometimes bypassing tactical targets. Winning the battle has always been important, but in the pervasive and instantaneous communications environment expected in future decades, it will be absolutely crucial. For commanders not to recognize that fact could result in the risking of the lives of young Americans to no purpose.

H. Urbanization

By the 2030s, five of the world's eight billion people will live in cities. Fully two billion of them will inhabit the great urban slums of the Middle East, Africa, and Asia. Moreover, while at present half of the world's poorest 10% live in Asia, that share will decrease to one fifth, while Africa's will rise from one-third to two-thirds. Most mega-cities

and cities will lie along the coast or in littoral environments. With so much of the world's population crammed into dense urban areas and their immediate surroundings, future joint force commanders will be unable to evade operations in urban terrain. The world's cities with their teeming populations and slums will be places of immense confusion and complexity, physically as well as culturally. They also will provide prime locations for diseases and the population density for pandemics to spread.



Source: U.K. DCDC

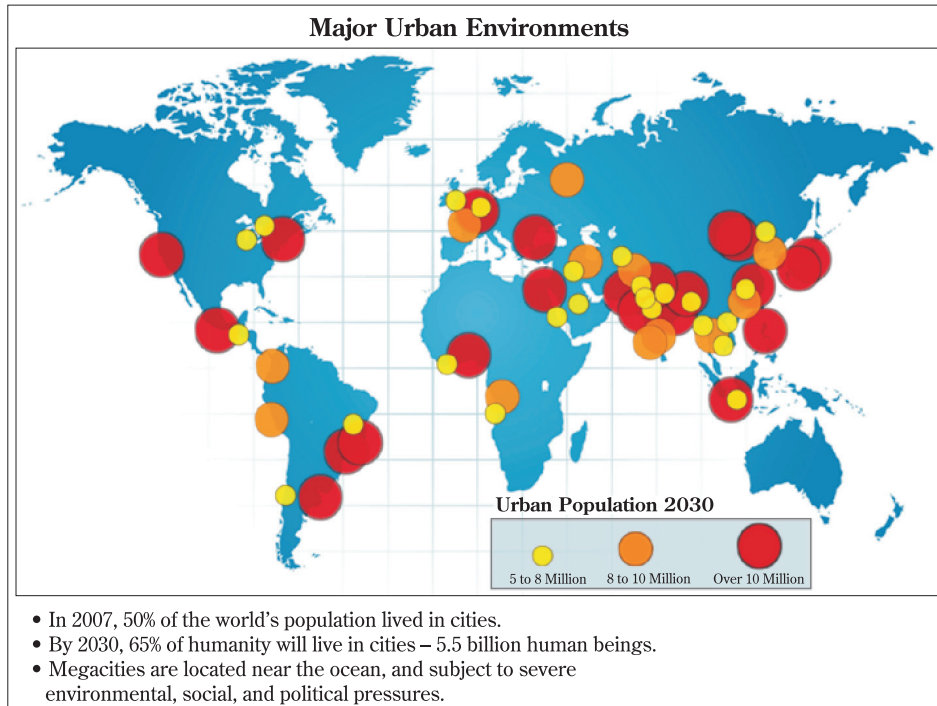
Splendor amid squalor: Modern Rio de Janeiro

There is no historical precedent for major cities collapsing, even in the eighteenth and nineteenth centuries, when the first such cities appeared. Cities under enormous stress, such as Beirut in the 1980s and Sarajevo in the 1990s, nevertheless managed to survive with only brief interruptions of food imports and basic services. As in World War II, unless contested by an organized enemy, urban areas are

always easier to control than the countryside. In part, that is because cities offer a pre-existing administrative infrastructure through which forces can manage secured areas while conducting stability operations in contested locations. The effectiveness of that pre-existing infrastructure may be tested as never before under the stress of massive immigration, energy demand, and food and water stress in the urban sprawl that is likely to emerge. More than ever before, it will demand the cultural and political knowledge to utilize that infrastructure.

Urban operations will inevitably require the balancing of the disruptive and destructive military operations with the requirements of humanitarian, security, and relief and reconstruction operations. What may be militarily effective may also create the potential for large civilian casualties, which in turn would most probably result in a political disaster, especially given the ubiquitous presence of the media.

As well, the nature of operations in urban environments places a premium on decentralized command and control, ISR, fire support, and aviation. Combat leaders will need to continue to decentralize decision-making down to the level where tactical leaders can act independently in response to fleeting opportunities.



Source: United Nations World Urbanization Prospects

*

In the fourth part of the article, the authors address certain aspects regarding the war and the conduct of military operations in the 21st century, the need for professional military education and pose a few questions regarding defense economics and acquisition policies as well as the personnel system.



* Publication of the JOE is not intended as a DOD endorsement of *Romanian Military Thinking* and *Gândirea Militară Românească* or its purposes. Inquiries about the Joint Operating Environment should be directed to USJFCOM Public Affairs, 1562 Mitscher Avenue, Suite 200, Norfolk, VA 23551-2488, (757) 836-6555.

MILITARY JOURNALISTIC UNIVERSE

Armada International, Switzerland, vol. 33,
no. 3, June-July 2009

Fighters Forever • C-Ram – the Artillery Shell Zappers • The Shifting Sands • Gimballing Rolling Eyes • Land-based Medium-range Air-defence • The Can-Do Choppers • Silencing the Bomb Path • For Armoured Vehicle Protection, Kill the Killer ! • Complete Guide: Drones 2009

Armées d'aujourd'hui, France, no. 337,
February 2009

Crisis Scenario for the Multinational Force in Kosovo (KFOR) • De-Mining Operation in South Lebanon • European Union: French Presidency Moved Forward the European Security and Defence Policy • Positive Balance for UN Interim Force in Lebanon (FINUL) • Risks in Conflict Area: Journalists Rendered Sensitive by the Military Men • Korea 1950: The Forgotten War • Military Volunteers at Scientific Bases in French Austral Territories; Forces Equipment (File) • Bonaparte and Egypt: the Scientific Expedition • Climbing: A Century on the Mountain Summits

Armées d'aujourd'hui, France, no. 338,
March 2009

French Armies Mobilised to Counteract the Effects of Klaus Tempest • French Air Forces Follow the Trail of Klaus Tempest • From the Afghanistan Air Survey to Fire Support for Ground Troops • Defence Restructuring – the Success of the “*Social Accompaniment*” • Military Reform: We Cannot Deny the Specificity of Each Military Force Category • Maternal Support and Wife/Husband Employment

Structure • Tactical Flights of Transport Airplanes • Improved Armoured Vehicle for Afghanistan • French and Italian Naval Academies Cooperate as part of “*Military Erasmus*” • Soldiers and Extreme Environments (File) • Women Portraits of French Armed Forces • Techniques of Optimising the Military Men Potential

Armées d'aujourd'hui, France, no. 339,
April 2009

Evacuation Exercise from a Submarine in an Emergency Case • Salvation Exercise from a Submarine with Divers and the “*Ulisse*” Robot • Work Force: Adapting Defence Offer to Enterprises Demand • Operation Expenses: the Defence – the Best Student • NATO – a New Rostrum for the Voice of France (France Re-Integration in the Military Command Structure) • 5 Key-Elements to Understand How NATO Works (File) • “*Accompaniment Cells*” for Wife/Husband Employment • Joint Workshop of Major Military Schools “*Army Modernisation*” • French Forces in the Caribbean • National Military House for Social Security • Space Early Warning System “*Spirale*” • German Resistance to Hitler • The Federation of Defence Sport and Art Clubs – 50 Years • “*Mirage*” Aircraft Series – a NATO “*Creation*”

Défense nationale et sécurité collective,
France, no. 5, May 2009

Operational Condition Maintaining (OCM). OCM Reform of Ground Forces Equipment • Ground Equipment: Crucial Years • Innovative Support Contacts of Central Army Equipment Direction

• Ground Support Transformation • Towards a Strengthen Partnership Between State and Industry • “Industry–Defence” Partnerships in Logistics and OCM • CEFA Society and Contractual OCM Challenge • Human Resources Information System “Concerto” • Small and Medium Enterprises/ Industries, Territorial Intelligence to Overcome the Crisis • We Must Restore the Name “War School” • American Military High Education • “European Union Faced with Terrorism” – Conference Proceedings

Défense nationale et sécurité collective,

France, no. 6, June 2009

Le Bourget Aeronautic Exhibition. 75 Years of French Air Force: Strategic Views • Human Resources: What Will French Air Force Look like Tomorrow? • Euro-Atlantic Aerospace Dimension • Operational Engagement of Aerospace Power: Present-Day State and Prospects • Renewed Aeronautical Support • Aviation Projection, a Mission in the Core of Combats • Air Force Helicopters • Drones in Afghanistan, the Necessary Complementarity of Vectors • New Directions of Aeronautics and Space in Defence • Rafale, a Multirole Aircraft • A New Breath in the Military Space in France and Europe • Cooperation and Collaboration of World Aeronautic Community • Rafale: the Right Answer to Air Force Needs • White Paper and the Drones • Why a Military Space Commander? • Force Digitisation: More Joint Cooperation and More Interoperability • Force, Power, Energy – Searching a New Order for Military Values and Capacities • European Tour of American President Obama: the First Review • European Defence Industry and the Limits of Privatisation • Energy and Climate Prospects

Défense nationale et sécurité collective,

France, no. 7, July 2009

A Year of Reforms. An Original Reform • The Defence Bases • Territorial Accompaniment of Reorganisations • Regrouping Staffs and Central Administrations in Balard District in Paris • Modernising the General Delegation for Armament • The French Army Modernisation • Air Force Reform • French Navy and Reorganisation • Adaptation of Health Service to the Forces Needs • Consultants Assail the Defence • The Role of

Consulters in Ministry of Defence Transformation • Private Military Societies: Between Liberty and Regulation • Parliament and Foreign Operations • Towards a Renewing of Strategic Thought in France? • Must We Give up Nuclear Dissuasion? • Dissuasion, Asymmetry and Rounding Ways • A New Foreign Policy in Middle East • Afghanistan: Waiting for a New Defeat

Foreign Affairs, USA, vol. 88, no. 1,

January-February 2009

The Great Crash, 2008. A Geopolitical Setback for the West • From Doha to the Next Bretton Woods. A New Multilateral Trade Agenda • A Balanced Strategy. Reprogramming the Pentagon for a New Age • Beyond Iraq. A New US Strategy for the Middle East • Change They Can Believe in. To Make Israel Safe, Give Palestinians their Due • The Myth of the Autocratic Revival. Why Liberal Democracy Will Prevail • America’s Edge. Power in the Networked Century • In the Shadow of the Oval Office. The Next National Security Adviser • The Responsibility to Contain. Protecting Sovereignty Under International Law • Where Are the Civilians? How to Rebuild the US Foreign Service

Foreign Affairs, USA, vol. 88, no. 2,

March-April 2009

The Precedents for Withdrawal. From Vietnam to Iraq • The Japan Fallacy. Today’s US Financial Crisis Is not Like Tokyo’s “Lost Decade” • Centre Stage for the Twenty-first Century • How Development Leads to Democracy. What We Know About Modernisation • Reshaping the World Order. How Washington Should Reform International Institutions • The Geo-engineering Option. A Last Resort against Global Warming? • Free at Last? The Arab World in the Twenty-first Century • Germany’s Russia Question. A New Ostpolitik for Europe • Bank Shots. How the Financial System Can Isolate Rogues • Cambodia’s Curse. Struggling to Shed the Khmer Rouge’s Legacy

Foreign Affairs, USA, vol. 88, no. 3,

May-June 2009

The Mushroom Cloud that Wasn’t. Why Inflating Threats Won’t Reduce Them • Tomorrow’s Institution Today. The Promise of the Proliferation

Security Initiative • The G-2 Mirage. Why the United States and China Are not Ready to Upgrade Ties • Deng Undone. The Costs of Halting Market Reform in China • State Capitalism Comes of Age. The End of the Free Market? • Necessity, Choice, and Common Sense. A Policy for a Bewildering World • Diplomacy, Inc. The Influence of Lobbies on US Foreign Policy • Farm Futures. Bringing Agriculture Back to US Foreign Policy • The Key to Kiev. Ukraine's Security Means Europe's Stability • The King and Us. US-Saudi Relations in the Wake of 9/11 • The Perils of Apology. What Japan Shouldn't Learn From Germany

Foreign Affairs, SUA, vol. 88, no. 4,
July-August 2009

Globalization in Retreat • Tamed Tigers, Distressed Dragon • The Pentagon's Wasting Assets • Flipping the Taliban • Teheran's Take • The Real War in Mexico • The Russia File • Pirates, Then and Now • The Battle for Thailand • Africa's Capitalist Revolution

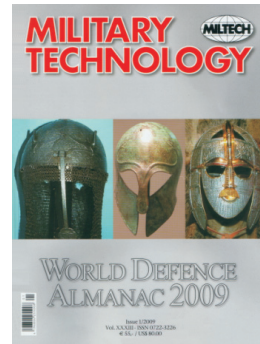
Géopolitique, France, no. 105, April 2009

Coups d'état and Revolutions • On Revolution and Coup d'état; How to Finish a Revolution: 18 Brumaire Coup d'état • Napoleon's Second Coup d'état • October 1917: Coup d'état and Revolution • Hitler, or the Lessons of a Failed Putsch for a Successful Coup d'état • A French Ambassador Remembers Some Coups d'état in Algeria, Libya, Iran and Afghanistan • 1908: Ottoman Empire Goes into Revolution • Spain, from Coup d'état to Revolution • Italian Fascism: a Revolutionary Doctrine or a Government Technique • Cuba: Coups d'état and Democracy • A Model of Coup d'état: Prague, 1948 • Germany: an Irresistible Propensity towards East • Launching of the First Iranian Satellite

International Security, SUA, vol. 33, no. 4,
Spring 2009

How Smart and Tough Are Democracies? Reassessing Theories of Democratic Victory in War • The Social Market Roots of Democratic Peace • Bridge over Troubled Water? Envisioning a China-Taiwan Peace Agreement • Long Time Coming: Prospects for Democracy in Iraq • Power without Influence: The Bush Administration's Foreign Policy Failure in the Middle East

The World Defence Almanac 2009. The most up-to-date of defence forces in the world. As a reference, it provides a comprehensive review of force structures, organisation and inventories.



Military

Technology, Germany, vol. 33, no. 2, 2009

The Baby and the Bath Water • US/Allied Security & a Feast of Expectations • The Mother of All "Fudges" • A Genealogy of Force • United Arab Emirates (UAE) Leaders Comment on Armed Forces Status • Defence in the UAE • Ballistic Missile Defence in the Gulf • PATRIOT Meet Air/Missile Defence Requirements for Today and the Future • The Mission in Afghanistan: Current Challenges Facing the Medical Service • The Role of Biofuels • E-2D Advanced HAWKEYE – Expanded Battlespace Awareness for the Warfighter • "Working to Grow our Presence in the International Market". The Boeing Company • Industrial News • Focus on Developing Innovative Products and Technological Breakthrough • "RUAG Ammotec is the Right Partner" • Unmanned Aerial Vehicles: Development Trends & Technology Forecast • Meggitt Training Systems – the Training Expert for Military Needs • India's Air Force in the 21st Century: Challenges and Opportunities • The Programme the Indian Air Force for Medium Multi-Role Combat Aircraft • "War on Terror" Becomes India's Priority • Aero India Industrial News • Bracing for Tomorrow Crisis

Military Technology, Germany, vol. 33, no. 3, 2009

For a Fistful of Dollars • Reforming the Reformable • Stopping Those Resourceful Smugglers • A Message from Fort Bastiani • Letter from Germany • The A400M Aircraft on the Critical Path for European Defence • ASEAN (The Association of Southeast Asian Nations) and Asia's Regional Security Architecture • Maritime Safety and Security • Maritime Security against Terrorism and Piracy • Combating Piracy off Somalia • New Options on Military Bridging • Sense and Respond: Military Logistics in a Global Security Environment • Australia's "Wars of Globalism" White Paper • Three new MBTs from the East

Military Technology, Germany, vol. 33, no. 4, 2009
A New Strategy, or New Goals ? • Iran/Iraq: The Path Forward • Putin's Muscle-Flexing in Central Asia Challenges Obama's Afghan War • Letter from the geographic and Trade Centre of Europe • A New Defence Strategy for Brazil • Naval Programmes in Latin America • Combat Aircraft Programmes in Latin America. Between Needs and Politics • Embraer's Super TUCANO Aims at Export Success • NATO Expeditionary Operations: The Way Forward • Strengthening Turkey's Security in a Changing World • The Turkish Defence Industry • Bulgarian Defence Industry Today • Building a Business on Mission Assurance • Advances in Ceramic Armour • Light Tanks and Heavy Armoured Cars • The International Defence Exhibition Highlights the United Arab Emirates Defence Ambitions

Military Technology, Germany, vol. 33, no. 5, 2009
Towards a US/Israel Confrontation ? • NATO "Beyond 60" • Rising Expenditure, Great Expectations • Tehran Raises Strategic Presence in Africa • The Case for European Airlift • For a Reform of the International Monetary System • The "AfPak" Season • Priority on Foreign Operations and Modernisation • Defence in the Czech Republic • The Republic of Singapore Navy • Asian Submarine Forces Taking Shape • Naval Radar Design and Optimisation for the Littoral • Combat Divers and Counter-Diver Operations. Technologies and Programmes • Changing Times, and an Evolving Canadian Forces • The Future of Signals • Training for Convoy and Patrol Operations • A Case of Simulation versus Reality • The US DoD's Next-Generation Non-Lethal Escalation-of-Force Weapons

Military Technology, Germany, vol. 33, no. 6, 2009
Of UCAVs, Psychology and Political Correctness • The New/Old Threat Wheel • After the US Troops Leave: Quo Vadis Iraq ? • Who Is to Fill the Gap Between Obama and Liberman ? • State of Fear • Air Power Revisited • Personal Statements by the Chiefs of Air Force • A Well Trained and Prepared Luftwaffe • Combat Aircraft Programmes – A Status Report • Attack of the Drones ! The Emergence of UCAV (Unmanned Combat Air Vehicles) Systems • "Défense Conseil International is at the Service of its Customers" • Combat Aircraft Engine Export Market • The Future of the Global Military Aerospace Industry • Acron Capability Engineering. Canadian Expertise • Raytheon's Air Defence Modernisation Enhances NATO's Strength • ELTA's CAEW – Straight-Forward Innovation

Military Technology, Germany, vol. 33, no. 7, 2009
"Allegro Ma Non Troppo" in Korea • The Long Reach Forward: US DoD Reviews & Reformation • A Boost to Indo-US Nuclear Cooperation • Less Resources, More Versatility • A Matter of Magazines • A Technology Too Far. "Reviewing" (or Terminating ?) the Future Combat Systems (FCS) Programme • Squaring the Wheel. Alternative Military Vehicles Show Their Strengths • I Fight the Body Electric ! UGVs (Unmanned Ground Vehicles) on Today's and Tomorrow's Battlefield. An US View • New Protected Vehicles for the German Armed Forces • Rheinmetall Defence Stresses International Posture • Remotely Controlled Weapon Station – Technologies and Markets • Active Camouflage Technologies Come of Age • Camouflage on the Modern Battlefield • Naval Support for Combat and Supply

ÖMZ (Österreichische Militärische Zeitschrift), Austria, no. 3, May-June 2009
Synchronised Armed Forces Europe (SAFE) • SAFE – A Plea for an Independent Security-Political Identity of Europe • Russia's Military and Security Policy under Putin and Medvedev • Solferino and its Consequences/Sadowa and Sedan • Sub-Sahara-Africa – Attempt at a Stability Analysis • The Iran Conflict from the Perspective of the Euratom Treaty • The Police Force of the Polish Armed Forces on Peace Mission in Iraq • Sunnites and Shiites Together against Israel or Insurmountable Opposites ?

ÖMZ (Österreichische Militärische Zeitschrift), Austria, nr. 4, July-August 2009
60 Years of NATO – an Alliance in the Course of Time • The Strategic Relationship between Turkey and Israel. Partnership or Marriage of Convenience ? • Operational Obstacles for Western Security Forces in the Age of Multiple Threat Scenarios • The Orange Military Reform as an Archimedean Item for Modern Art of War • The Strategic Implications of Charles Darwin's Dialectics • Pakistan: More than Merely Nuclear Explosive • Deployment of Forces from the Federal State of New York • Austria-Hungary's Military Administrations during the First World War

Revue Militaire Suisse, Switzerland, no. 1, January-February 2009
War Situations • National Insecurity in 2009 • Organising Cooperation and Security of "Greater Europe" Peoples • Civil-Military Cooperation

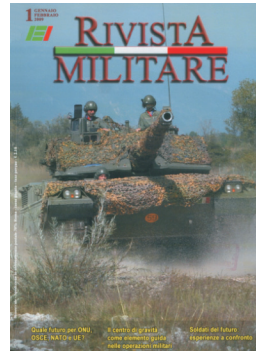
in Peacekeeping Operations: a Chance for Militia Swiss Army • Submunition Bombs: Some Technical Aspects • Canadian Forces in the International Security Assistance Force in Afghanistan (ISAF) • Canadian "Leopard" Tank • Israeli Tank Family "Merkava" • Drones, Today and Tomorrow • Swiss Officer Society Workshop with the Topic "Communication – Attack or Defense?" • The Importance of Territorial Missions at the Beginning of XXI Century • Disaster Air Battalions

Air Power: Which Perspectives? • NAS Fallon • National Museum of Naval Aviation • In the Clothes of Slow Mover • The Passing of the Typhoon • Predator, the Victorious Challenge of the Italian Air Force • The Sperimentale and the AMX ACOL

• Tactical Unmanned, What Matters is Capability • Normandy Motor Meeting 2009 • Hang to a Thread in the Orbit • Mario Calderara and Umberto Savoja: The First Two • D'Annunzio, Imaginative Poet and Concrete Aviator • Dien Bien Phu Battle • A Threatening Technology Taken from the Future

Rivista Aeronautica, Italy, no. 3, May-June 2009
Romanian Air Force – 95 Years Looking towards West • The "Quattro Gatti" Helping Abruzzo • Le Bourget 2009 Preview • The Air Force in Eastern Africa • Air Cruise in Eastern Mediterranean • The Italian Air Force during the Solstizio Battle

Rivista Militare, Italy, no. 1, January-February 2009
What Future for UN, NATO and EU? • Obama's America • "Eagle Tour 08": Lessons from a Study of Military History • The Role of the NATO Advisory Team in Bosnia-Herzegovina • The Centre of Gravity as Guiding Element in Military Operations • Regional Command West: Account of an Experience • Military Buildings: A Project of Reclamation



"Pinerolo" Brigade Returns from Kosovo

Austrian Military Police and German Military Police – A Comparison • Which Military Capabilities Will the EU Have Starting 2010? • The First Army of the First Republic • The First Main Battle Tank of the World • Eurofighter (Part 10) – Maintenance • The

Guard Music • The Guards • Provocatio (Part. 4) • The "Smoke Screen Accident" on the A22 – Military Communication in a situation of Crisis – an Analysis • The "Shadowmakers" – Austrian Engineers in Chad • Mission "Moonlight" – Norway 1944 • SHIRBRIG – Standby High Readiness Brigade

Truppendienst, Austria, no. 4 (310), 2009

150th Anniversary of the Battle of Solferino. A Humanitarian Disaster • The Purpose of the Armed Might Today. Part 1. On the Transformation of Europe's Armed Forces in the 21st Century • Operations of the "Volkswehr" • IVECO LMV – Light Multirole Vehicle • New Ways of the Adults Education in the Austrian Armed Forces • The European Battle Groups • AIRPOWER 2009 • The Security Sector Reform and Its Effects on the Troops.



of Abandoned Barracks • Transformational Leadership • Soldiers of the Future: A Comparison of Experiences • Force Protection and the Response to IEDs • Topicality of Military History in Modern Times • Julius Caesar, the Man, his Feats, the Myth • The

Selection and Translation

Ioana MANAFU, Delia PETRACHE,
Dr Mihai POPESCU, Cătălina ROJIȘTEANU
National Military Library

EDITORIAL EVENTS

 **Alina PAPOI**

Infanteria română – între jertfă și victorie (The Romanian Infantry – between Sacrifice and Victory) “is addressed to a broad array of readers, military men with various ranks, belonging to various military branches and specialities and, especially, to the infantrymen. Impressed with the predominant role of the infantry on the battlefield and the great sacrifices made in the wars waged by this heroic branch for the country’s independence and for defending the ancient homeland, some military writers and thinkers have named it the “queen of battles”, writes Lieutenant General Dr Teodor Frunzeti, the author of the Foreword.

The book, published by *Centrul Tehnic-Editorial al Armatei*, is an excursion into the evolution of the infantry, the author – **Major General Dr Nicolae N. Roman** successively approaching the following subjects: the influence of the international military environment on the infantry; Romania’s security policy – considerations regarding the influences on the military domain and on the infantry; contributions and benefits within the synergy of braches; the missions specific to infantry structures – new approaches to and dimensions of the training process; the transformation and modernisation of infantry structures. For the Romanian Armed Forces, the infantry has been a fundamental element throughout its tumultuous existence: on 30 April 1830, the infantry was created as a modern branch of the Romanian Principalities; in 1848, the army of Wallachia consisted of 5 608 military men, out of which 87% infantry and 13% cavalry; in 1880, the infantry had 6 infantry regiments, 30 dorobantzes regiments, 4 mountain battalions, meaning a total of 80 battalions; in 1912, the Infantry’s Inspectorate was established, being in charge of the mobilisation, procurement, training and command of the troops belonging to this branch. The author further presents this branch and writes about its significance until nowadays, when Romanian infantrymen fulfil, “with dignity, dedication and professionalism, the missions assigned in Afghanistan and Iraq”. In this respect, as General Frunzeti points out, “this book is intended as a pious tribute paid to the endless blood sacrifice of Romanian infantrymen, in the past and especially in the present, during the missions in theatres of operations, to preserve our fundamental national values”.

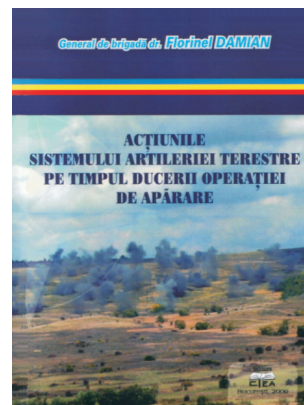


*“Through **Acțiunile sistemului artileriei terestre pe timpul ducerii operației de apărare (The Actions of the Terrestrial Artillery System during the Defence Operation)** – as **Brigadier General Dr Florinel Damian** mentions – I have intended to provide a solution to the way of implementing NATO techniques, tactics and procedures, especially from the structural and operational point of view, considering the fact that the terrestrial artillery subunits, units and large units from the Romanian Armed Forces meet only partially and/or not at all NATO’s standards”.*

Divided in four chapters, the book approaches some aspects regarding the conduct of offensive (combat) operation in the conception of some foreign modern armed forces; the preparation and fulfilment of offensive responses within the defence (combat) operation, in the Romanian military thinking; the terrestrial artillery’s place, role and missions during the preparation and execution of reaction (counterattack).

Also named the “*god of war*”, terrestrial artillery has gained another significance in the modern war, one that is much more important and profound, starting from the fact that the transformation of terrestrial artillery is aimed at the commands, at the data provision units, as well as at the fighting (subunits) units, and the minimised value of the effectives and of the main categories of combat armament and technique, limited to the treaties signed by Romania, “*requires a lot of thoughtfulness on the part of the organisational structures and the way in which terrestrial artillery is employed in (combat) operation*”.

The book is published by *Editura Centrului Tehnic-Editorial al Armatei*.



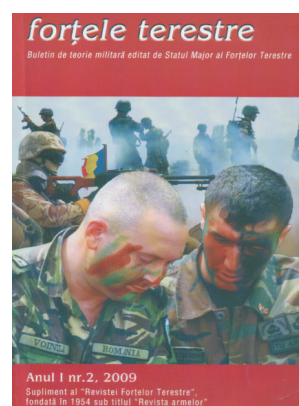
“Even if it is not the “beneficiary” of a terrorist phenomenon, Romania cannot remain outside the more and more complex system of international relations. As a NATO and EU member country, it is connected to the international terrorist phenomenon and, implicitly, to the most powerful antiterrorist alliance”. Starting from these considerations, the authors – **lecturer Dr Vasile Fulga, Cristina Fulga and Dan V. Fulga** –, in ***România raportată la fenomenul terorist internațional (Romania Connected to the International Terrorist Phenomenon)***, approach the terrorist phenomenon considering the following: its influence on states’ national security; the impact of terrorism

on the Romanian society; the prevention and fight of terrorist actions in the theatres of operations.

Moreover, the authors elaborate on the courses for development of Romanian military intelligence services with the purpose of identifying and countering the new terrorist threats. Thus, the most important measures are aimed at the political and diplomatic field in order to enlarge and enhance the antiterrorist coalition, monitor the most dangerous active terrorist organisations, adapt the conceptual framework to meet the new requirements, reorganise the intelligence services of other institutions and bodies involved in fighting terrorism, improve the intelligence management system.

The book is published by *Editura Centrului Tehnic-Editorial al Armatei*.

We have received the second issue of the ***Buletin de teorie militară – Forțele Terestre (Bulletin of Military Theory – the Land Forces)***, and here are a few subjects approached: “*Education through Models in the Military High School College – Between Rational Need and Professional Requirement*”; “*New Requirements and Missions for the Romanian Anti-Aircraft Artillery and Missiles*”; “*Battles of Bran and Dragoslavele in the First World War*”; “*Wind Power Impact on Protected Areas in Dobrogea*”; “*Air Targets Acquisition in the Land Forces*”; “*European Perspectives on Governing Security Risks in Outer Space Activities*”; “*The Man-Environment Relationship*”; “*Digital Image Processing*”; “*Quantitative and Qualitative Changes in the Major Conflicts of the Centuries*”.



“*It is said that the purpose of human action is to pursue happiness and the means by which this can be achieved is virtue. Long ago, virtue meant physical courage, manhood and, initially, it referred to male warrior virtues, such as courage; then, it meant withstanding temptations and regularly practicing the good ...*” – in *On Virtue*, Commander Dr Ioan Crăciun pays tribute to the members of the Marine Petty Officers Corps, on the 100 year-anniversary of the establishment of this entity. These are the opening lines of the fourth issue of the ***Marina română (Romanian Naval Forces)*** review.

Here are a few topics: “*Marine Infantrymen in the Babadag Polygon*”; “*Combat Divers Jumps or the “Freedom” to Practice Free Jumps off a Helicopter*”; “*Three Years since the Establishment of the Naval Helicopters Group*”.

English version by
Iulia NĂSTASIE

Résumés

“Révolution” dans la logistique – une nécessité ou un caprice ?

La durabilité dans les théâtres d'opérations, a récemment déclaré un chef militaire d'une certaine autorité, s'assure par des investissements dans la technologie et des systèmes de gestion, un but qui prend du temps et des ressources considérables. Et qui exige le changement de l'attitude des militaires – de mettre en œuvre la mentalité de gagneur –, mais aussi de l'opinion du public, qu'il faut être correctement informé pour appuyer les décisions politiques sur la sécurité nationale.

La prévision, l'économie, la coopération, la simplicité, la flexibilité, la responsabilité, l'autorité resteront de simples mots dans un glossaire de termes qui devraient illustrer les principes de la gestion logistique, si pas procéder fermement à soutenir le processus de promouvoir, adopter, adapter et appliquer de nouveaux concepts visant le même appui efficace pour la logistique.

Leadership motivationnel et efficace.

Management de l'éducation

Selon l'auteur, la gestion de tout établissement d'enseignement doit être connectée à un système intégré interinstitutionnel par une coopération pragmatique avec le système de gouvernement local, avec le milieu universitaire local, national et international, et les bénéficiaires potentiels des diplômés.

À cet égard, l'auteur mentionne le rôle des politiques de gestion des leaders, qui,

bien que non identiques, devraient, d'une part, de préserver les éléments traditionnels de l'institution, à travers d'un processus de continuité, et, deuxièmement, d'imposer des règles qui exigent la modernisation et l'harmonisation avec les nouvelles réalités. Ainsi, un leader compétent, dans l'élaboration du contenu de la réforme, devrait se concentrer sur les orientations pour l'amélioration et qu'ils peuvent changer. Un leader doit croire au programme de réforme, motivant correctement ses collègues ou ses subordonnés.

Le management des ressources pour la défense – le management des ressources humaines (I)

La lutte continue pour une vie meilleure devient un mode de vie normal pour chaque être humain, en particulier pour ceux d'entre nous qui veulent être performants. En conséquence, si on fait un choix erroné, alors tout le monde va souffrir en raison des liens invisibles qui existent entre tous les habitants du ce «village global». Les êtres humains ont toujours été notre plus importante ressource pour la défense du pays. C'est pourquoi nous devons être conscience de l'évolution du potentiel humain dans les années prochaines. Il est très important de connaître la situation actuelle des ressources humaines pour la défense, et il est tout aussi important de prendre les mesures appropriées pour le protéger et développer.

En tant que membre de l'OTAN et de l'UE, la Roumanie a de nombreuses avantages

et des responsabilités, parmi celles-ci étant la transformation des forces armées, en mettant l'accent sur la ressource humaine. Il est très important aussi de donner une bonne attention sur les êtres humains, parce qu'ils sont le cerveau du corps militaire.

Le binôme PSYOPS & CIMIC dans les opérations (I)

Les auteurs soulignent la nécessité d'une prévention des conflits et la gestion des crises, ayant comme finalité principale la consolidation de l'autorité gouvernementale au niveau central, régional et local, le droit et la restauration de l'ordre public, et la normalisation de la vie économique.

À cet égard, les opérations d'information sont nécessaires pour agir et réagir à la fois cinétique et non cinétique, en utilisant tous les moyens disponibles, des outils, des techniques et des capacités. Parmi ceux-ci, un rôle important à jouer a les éléments de soutien, le soi-disant «multiplicateurs de force», les opérations psychologiques et la coopération civil-militaire, qui peut effectivement promouvoir l'image, le mandat, et la légitimité de la force d'intervention. Gagner la sympathie et le soutien de la population pour les objectifs militaires permettra de réduire la base de recrutement de l'insurrection et le soutien aux organisations terroristes, et, par conséquent, faciliter les conditions qui permettent le désengagement et le retrait de la force d'intervention.

Logistique militaire. Une nouvelle stratégie d'approche

La réalisation d'un système intégré basé sur la distribution est, selon l'auteur, la finalité du processus de transformation de la logistique de l'Armée Roumaine. Ce nouveau système permettra de comprendre, premièrement, un ensemble de politiques, de doctrines et de concepts innovants, les processus logistiques opérationnelles remodelés, de nouvelles entités logistiques, une nouvelle commande-ordinateur de contrôle, qui sera

d'information et qui constituera le soutien pour le processus informationnel décisionnel, et non finalement, les logisticiens, les spécialistes militaires et civils, avec une nouvelle mentalité, capables de gérer toutes leurs activités dans tout le système logistique complexe.

L'auteur souligne que le nouveau système doit être léger et souple, compatible et interopérable avec les structures similaires de l'OTAN, capable d'offrir le soutien nécessaire et la liberté d'action pour les forces qui luttent au cours de leur exploitation et leur participation à la gamme complète des opérations.

Efficacité d'activités logistiques dans le contexte de l'accélération du processus de transformation de l'Armée Roumaine

L'article souligne le fait que, n'importe quelles sont les conditions existants dans un certain moment, la logistique militaire se développera, même si nous ne comprenons pas toujours les réalités concrètes qui façonnent le processus de transformation. Selon l'auteur, l'avenir du système logistique militaire roumain sera concentré par la contribution de toutes les forces et catégories militaires de la structure organisationnelle de la Ministère de la défense nationale.

L'auteur tient à souligner que la transformation et l'intégration du système logistique ne peuvent être atteints que d'une manière uniforme, par le biais des efforts conjoints des spécialistes et des décideurs politiques à tous les niveaux de nos structures militaires, à travers d'un processus complexe qui vise à être compatible avec les principes, les politiques, les concepts, les doctrines, les normes et les procédures de l'OTAN.

Déterminants de la gestion de la chaîne d'approvisionnement en logistique multinationale

Le but de cet article est de montrer une série de changements essentiels sur les aspects de la logistique militaire, de l'approvisionnement

en logistique multinationale, et certains de leurs effets sur la logistique de l'appui des opérations multinationales. De l'avis de l'auteur, on peut définir la logistique comme un domaine d'activité qui englobe toutes les phases par qui sont suivis toutes les entrées et les sorties de matériel des marchandises de toute nature. La gestion de la chaîne d'approvisionnement en logistique multinationale est un concept qui rejoint la logistique et assure l'interconnexion du personnel de l'entreprise. Il est évident que la distribution de la chaîne d'approvisionnement peut fournir l'infrastructure et des options de distribution nécessaires pour atteindre des fonctions telles que: l'achat et l'acquisition de ressources, leur traitement et la transformation dans l'enseignement secondaire en produits finis.

Options modernes pour la transformation du management logistique

Les transformations actuelles des forces militaires génèrent de nouveaux défis et dilemmes. Aujourd'hui, l'auteur souligne, il est nécessaire d'assurer un équilibre entre la nécessité d'avoir des forces bien formées et modernes, le nombre augmenté des missions et les ressources qui se raréfient. La transformation de la gestion logistique militaire est perçue, selon l'auteur, non seulement comme une plaque tournante de l'avenir de soutien logistique, mais comme un point d'appui pour l'effort des forces armées d'atteindre l'équilibre nécessaire entre la préparation et la modernisation. Aussi, l'auteur met l'accent sur la façon dont les guerres futures devraient être menées. En ce sens, les experts militaires aperçoivent cette transformation comme un processus de révision des objectifs prioritaires et la structure des forces armées, du modèle adopté au cours de la guerre froide à un nouveau type de forces, capables d'accomplir une gamme plus large des missions et d'assurer la domination stratégique en tout point du globe.

Le soutien logistique et sa contribution à la réussite des opérations multinationales

Les efforts apportés dans le sein de l'OTAN pour accélérer la transformation dans le champ logistique ont développés une série de changements, non seulement de point de vue doctrinal et opérationnel, mais aussi de la perspective de l'attitude envers les besoins des combattants. Selon l'Alliance, dans les prochaines années, les grands défis pour l'Alliance seront de combattre les menaces asymétriques dans un monde qui est en constante évolution.

Pour assurer une réponse crédible aux ces défis, l'OTAN doit être en mesure de fournir une capacité globale destinée à soutenir les forces expéditionnaires pour une longue période de temps, hors de la zone de responsabilité de l'Alliance. Pour les militaires spécialistes, cet objectif ne peut être atteint sans un niveau plus élevé d'intégration entre les systèmes logistiques des pays membres de l'OTAN.

La logistique aérienne dans le nouveau contexte de sécurité

Le nouveau contexte de sécurité, tels qu'il est décrit dans la Déclaration de Londres, a nécessité un changement dans l'utilisation des forces aériennes. La part principale est passée de forces régionales permanentes vers des unités très mobiles, avec une capacité de réaction rapide, prêtes à agir de l'intérieur ou l'extérieur de la région. Cette tâche, l'auteur souligne, est apte pour les moyennes aériennes, à condition qu'il existe un appui logistique adéquat pendant toutes les phases d'une opération.

À cet égard, l'auteur affirme que l'appui logistique peut être réalisé en utilisant le soutien du pays hôte, mais il est essentiel de créer et d'acheter des modules propres de soutien

logistique à déployer, qui peuvent être utilisés pour surmonter les défaillances constatées dans les bases mal équipés.

Le rôle de l'infrastructure de transport dans la planification logistique des opérations conjointes

L'expérience des conflits du dernier siècle et le développement sans précédent des forces armées montrent, avec suffisamment de clarté, que l'on acquiert une grande importance à l'utilisation complexe de toutes les catégories de véhicules pour mener à bien l'action militaire.

Selon l'auteur, accomplir les exigences extrêmement élevées de transports des forces armées de transport dans des conditions de la guerre moderne est incroyable sans l'utilisation complexe de toutes les catégories de moyens de communication et moyens de transport – routiers, ferroviaires, maritimes, aériennes, et ceux qui sont spécifiques.

Dans la plupart des affrontements militaires, le transport par chemin de fer et par des véhicules avaient le poids le plus élevé, d'autres modes de transport, par l'eau, par l'air et par les pipelines en jouant un rôle secondaire et souvent en les complétant sur d'autres.

Le management des ressources de défense intégré dans le contexte de la transformation militaire

La transformation militaire, tant au sein de l'OTAN et les armées des pays membres, vise à adapter les forces armées au nouvel environnement de sécurité et, dans le même temps, le contrôle des évolutions possibles dans cet environnement.

Dans ce contexte, l'auteur estime que la transformation de l'armée roumaine vise à créer une structure moderne de forces, équipée par une technologie avancée, interopérable, flexible, avec un degré élevé de mobilité et de la durabilité, ce qui peut

accomplir la gamme complète de missions assignées. Les fins de ce processus sont: la création des structures de commandement, de combat, de soutien au combat et des missions de logistique capables d'assurer l'accomplissement des missions par la concentration des effets; le développement d'un système compatible avec l'équipement et la dotation des armées des États membres de l'OTAN; la normalisation du cadre législatif, conceptuel et actionnel en conséquence au sein de l'Alliance.

Le soutien fourni par le pays hôte – un pousseur pour la capacité des forces déployables

Les nouveaux concepts et capacités opérationnelles et logistiques spécifiques aux forces déployables et aux opérations expéditionnaires déterminent le changement du contexte opérationnel classique et permettent la réalisation du découragement avancé à l'aide de petites forces et des renforts. Les opérations "Iraqi Freedom" et "Enduring Freedom" ont déjà démontré l'importance d'augmenter la commande de vitesse et l'impact terrible auquel le réseau et aussi la dispersion des forces peuvent réaliser sur la projection rapide de forces et d'augmenter l'efficacité dans les conditions de combat moderne.

Dans le nouveau contexte, pour réaliser les effets cinétiques ou non cinétiques désirés, l'auteur met en évidence que les forces alliées et les coalitions utiliseront principalement des forces et des capacités configurées en stricte conformité avec les exigences opérationnelles.

Perspectives sur le soutien logistique dans les théâtres d'opérations

La réalisation d'un soutien logistique pour les contingents nationaux dans l'exercice de ses missions multinationales dans les théâtres d'opérations, dans la conception de l'OTAN,

c'est une responsabilité nationale, avec l'aide d'un support logistique intégré multinational pour la normalisation, l'efficacité et l'efficacité. Cet-là est un soutien logistique spécialisé, d'une nation dans un domaine donné, et aussi un soutien logistique de la nation qui est considérée digne de prendre les décisions.

A nos jours, pour réaliser un soutien logistique nécessaire pour les contingents, la Roumanie est chargée de fournir: la technologie et les stocks de matériaux, en fonction des classes de l'OTAN d'approvisionnement, des parties spécifiques de rechange, la maintenance, les munitions et les explosifs, les lubrifiants et d'autres liquides spéciales, des médicaments et du matériel sanitaire, des fournitures et des quotas de transport vers/depuis les théâtres des opérations.

Le transport maritime stratégique dans le sein de l'OTAN et de l'UE

Pour couvrir les besoins du transport par l'air, l'eau et sur la terre et à assurer une plus grande mobilité à des fins d'utiliser des moyens alternatifs de transport, les structures de transport stratégiques futures sont orientés principalement à deux directions, à savoir: assurer un caractère multinational de plusieurs nations à adhérer à la même initiative et de l'utilisation de véhicules mis à leur disposition ou d'offrir en location ses propres capacités de transport, fournissant ainsi un caractère multimodal, avec une utilisation optimale des véhicules aériens, par l'eau et sur la terre, pour couvrir les besoins de transport.

Donc, l'OTAN et l'UE sont en cours de finalisation les deux structures de transport stratégiques sur lesquels l'auteur s'arrête à partir dans ce matériel: le Centre multinational de coordination de l'Europe et le Centre multinationale de coordination du transport maritime d'Athènes.

Le programme OTAN d'investissements au service de la sécurité – un instrument pour maintenir la stabilité politique-militaire

Le management des projets du Programme OTAN d'investissements au service de la sécurité est une activité complexe et laborieuse. Cela comprend une communication constante et la coordination avec de différentes structures, tant au niveau national et l'Alliance, pour assurer la planification et la conception, la préparation des études techniques de faisabilité, afin d'obtenir l'engagement de financement de l'OTAN, un financement commun, d'organisation des procédures acquisitifs, le contrôle de l'exécution des travaux, la coordination des inspections pour l'acceptation finale.

Jusqu'à présent, la Roumanie a été alloué pour mettre en œuvre les projets de ce Programme, couvrant les champs de référence de l'aéroport, les communications et les systèmes informatiques militaires, d'alerte et d'installation des systèmes de commande et de contrôle aérien.

La logistique de l'OTAN – la logistique du futur. L'Agence OTAN d'entretien et d'approvisionnement

L'auteur s'arrête sur les principaux domaines où l'Agence est impliquée: fournitures, l'entretien, l'approvisionnement, la gestion des contrats, de l'ingénierie et support technique. La plupart de ces services de logistique sont externalisées, le principal rôle de l'Agence étant de renforcer la nation qui a besoin d'appui, en centralisant les activités de gestion logistique, la procédure d'appel d'offres internationales et contrôle des coûts et la qualité du service presté par ses clients.

Cette agence fournit également un appui pour le système OTAN de codification et en ligne, il y a une coopération de gestion logistique, d'échanger des informations et du matériel

d'approvisionnement. Ces dernières années, l'Agence est devenue de plus en plus impliquée dans le soutien logistique de l'Alliance et pour les opérations menées par les forces armées des États membres.

Un échelon de logistique de l'armée romano-byzantine du VI^{ème} siècle – quaestura exercitus Iustiniani

“Quaestura exercitus” a eu le rôle de financement et de fournir des troupes sur le Danube. Cette structure militaire, qui a été fondée en 536, était une sorte de référence de la logistique de l'armée romano-byzantine. Il n'y a pas, dans la mesure telle qu'elle est connue à ce jour, une autre structure similaire. Il était nécessaire, selon l'auteur, parce qu'il existait un écart entre les besoins et les possibilités pour l'approvisionnement local des troupes déployées dans la Scythie et Moesia Secunda. Quaestorul amassait des provinces riches des impôts en argent et en biens destinés à être livrés aux soldats et le centre de distribution était à Odessa.

En ce qui concerne l'approvisionnement alimentaire, les dernières recherches ont pu établir que les amphores trouvées dans les fortifications du Danube peuvent être associées aux transports des marchandises organisés par quaestura exercitus. Elles ont été utilisées principalement pour l'huile d'olive, mais parfois pour le vin.

L'Europe a un rôle central à jouer au Moyen-Orient

L'auteur attire l'attention sur les problèmes du Moyen-Orient, plaidant pour la nécessité pour la projection du modèle européen d'intégration et de coopération afin de régler les problèmes dans la région, et estimant que l'Europe peut et doit jouer un rôle central dans la future transformation du Moyen-Orient. À cet égard, il mentionne que la région est

désormais aiguë symptomatique de la manière imprévisible que le système international a rapidement et plus radicalement changé, d'être influencé par l'émergence de nouveaux acteurs ainsi que les déficits de gouvernance considérables, qui sont d'importantes à la création d'États en déroute, etc. En accord avec «les idées simples du général de Gaulle» à l'approche d'un «Orient compliqué», l'auteur présente quelques propositions concernant le processus de paix au Moyen-Orient, toutes en aboutissant à l'institutionnalisation des relations entre les pays du Moyen-Orient, à travers des lignes européennes, asiatiques ou même d'Amérique latine, qui doit être considéré comme un but à long terme.

Sécurité et élections en Afghanistan: pourquoi les deux doivent aller ensemble

L'auteur décrit le rôle important joué par la sécurité dans la ère post-guerre froide et la nécessité des pays du monde à suivre des voies démocratiques, en général, ainsi qu'à propos de la sécurité en Afghanistan, en particulier, et sur le contexte des prochaines élections dans le pays. À cet égard, il évoque une série des facteurs qui font obstacle à la libre circulation et la nature équitable des élections: les ingérence des pays étrangers, le manque d'un environnement sûr et efficace, le fait que le véritable pouvoir est dans les mains de propriétaires irresponsables armés, l'injustice qui prévaut dans la société, le pourcentage de l'analphabétisme, etc.

L'auteur conclut en citant le besoin de l'Afghanistan pour maintenir un environnement sûr, dans lequel les gens peuvent se sentir libres et de penser et d'exprimer confortablement leurs idées, d'une façon indépendante, ainsi que pour l'autodétermination, pour leur propre développement économique, social, culturel et historique dans les conditions existantes.

**Le défi sécuritaire des déficits
en matière d'État de droit:
"toucher la surface"**

L'auteur fait valoir que ce n'est pas en se concentrant davantage sur les aspects techniques de la réforme en matière d'État de droit que l'on brisera la spirale négative de l'érosion de la confiance de l'opinion publique afghane dans l'État et de l'accroissement de l'insécurité, s'il n'existe pas la volonté politique de venir à bout de l'impunité institutionnalisée. Il reste que, comme on l'a vu lors des précédents processus électoraux, les élections ne sont pas la panacée.

Compte tenu de l'ampleur du soutien que la communauté apporte à l'Afghanistan sur le plan politique et militaire et sur celui du développement, celle-ci est en excellente position pour exiger que le gouvernement afghan consulte ses citoyens et pour soutenir un débat politique axé sur la justice dans le pays. Formuler des exigences à l'intention du gouvernement afghan implique bien entendu que l'on jette également un regard critique sur les stratégies de la communauté internationale elle-même.

**The Joint Operating
Environment 2008
– Challenges and Implications
for the Future Joint Force (III)**

L'étude relève les défis et les implications pour l'avenir commun de la Force, publié par United States Joint Forces Command pour décrire le futur environnement opérationnel, qui fournit une perspective sur les tendances futures, les chocs, les contextes et les implications pour l'avenir commun des commandants de force et d'autres dirigeants et de professionnels dans le domaine de la sécurité nationale.

Ainsi, les auteurs décrivent le caractère durable de la guerre, les causes et les conséquences du changement et de surprises et aussi le rôle de la stratégie.

Les auteurs abordent certaines questions sur la guerre et les opérations militaires au XXIème siècle, aussi sur la nécessité de l'enseignement militaire professionnel. Ils formulent certaines questions à l'égard de l'économie dans le domaine de défense, les politiques d'acquisitions et le système de personnel.

Version française par Alina PAPOI





*King Ferdinand I, Prince Carol and General Averescu
watching the 3rd Division troops parade, in Verdea, 1917*

Source: *The National Military Museum, by the kindness of Professor Neculai MOGHOR*

ROMA

<http://www.defense.ro/gmr>