

ROMANIA
“CAROL I” NATIONAL DEFENCE UNIVERSITY
CENTRE FOR DEFENCE AND SECURITY STRATEGIC STUDIES



STRATEGIC IMPACT

No. 4 [41]/2011

68-72 Panduri Street, sector 5, Bucharest, Romania

Telephone: (021) 319.56.49; Fax: (021) 319.55.93

E-mail: cssas@unap.ro; Web address: <http://impactstrategic.unap.ro>, <http://cssas.unap.ro>

“CAROL I” NATIONAL DEFENCE UNIVERSITY PRINTING HOUSE
BUCHAREST, ROMANIA



The Centre for Defence and Security Strategic Studies' scientific quarterly magazine acknowledged by the National University Research Council as a B+ magazine

STRATEGIC IMPACT

Editorial Board:

Teodor Frunzeti, Professor, PhD, chairman

Marius Hanganu, Professor, PhD

Gheorghe Calopăreanu, Associate Professor, PhD

Constantin Moștofleu, Senior Researcher, PhD

Hervé Coutau-Bégarie, director, PhD (Institute for Compared Strategy, Paris, France)

John L. Clarke, Professor, PhD (European Centre for Security Studies "George C. Marshall", Germany)

Adrian Gheorghe, Professor Eng., PhD (Old Dominion University, Norfolk, Virginia, USA)

Libor Frank, PhD (Institute for Strategic Studies, Defence University, Brno, Czech Republic)

Dario Matika, PhD (Institute for Research and Development of Defence Systems, Zagreb, Croatia)

Ilias Iliopoulos, Professor, PhD (Hellenic Naval War College, Athens, Greece)

Eng. Pavel Necas, PhD (Armed Forces Academy, Liptovsky Mikulas, Slovakia)

Dana Perkins, PhD, 7th Civil Support Command - USAREUR, Germany

Acad. Alexandru Bogdan, Professor, PhD, Biodiversity Centre, Romanian Academy

Scientific Board:

Grigore Alexandrescu, Senior Researcher PhD Alexandra Sarcinschi, Senior Researcher, PhD

Cristian Băhnăreanu, Researcher, PhD Richard Stojar, PhD

Dorel Bușe, Associate Professor, PhD Costică Țenu, Professor, PhD

Gheorghe Deaconu, Associate Professor, PhD Mihai Velea, Professor PhD

Nicolae Dolghin, Senior Researcher, PhD Andry Volosyn, PhD

Petre Duțu, Senior Researcher, PhD

Editors:

Constantin Moștofleu, Senior Researcher, PhD, editor-in-chief

Cristina Bogzeanu, Research Assistant, deputy editor-in-chief

Daniela Răpan

George Răduică, PhD

The authors are responsible for their articles' content, respecting the provisions of Law no. 206 from 27th, May 2004, regarding the conduct in scientific research.

ISSN 1842-9904 (online edition)



CONTENTS

POLITICAL-MILITARY TOPICALITY

<i>New Paradigms of Armed Combat and Their Influence on Military Forces' Training</i> Teodor FRUNZETI, PhD, Marius HANGANU, PhD.....	5
<i>Challenges for the Common Security and Defence Policy – EU Battlegroups</i> Gheorghe CALOPĂREANU, PhD.....	16
<i>International Security Institutions and Libyan Crisis – Co-Operation or Competition</i> Pascu FURNICĂ, PhD.....	21

GEOPOLITICS AND GEOSTRATEGIES ON THE FUTURE'S TRAJECTORY

<i>South Africa - Emerging Power</i> Dorel BUȘE, PhD.....	27
<i>Energy Potential of Ukraine as Part of the Expansion of Raw Materials and Energy Base of the European Union</i> Andryi VOLOSIN, PhD.....	34

NATO AND EU: POLITICS, STRATEGIES, ACTIONS

<i>Rapid Reaction Force - Basic Component of the European Defence System</i> Ion BĂLĂCEANU, PhD.....	43
<i>“National Interest” Concept in European Context</i> Cristina BOGZEANU.....	48
<i>Level of Correlation Between the Romanian Law and the European Union Law Concerning the Management of Emergency and Extreme Risk Situations</i> Mirela ATANASIU, PhD.....	58

SECURITY AND MILITARY STRATEGY

<i>Education, Strategic Factor for National Security</i> Viorel BUȚA, PhD.....	72
<i>Aggressions to Critical Infrastructures, with Military and Non-Military Implications</i> Gheorghe MINCULETE, PhD, Daniela RĂPAN.....	76
<i>Multidimensionality of the Modern Battlefield and a New Strategic Dimension of Confrontation</i> Iulian ALISTAR.....	83

ANALYSIS, SYNTHESIS, EVALUATIONS

<i>Possible Methodologies of Intervention (Prevention) Assessment under Conditions of Extreme Risk</i> Gheorghe VĂDUVA, PhD.....	90
<i>Industrial Accident Risk Assessment</i> Cristian BĂHNĂREANU, PhD.....	100
<i>“Nuclear Spring” of Prague: a Utopia?</i> Iulia MOISE.....	107



POINTS OF VIEW

The Security of National Strategic Supply

Petre DUȚU, PhD.....114

REVIEWS

Afghanistan, Ten Years of Fight Against Terror.....119

CDSSS' AGENDA

The activities of the Centre for Defence and Security Strategic Studies, October - December 2011

Irina TĂȚARU.....122

Instructions for Foreign Authors.....124



NEW PARADIGMS OF ARMED COMBAT AND THEIR INFLUENCE ON MILITARY FORCES' TRAINING

*Teodor FRUNZETI, PhD**
*Marius HANGANU, PhD***

War, as a complex phenomenon, has experienced new forms of expression with the evolution of society or, more exactly, simultaneously with the development of scientific knowledge, with technical and technological progress. At the same time, there have appeared and developed various theories and paradigms of armed combat. The latter have exercised constant influence on military training various levels.

Key-words: war among civil population; asymmetric conflict; network-based warfare, effects-based operations; new paradigm training.

1. Considerations on the new paradigm of armed combat

As in any other field of social theory and practice, armed combat is constantly evolving as a result of social development, scientific knowledge, technical and technological progress. Evolution theories often turn to armed combat paradigm, namely to those scientific achievements consisting in a characteristic set of beliefs and preconceptions and being able to perform knowledge functions typically attributed to shared rules.

Currently, there are a range of new paradigms of armed combat. Among them, it is frequently debated and written about “war among civil

population”¹, “fourth generation warfare”², asymmetric conflict³, effects-based operations, and network-based war.

1.1. War among civil population

Conventional wars were fought in open space on land, sea or air, often plain. In this perspective, the city was but rarely the theater of an armed confrontation.

Currently, the old paradigm of “the war in open space”, a symmetrical war, led by an industrial power against other industrial powers, an interstate war, a technical war if not a war of technology, of high intensity, with fronts moving with the infantry unit supported by armor, artillery, aviation was replaced with the new paradigm of the “war among civil population”. In other words, conventional, interstate war was replaced by “new” wars⁴ – low-intensity wars, medium- intensity wars, asymmetrical wars, fourth generation warfare, information warfare and network-based warfare, urban guerrilla and insurgency.

We should emphasize the merits of the new paradigm and of this new model of post-Western war⁵. Since 1990, new wars have become increasingly urban. Since the end of the Cold War, the battles are becoming urban combats. It can be

** Lieutenant-General Professor Teodor FRUNZETI (tfrunzeti@unap.ro) has one doctorate in military sciences and another one in political sciences and is the rector and commandant of “Carol I” National Defence University, Bucharest, Romania.*

*** Rear Admiral (r.) professor Marius HANGANU (mhanganu@unap.ro), has a doctorate in military sciences and is the deputy commandant for scientific research and deputy rector with “Carol I” National Defence University, Bucharest, Romania.*



said that three quarters of the conflicts that took place in the 1990s were conflicts in urban areas. On the other hand, if one takes into account that, in 2025, two thirds of the world population will live in urban areas, it is clear that the future war will be one among civil population⁶.

As far as war among civil population is concerned, armies turn out to be less “useful” as means of expressing power and as a means of coercion. They are not “useful” anymore because they no longer generate fear. And there are at least two reasons for this: nowadays, the use of violence is limited by regulations related to international humanitarian law and not only; the other understood that one has to opt for new moral and physical fields of action, which are more favorable as power equalizers, and not for imposing its own will by pursuing military force.

Today, “clean war”, born out of Western ethics, opposes to “dirty war” strategies, to “war among civil population”, which is based on what the first excluded. Consequently, national armies and their instruments must adapt to new realities and constraints of the “war among civil population”.

“War among civil population is neither a solution nor an ideology, it is simply a reality. For today and for the foreseeable future”⁷. According to the quoted source, some intellectual authorities estimate that if the nineteenth and twentieth centuries were the centuries of diplomats, twenty-first century could be the century of soldiers because, due to the improved relations between states, war would come to be placed in the heart of states and nations, “within the populations”, where the soldier assumes the central role, directly political.

War in urban and industrial areas can be appreciated as a form of war among civil population. Even for modern armies, which use modern technology extensively, carrying the fight in urban and industrial areas is a major challenge and the results of recent conflicts showed that these structures are almost as vulnerable in this environment with adversaries much less advanced technologically. Many modern armies are not trained enough to carry long-lasting fights in urban areas, especially, in the inhabited ones, which have lately become common in informal conflict⁸.

The military demonstrate restraint in the use of fire against the enemy if there are groups of civilians in the area, especially when located in

a strong country. An important role in clarifying the circumstances of using lethal force is held by the rules of engagement which have to be clear enough so as to avoid determining uncontrolled situations, to eliminate ambiguities in addressing different situations and to ensure the protection of their forces by exercising the right of self-defence at need.

Urban guerrilla and insurgency can be considered particular forms of warfare among civil population. Both of them fight against a government holding the power in the state. Nowadays, urban guerrilla uses terrorism as military strategy (namely, advertising or selective terrorism, violent though) in a way to trigger a violent reaction from the state⁹. Among the most typical action procedures that can be used by guerrilla and urban insurgency are: observation, surveillance, trap, ambush, dams and destruction, carrying the fight underground, limited objective attack, raid, harassment.

Urban guerrilla formations must avoid ample confrontations with enemy forces, they must constantly escape their superior forces’ hits, but they have to harass them relentlessly by actions with an acute offensive character of small scale but which, when integrated, lead to strategic effects.

Currently, insurgent movements are associated with secession objectives which are of religious nature in the Philippines, of ethnic considerations as in Spain, the Basque Country or in Turkey and Iraq (referring to Kurdish minority). These groups carry a long asymmetric conflict, mainly of pulsatory type. Insurgent movements use a strategy based on three basic elements: protection of the insurgent forces against the actions of government’s armed forces; attracting financial and logistical support; fulfillment of the set political – or any other – objectives at all costs¹⁰.

1.2. Fourth Generation Warfare

J. Robb and other authors consider that this conflict opposes “powers, even states that are considered engaged in the defence of globalization and the increasingly numerous forces, especially terrorist ones, acting against globalization”¹¹. In the view of this author, a so-called “global guerrillas” could use the disturbances of systems (energy pipelines, electricity grids) to produce loss in vulnerable states. This “war” would be an Open Source Warfare (OSW), a type of war which uses dissidences, actions on the Internet, information



systems, especially, in cyberspace etc. The most important military analysts consider, however, that fourth generation wars are the military conflicts of this era¹². Military means and procedures of Fourth Generation Warfare (benefiting of an important contribution from electronic technology) can be used in conflicts of low, medium and maximum intensity.

The new war could focus on conflict management operations, on the international military-political supervision, on the direct action against countries threatening regional or global security. This type of war may have a preemptive or preventive nature¹³.

Recently, the issue of “long war” has been also debated. J. Carafano and other theorists argue in favor of the strategy to protect states on the long-term. The objectives of this war would be: defeating terrorist networks; defending the territory; modeling the states’ options; preventing acquisition of weapons of mass destruction. RAND Corporation analysts consider that this type of war is at the confluence of terrorism with the confrontations between governments and ideologies. It will aim at combating terrorism and insurgent movements.

1.3. *Asymmetric conflicts*

The term “conflict” refers to any form of opposition between at least two entities. Such a definition covers a wide spectrum, from difference of opinion between two individuals to interstate war. The conflict is defined as asymmetric when one of the players does not respect the common rules laid down, when he “does not see the fair play”. In case of war, of armed conflict, the rules are often established for the benefit of one of the antagonists, which are a means to increase its superiority. So it is logical that, after having tried to follow the rules, the opponent seeks to bypass them in order to restore a balance, to create an upward or to take the initiative to reduce its weakness which could be fatal.

The use of atomic weapons at Hiroshima and Nagasaki was meant to make surrender a determined opponent who otherwise would have continued fighting for a long time. Any conflict is essentially asymmetric, because one of the two opponents will always seek to reflect, to organize and act differently from the other.

This asymmetry is established not only strategic

and operational levels, but also, at the tactical one. So, asymmetry in conflict rather characterizes an adaptation to adversary or a threat. Partial or total, this adaptation can be integrated into a more conventional confrontation, moving or expanding the field of conflict from the battlefield to the media and political space. “Speaking about the concept of *asymmetric conflict* seems rather less pertinent, even counterproductive in understanding the phenomenon of war, as it occurred 5,000 years ago”¹⁴.

Asymmetry is a recurrent factor in conflicts, but its strategic importance varies from age to age. Therefore, we should not neglect other forms of conflict by presenting old features as being new and not taking into consideration the lessons of the past.

More broadly, the asymmetric warfare expresses a transformation in power relations by comparison with conflicts as we know them – for example – during the Cold War. This type of is often “a confrontation between political, social, cultural, organizational systems following different logics”¹⁵. It is also characterized by a different relation in space. “On the operational level, the battlefield gave way to the operational space, which can be defined as the volume where military and security operations take place. Asymmetric warfare incorporates the traditional three-dimensional space in which operations are carried physically, but also includes the Hertzian space, electronic warfare domain, cyberspace, where digital information flows, the info-sphere where there are manipulations of opinions and human space, whose subtle interactions are in the centre of modern security issues”¹⁶.

Basically, by asymmetry, one tries to turn enemy superiority into weakness. So, asymmetry will play an important role in information and communication. While conventional war aimed at strategic material targets (conquest of territories, for example), asymmetric war has often immaterial strategic objectives, with emphasis on legitimacy. In short, asymmetrical strategies were designed with a view to influence and to create doubt among the enemy and not to conquer territories.

Nonviolence, political violence, terrorism and part of the information war are part of the category of asymmetric conflicts.

On the other hand, asymmetry is an adaptation of one of the belligerents to the threat that has to



deal with, to the enemy to whom he has to fight. This adaptation may be voluntary, namely the result of an analysis or reflection, or it may be required by the circumstances, by the inability to engage by traditional means. Also, this adaptation may be total or partial and can be combined with traditional forms of combat, as illustrated by the armed opposition in Indochina.

Then, asymmetry is a phenomenon with multiple dimensions, which can not be revealed by the excessively rigid concept of “asymmetrical conflict”. Thus, the tactics adopted by the Germans in Poland in the 1939 campaign and in France in 1940 are understood and then countered by the Allies. So, one can hypothesize that asymmetry loses its effectiveness progressively. The one who is compelled to resort to asymmetry has no other choice than to make it evolve, while the one who deliberately uses it could either abandon or to combine it with more classic forms of combat. In time, such volatility represents a challenge to regular Western armies, which often have no choice but to adapt or to suffer the consequences of an excessively rigid doctrine.

Finally, asymmetry only rarely guarantees strategic victory, even if it changes significantly the criteria for strategic success. In order to allow the orientation of decisions, asymmetry is often combined with other direct or indirect modes of action, more conventional.

Thus, asymmetry is an old and complex phenomenon integrating traditional forms of conflict. It is rarely an isolated and unique phenomenon that could be condensed in a single theoretical model. Conceptualizing asymmetric war seems less relevant in this regard¹⁷. Rather, it is fully possible to identify parameters that can be modified to obtain an asymmetry at both tactical and strategic operational levels¹⁸.

There are different types of asymmetries in armed conflict, among which one could mention the following:

- **Asymmetry of the method.** This refers to the development of operation concepts, tactical doctrines different from those of the opponent, to the whole methods of fight conception, preparation and conduct;

- **Asymmetry of organization.** It implies adapting military structures to a combat form different from that of the opponent;

- **Asymmetry of wills.** In organizing troops and tactics, a belligerent can see his determination

evolution during the conflict. It may be eroded over time or, on the contrary, it may strengthen if the legitimacy of its action is clearly stated. Asymmetry of wills is even more unequal between opponents when one of them believes that the survival or its vital interests are at stake, while the other protects or defends less important interests, being subjected to a higher or lower media pressure. This asymmetry is particularly common at strategic level. It makes the first to tend accepting a loss, may it be glorified or not, consenting constant privations and sacrifices, while it makes the second to be more hectic in planning operations, in the consented risks. This type of asymmetry shifts the conflict space to an immaterial field;

- **Normative and cultural asymmetry.** It is present in conflicts between peoples with different cultures: different understandings of death, time, courage, cowardice and cruelty attributed to certain methods of warfare. In this respect, the threat represented by the improvised explosive devices (IED) is eloquent for this type of asymmetry. Used against the coalition, IED play the role of hand-made anti-vehicle or anti-personal mines this being similar to a classic method of destruction by ambush. Used blindly in a civil environment, these devices resemble more closely to a terrorist weapon, through their devastating physical, psychological and moral effects;

- **Technological asymmetry.** It is the currency in the history of wars. Research undertaken during the First World War to increase the rate of fire or target's striking distance responded to a need to increase the advantage over the opponent while respecting the same rules and with the same moral guidelines;

- **Economic asymmetry.** Economic power gives states the opportunity to ensure their armed forces' equipment with the latest means of fighting;

- **Legal asymmetry.** Very often, the asymmetric nature of conflict is limited to a matter of capacity or technique. However, one of the basic determinants of war is the Law of War. Today, war is always conceived as a asymmetric matter between sovereign states. Thus, this finding provides an initial asymmetry between the experienced war facts and the framework of employing an army. But asymmetry is more evident when it comes to the status granted to the aggressor; he may be an insurgent, a terrorist or a resistance fighter. During the occupation, the Germans denied resistance



fighters the status of prisoners of war because they acted illegally, manifested perfidy and shooting them was legal. Today in Afghanistan, a Mudjahidin is considered “captured person”, meaning he enjoys a status that does make him neither a prisoner of war, nor an ordinary criminal, nor a perfidious spy. Putting them in prison and examining them pose legal conjectural problems. When these issues are resolved, the law of war will take into account belligerents’ asymmetry. National regular army will have to fully respect the new law in order to avoid a counterproductive asymmetry such as secret CIA prisons.

Thus, asymmetry is a matter of circumstance and adaptation to a certain time of the conflict in order to allow one of the opponents to restore balance or gain a decisive advantage. The concept of asymmetric conflict loses its meaning due to the fact that, circumstantially, a conflict may know some levers of active asymmetry in a conventional structural context.

1.4. Effects-based operations

The concept of effects-based operations (EBO) is very important for the armed forces. To some extent, this should not be surprising as planned actions, in war or in any other activity, are seen as rational and calculated, and any calculated and rational action involves a predictable effect¹⁹. Any calculated action is connected to effects, but many questions arise in connection with both the real effect of an action and the capacity of knowing undesirable side effects which may accompany the desired effect. The main problem may lie in determining the true effect of an action because they always have primary effects and side effects. At the same time, an important issue is to determine the effect really wanted that usually differs from determining the real effect of an action.

Effects-based operations can be addressed as a “philosophy of campaign planning through which the military planner uses his superior knowledge to avoid battles of attrition, applying force at the right time and place to get accurate operational and strategic effects”²⁰. Typically, the emphasis on desired effects leading to achieving assigned objectives enables avoiding the focus on pseudo-targets, such as destruction.

EBO are defined as operations that are planned, executed, evaluated and adapted to influence or change systems or means in order to obtain

desired results²¹. Another definition of effects-based operations is: “operations that are planned, executed, assessed and adapted on the basis of a holistic understanding of the operational environment so as to influence or change systems’ behavior or potential, by the integrated application of the instruments chosen by the power in order to achieve the established political objectives”²². In this definition, the effect means the wealth or behavior of a political, military, economic, social, informational and infrastructure system, resulting from an act or a series of military actions or not²³. On the other hand, effects-based operations represent a process allowing obtaining a given result or strategic effect against an enemy through synergistic and cumulative application of a full range of military and non-military capabilities at all levels of conflict²⁴. Another point of view²⁵ characterizes effects-based operations as follows: a complete method of reflection on operations; it transcends all dimensions, disciplines and levels of war; it focuses on the investigated situation and on achieving the objectives; it aims at combining in a transparent way planning, execution and evaluation in an adaptive ensemble; it refers to the creation of effects – not platforms, armament or methods; it must take into account all possible types of effects; one should always consider the law of unwanted consequences; it aims at achieving the most effective objectives, first, and, then, the most rational ones; it recognizes that war is a shock for complex adaptive systems; it mainly focuses on the behavior not only on material changes; it recognizes that being in the perfect know of all the actors and operational environment is important for achieving success in the undertaken actions.

EBO concept involves the following elements: *influence or change, the desired results, achievement*. Influence or change results from the application of power. If, however, one should apply power, it must possess some knowledge on how things occur in the world. As such knowledge is theoretical it must be confirmed by the observed reality. Regarding EBO concept used by the US military, it focuses on results. It is noted that it is easier to predict the products than the results. As, for example, any bombing generates destruction, it is easy to anticipate destruction during mission planning and it seems natural to evaluate the bombings measuring the damage they produce. However, military planners know that



the destruction is only a tool of obtaining more complex results – ban, paralysis, distress, fear etc. So, we have to consider winding way leading from a certain product to various results.

In fact, a military product may lead to a cascade of political, economic, socio-cultural and military results. Similarly, it is possible for a politically desirable result to be accompanied by a socio-cultural undesirable result. For example, the victory of the international military coalition in Iraq provides numerous examples of such situations. Therefore, the problem is determining the meaning of the desired result or isolating this result by blocking the undesirable results emerging from the same product. The third important feature of EBO – realization – is different from producing results if we accept the significations suggested previously. To realize means to achieve a previously established objective. It is relatively easy to anticipate results because they are different and can extend. The more extended are the results the more they will be influenced by future events claiming multiple specialized verifications.

Understanding what we want to obtain, as significant desired result, depends, therefore, on the following elements: defining the desired result; evaluation of opportunities to obtain the desired result depending on the circumstances emerging from a given product; evaluating opportunities to see factors beyond our will generating the achievement of the desired result; evaluating the benefits of all combinations of results that would be able to generate a given product; check the possibility to isolate the desired result from other results equally likely but undesirable; obtaining the product from which the desired result would emerge, as a consequence of a creation planned by the circumstances.

In EBO's approach must take into account: a distinction between products and results; being in precise knowledge of the relation between products and results so as to able to assess the probability of obtaining a desired result; getting a product that triggers the cascade of events leading to the desired result.

1.5. Network-based warfare

Network-based warfare no longer belongs to science fiction, it is already a reality. The 21 day attack led by the US against Iraq in 2003 was a demonstration of the superiority of American

technology, and a practical application of the concept of “network-based warfare” (NBW). In the broadest sense, NBW is the ability to join different categories of forces (land, air, naval) as well as the Allied armies to retrieve information thanks to drones, satellites, to broadcast them in real time to the units in order to strike more rapidly and accurately.

Basically, NBW concept is the beginning of a new stage in the development of human society. It is a concept of vanguard technology, accessible only to entities that have high technology (high tech), information technology (IT), the hardware and software structures necessary for their appropriate use. In fact, this concept appeared and has been evolving as part of the revolution in military affairs, initiated in the theory and practice of the US military after the Cold War. The premise from which we started the foundation of this concept is that society has changed profoundly due to the information, and the military should not lag behind. The changes were generated by integrated development processes and economic organizations, information and business technology with a view to achieve new standards of efficiency.

NBW is possible due to information superiority. In fact, it represents a modality to generate combat power through integration into an information network of sensors, decision makers and performers with the purpose to increase the knowledge of the battle space, to increase the rapidity of commandment, to accelerate the pace of operations, increase lethal effects, the development of protection and achieve a certain degree of auto-synchronization.

Also, NBW is a matter of human and organizational behavior, based on the adoption of a new model of thinking. When operationalized, NBW concept expresses the ability of geographically dispersed forces to achieve a high level of knowledge on the combat which shall allow its operation by auto-synchronization and other network-based operations in executing commanders' decisions.

On the other hand, NBW allows speeding up the transformation of decision-making in the upper echelons and is not conditioned by the nature of the mission, composition of forces or its geo-location. As a result, it provides opportunities for rapid rhythms in operations and the possibility to



achieve immediate reaction to changes, to take low risks and costs; in other words, it is about efficiency.

The forces, means, and employment strategies, as well as the intensity of confrontations depend on the effects that one ultimately wants to obtain in the end or at different stages. This methodology has always been used. In the new conditions created by the network configuration, the effect goes in the foreground and becomes almost simultaneous with the cause and mechanism producing it. Actions specific to non-contact war, especially NBW type, achieve such simultaneity on the strategic and tactical level, enabling contiguity of strategic, operational and tactical levels. Here, the network effect is understood as action and reaction in real time²⁶.

Network-based warfare can be approached from at least three perspectives: *war in theater*, or as a confrontation in a defined theater of operations, both as geographical area and as employment, thus maintaining the confrontation's symmetric and asymmetric dimensions, as well as the philosophy and praxeology of operations and concrete actions; as *war extended to areas other than the specific ones of the armed combat*, especially, in cyberspace and the media; *permanent, generalized, network war*, defined by asymmetry, stratagems, chaos and partnerships²⁷.

2. The influence of new paradigm of armed combat on military training

Nowadays, military training is *significantly, directly and constantly* influenced by the new paradigms of armed combat. The *significant* nature refers not only to the intensity of the influence exercised by the new paradigms of armed combat – war among civil population, asymmetric conflicts, network-based warfare, and effects-based operations – but also to the wide coverage of armed forces categories. The *direct* nature of the influence of new paradigms of armed combat is reflected in the content of training and professional development of military forces, in the choice of methods and techniques of training military personnel, in targeted behavioral patterns to be internalized by the military and civilians who will part of future armed conflicts. The *constant* character of influence means that the relation is established between the acknowledgement of the

major role played by the new paradigms of armed combat, on the one hand, and, on the other, the processes of training and professional development of civilian and military personnel of the armed forces.

In our opinion, the influence of the new paradigms of armed combat on military training occurs at least at three levels – the content of training and professional development programs; the prevalence of certain methods of training; and the emphasis laid on training and the psychosocial development of military structures properties.

First, it is about the content of professional training and retraining of military personnel. It must reflect the full, but flexible impact of the new paradigms of armed combat on what should be taught, or what data and information must be assimilated, acquired and internalized by the civilian and military personnel and then turn them into knowledge, skills, abilities and automatisms necessary to carry out assigned actions in various theaters of operations.

This content should include:

- *Fundamental scientific disciplines for fighters' military training*. Depending on the category of military personnel; there are established concretely specific subjects which must be covered by military forces;

- *Technical disciplines necessary for training skills, abilities and apprehensions of a military*, namely of a person able to know the available means of fight, to use them effectively and efficiently when carrying out his mission. Here, the military, accordingly to the category of personal to which he belongs and to his position, is trained to make rapid decisions under stress and in critical situations;

- *General knowledge necessary for training individual and collective behavior*. Typically, armed forces provide to its staff, civilian and military, behavior patterns appreciated as desirable;

- *Acquiring a language of international circulation* (usually, English at conversational level), useful in intercultural communication in various theaters of operation where an international military coalition under UN mandate is present;

- *Scientific disciplines of information technology*, aiming at training skills and abilities to use personal and/or military equipment effectively and efficiently the means of communication and information;



- *Physical and psychological education* necessary for training and strengthening physical and psychological resilience to successfully cope with various demands of the current battle field;

- *Psychology, psycho-sociology and ethics*²⁸ necessary to train the fighter's behavior.

Basically, the entire content of military forces' training and professional development programs should determine the emergence of the kind of fighter required by the current battlefield. Thus, military personnel must know what is implied by the fight in "wars among civil population" in asymmetric conflicts, network-based war or effects-based operations. For example, the direct participation in the "war among civil population" supposes the judicial use of fight means since the actions take place in urban areas where civilian population's density is high, where there are buildings, power grids, sewage, gas etc. that can be destroyed and generate unwanted effects, inclusively for combatants. On the other hand, it is possible for the effects generated by applying extreme violence in a city by military personnel engaged in battle to lead to the development and manifestation of resentment among the population affected.

It is also possible these resentments would determine individual and collective behavior of the population of constant, direct and significant support for the insurgents, terrorists or guerrilla members. At the same time, according to new paradigms of armed combat, military personnel need to acquire a series of information about the culture, civilization, values, traditions, custom, and taboos of the population in the theater of operations. Such knowledge is useful in adopting a suitable conduct of combat personnel towards the civilian population. Today, the combat purpose is no longer the destruction and annihilation of the enemy but resolving the crisis and/or conflict, in order to return to normality, namely peace and stability. At the same time, officers are involved in the reconstruction initiated in post-conflict period, in which the population's cooperation and support are very important. This is the reason why military personnel shall adopt a cooperative behavior, at both individual and collective level, when relating to the population in the conflict area.

The second level of the manifestation of the new paradigms of armed combat influence on military training is represented by the methods

used in transmitting information and in knowledge formation during the educational process. Of course, traditional methods do not substantially reduce the role, but to be in compliance with the requirements imposed by the new paradigms of armed combat, a series of learning and training methods of fighters' skills have acquired a privileged status. In our opinion, here, it is about the methods of modeling, simulation and role play.

Modeling method is based on the model used in the training and professional development of military personnel. The model is a physical, mathematical or logical representation of a system, entity, phenomenon or process. There is a close relation between modeling and simulation method. Simulation is the evolution in time of a model. The main role of modeling and simulation tools in the training process is to replicate the battlefield conditions as realistically as possible and at low cost by comparison with conventional training procedures.

In a changing environment (from a political, media, legal, technological point of view), the mere possession of operational procedures is not sufficient. The thorough knowledge of the theater in all its dimensions, of cultures and political and military objectives are now essential to ensure optimal management of these events. In this sense, information is a vital contribution to promote knowledge transfer and accelerate operational leadership skills especially at the operational level. The concept of simulation in training various military structures through different simulation exercises train commanders in decision making and, by using PC procedures, they are trained in coordinating actions between the different compartments of the networked structure. To do this, simulation models are used to place forces commanders, staffs, command and control systems in a realistic operational environment.

Basically, simulation is conducted in two phases:

- **Stimulation:** its aim is to train different actors, as fast as possible, so as to develop the skills, and abilities necessary for fulfilling their duties under simulated conditions similar to the real ones from various theaters of operations. This phase is articulated around two activities carried out in parallel: 1) *passive stimulation* allowing accelerated transfer of operational knowledge (theater, exercise order, crisis history etc.); this



activity is available during the entire exercise; 2) *active stimulation* allowing participants to acquire information about the operating working environment.

- **Simulation**: its purpose is to train staff in working with PC in decision making operations' management. This phase begins when the PC may take the operational control of the crisis. It is about leading, through response cells, a coherent animation of human behavior and weapon systems based on political-military scenario. This phase addresses the actors having a role in PC-based decision making process, training them in conditions similar to those of future real theaters.

- *Role play method* is propitious in the military field exercises²⁹. It is a method involving active participation of the military to conduct specific training activities³⁰. The main advantage of role play is that it gives participants the opportunity to live a real situation, possibly met in the missions' fulfillment. Basically, by playing a specific role, the combatant learns how to do, when and by what means to fulfill the mission entrusted. By this method, there are formed and developed skills and abilities necessary for individual and for various military groups (team, platoon, and company) in order to carry out the missions entrusted in various theaters of operations.

This method involves three phases: endorsing the individual and/or group role; carrying out the field exercise; the analysis of the manner in which each combatant entered into play. The entire activity is based on a scenario drawn up, most times, under the opportunity to participate in lessons identified in different international missions on various theaters of operations. Of course, we do not neglect in any way the content and nature of future missions which would be performed by military forces participating in the respective field training.

The third plan of exercising influence on the armed combat of the new paradigm of military training is the emphasis on *training and psychosocial development of military structures properties*. Any military structure is a human group and, as such, it has to form and develop a series of properties of a psychosocial nature. These include: group cohesion, consensus, effectiveness, morale, interpersonal relations, and compliance³¹.

In our opinion, the formation and development of psychosocial properties give an added value to

the military structure and is required by the new paradigms of armed combat. This for the following reasons:

- *The specific of waging military action* (war among civil population, fourth generation warfare, network-based war);
- *The enemy type* which is most commonly found in theaters of operations they participate in where there are carried out peacekeeping and peace-enforcement and stability missions. It's about insurgents, terrorists or guerrillas (asymmetric conflicts);
- *The concrete physical, geographical, cultural and civilization conditions* where the military conflict is conducted (effects-based operations);
- *The implications of compliance/non-compliance with the international humanitarian law* (war among civil population);
- *The presence of media in the theaters.*

Conclusions

The new paradigms of armed combat have a significant, direct and constant influence on military training. This influence is evident in the following areas: content of training and professional development of military personnel; the focus on some methods of learning and training skills and attitudes needed in combat; psychosocial training and development of military structures properties.

Achieving a close correlation between the demands of new paradigms of armed combat and military training is an absolute must for all armies, including the Romanian Army, if one aims at the successful implementation of the entrusted missions between and beyond borders.

A flexible attitude by national political and military leadership in what concerns the development of armed combat paradigms and its impact on training and professional development of military forces is the best solution.

In the current complex and dynamic national and international context, the military must prepare intellectually, doctrinally and materially to maintain the utility of military force necessary for states' defence and sustainability.

This work was supported by a grant of the Romanian National Authority for Scientific Research, CNCS-UEFISCDI, project number PN-II-ID-PCE-2011-3-0849.

**BIBLIOGRAPHY:**

1. ANTOINE, Emmanuel, *Le concept de conflit asymétrique a-t-il un sens?*, <http://alliancegeostrategique.org/2011/05/07/le-concept-de-conflit-asymetrique-a-t-il-un-sens-i/>.
2. BAUD, Jacques, *La Guerre asymétrique ou la défaite du vainqueur*, Editions du Rocher, Paris, 2003.
3. BĂDĂLAN, Eugen; FRUNZETI Teodor, *Asimetria și idiosincrasia în acțiunile militare*, Editura Centrului Tehnic-Editorial al Armatei, Bucharest, 2004.
4. BOOT, Max, *The new American Way of War*, in *Foreign Affairs*, vol. 82, no. 4, July/ August 2003.
5. DEPTULA, David A., *Air Force Transformation: Past, Present, and Future*, *Aerospace Power Journal* 15, n° 3, automne 2001.
6. DESPORTES, Vincent, *La guerre au sein des populations: solution ou idéologie?*, http://pedagogie.ac-montpellier.fr/hist_geo/defense/pdf/cercle/la%20guerre%20au%20sein%20des%20populations.pdf.
7. FRUNZETI, Teodor; ZODIAN, Vladimir, *Lumea 2011*, Editura Centrului Tehnic-Editorial al Armatei, Bucharest, 2011.
8. FRUNZETI, Teodor; MUREȘAN, Mircea; VĂDUVA, Gheorghe, *Război și haos*, Editura Centrului Tehnic-Editorial al Armatei, Bucharest, 2009.
9. HABERMAS, Jürgen, *The Theory of Communicative Action*, vol. 1, Beacon Press, Boston, 1984.
10. HUYGHE, François-Bernard, *Guerre de 4ème génération et 4ème Guerre Mondiale*, <http://www.european-security.com/index.php?id=5196>.
11. HUNERWADEL, J. P., *L'approche des opérations basées sur les effets*, <http://www.airpower.au.af.mil/apjinternational/apj-f/2007/Pri07/hunerwadel.html>.
12. Le GAL, Patrick, *Ethique militaire dans les conflits asymétriques. Retour de visite d'opérations*, http://www.st-cyr.terre.defense.gouv.fr/ressources/10204/32/9_tr1_4.pdf.
13. PASCALLON, Pierre, *Le nouveau paradigme: la guerre au milieu des populations*, http://www.club-participation-progres.com/.../la_guerre_au_milieu_des_populations__pierre_pascallon.pdf.
14. SERGIO da ROCHA, Alexandre, *Opérations basées sur les effets*, <http://www.airpower.au.af.mil/apjinternational/apj-f/2007/Pri07/darocha.html>.
15. SMITH, Rupert, *The Utility of Force: The Art of War in the Modern World*, Allen Lane, 2005.
16. VĂDUVA, Gheorghe, *Războiul bazat pe rețea în fizionomia noilor conflicte militare*, http://cssas.unap.ro/ro/pdf_studii/rbr_in_fizionomia_noilor_conflicte_militare.pdf.
17. USJFCOM, *Operational Implications of Effects-Based Operations (EBO)* (Implications opérationnelles des opérations basées sur les effets), Joint Doctrine Series n° 7 (Fort Monroe, Virginie: *Joint Warfighting Center*, 17 novembre 2004).
18. TZÎ, Sun, *Arta războiului*, Editura Militară, Bucharest, 1976.

NOTES:

1 Sir Rupert SMITH, *The Utility of Force: The Art of War in the Modern World*, Allen Lane, 2005.

2 W.S. LIND, *American strategist who launched the concept of Fourth Generation Warfare*, abbreviated 4GW.

3 Sun TZÎ, *Arta războiului*, Editura Militară, Bucharest, 1976.

4 See T. FRUNZETI, V. ZODIAN, *Lumea 2011*, Editura Centrului Tehnic-Editorial al Armatei, Bucharest, pp. 27-28.

5 See Pierre PASCALLON, *Le nouveau paradigme: la guerre au milieu des populations*, http://www.club-participation-progres.com/.../la_guerre_au_milieu_des_populations__pierre_pascallon.pdf, pp. 5-8.

6 Pierre PASCALLON, *Que faut-il penser du nouveau paradigme: « la guerre au milieu des populations » ?* <http://www.lalettrediplomatique.fr/detailrub.php?id=42&idrub=192&idrubprod=&type=1>, p. 1.

7 Général de division Vincent DESPORTES, *La guerre au sein des populations: solution ou idéologie?*, http://pedagogie.ac-montpellier.fr/hist_geo/defense/pdf/cercle/la%20guerre%20au%20sein%20des%20populations.pdf, p. 12.

8 Eugen BĂDĂLAN, Teodor FRUNZETI, *Asimetria și idiosincrasia în acțiunile militare*, Editura Centrului Tehnic-Editorial al Armatei, Bucharest, 2004, p. 161.

9 Gérard CHALIAND, *Les guerres irrégulières*, Folio, Paris, 2008, pp. 799-824.

10 Eugen BĂDĂLAN, Teodor FRUNZETI, *Asimetria și idiosincrasia în acțiunile militare*, Editura Centrului Tehnic-Editorial al Armatei, Bucharest, 2004, p. 151.



11 At large in J. ROBB, *Brave New War: the Next stage of Terrorism and the Globalisation*, Foreword by James Falows, 2007.

12 <http://www.dedefensa.org/article>.

13 T. FRUNZETI, V. ZODIAN, *Lumea 2011*, Bucharest, Editura Centrului Tehnic-Editorial al Armatei, Bucharest, 2011, p. 28.

14 Emmanuel ANTOINE, *Le concept de conflit asymétrique a-t-il un sens?*, <http://alliancegeostrategie.org/2011/05/07/le-concept-de-conflit-asymetrique-a-t-il-un-sens-i/>, p.1.

15 Jacques BAUD, *La Guerre asymétrique ou la défaite du vainqueur*, Editions du Rocher, Paris, 2003, p. 11.

16 Jacques BAUD, op. cit., p. 32.

17 Emmanuel ANTOINE, art. cit., p. 2.

18 Eugen BĂDĂLAN, Teodor FRUNZETI, *Asimetria și idiosincrasia în acțiunile militare*, Editura Centrului Tehnic-Editorial al Armatei, Bucharest, 2004, pp. 123-168.

19 Jürgen HABERMAS, *The Theory of Communicative Action*, vol. 1, Beacon Press, Boston, 1984, p. 285.

20 Général de division David A. DEPTULA, *Air Force Transformation: Past, Present, and Future*, Aerospace Power Journal 15, n° 3, automne 2001, p. 90.

21 Dr. Alexandre SERGIO da ROCHA, *Opérations basées sur les effets*, <http://www.airpower.au.af.mil/apjinternational/apj-f/2007/Pri07/darocha.html>.

22 Le lieutenant colonel J. P. HUNERWADEL, *L'approche des opérations basées sur les effets*, <http://www.airpower.au.af.mil/apjinternational/apj-f/2007/Pri07/hunerwadel.html>, p. 11.

23 Cf. USJFCOM, *Operational Implications of Effects-Based Operations (EBO)* (Implications opérationnelles des opérations basées sur les effets), Joint Doctrine Series n° 7, Fort Monroe, Virginie, *Joint Warfighting Center*, 17 novembre 2004, p. 32.

24 Brig-Gen David A. DEPTULA, *Effects Based Operations: Change in the Nature of Warfare*, Defence and Air Power Series, Aerospace Education Series, 2001.

25 Le lieutenant colonel J. P. HUNERWADEL, art. cit., pp. 4-10.

26 T. FRUNZETI, V. ZODIAN, *Lumea 2011*, Editura Centrului Tehnic-Editorial al Armatei, Bucharest, p. 29.

27 Dr. Gheorghe VĂDUVA, *Războiul bazat pe rețea în fizionomia noilor conflicte militare*, http://cssas.unap.ro/ro/pdf_studii/rbr_in_fizionomia_noilor_conflicte_militare.pdf, p. 5.

28 See Patrick Le GAL, *Ethique militaire dans les conflits asymétriques. Retour de visite d'opérations*, http://www.st-cyr.terre.defence.gouv.fr/ressources/10204/32/9_tr1_4.pdf.

29 Vezi: III.B/ *Un entraînement adapté au milieu urbain?*, <http://sites.google.com/site/geographiemilitairemitrovica/un-entrainement-adapte-au-milieu-urbain>, Les forces terrestres dans les conflits aujourd'hui et demain, <http://www.scribd.com/doc/31504278/FT-01-Gagner-la-bataille-conduire-la-paix-France-2007>.

30 *Un exemple de méthode active: le jeu de rôle*, <http://www.fundp.ac.be/pdf/publications/64222.pdf>.

31 *Dicționar de psihologie socială*, Editura Științifică și Enciclopedică, Bucharest, 1981.



CHALLENGES FOR THE COMMON SECURITY AND DEFENCE POLICY – EU BATTLEGROUPS

*Gheorghe CALOPĂREANU, PhD**

The origins of EU Battlegroup concept can be traced back to the European Council Summit held in Helsinki between 10th and 11th of December 1999. Although the main outcome of the Summit was the establishment of the Headline Goal 2003 and its associated schedule, Helsinki Presidency's Conclusions reflected that special attention would be given to the development of a "rapid reaction capability".

This article is designed to depict the development of EU Battlegroup concept and illustrates the way in which the Battlegroup concept fits into the Common Security and Defense Policy.

Key-words: Battlegroups; CSDP; capabilities; missions; European Union.

Introduction

Today, the European Union plays an important role in ensuring stability in different parts of the world. The Union increased its credibility in the first ten years of existence of the Common Security and Defence Policy, in particular, by carrying out military missions conducted on four continents. The European military capabilities were developed under the aegis of the EU in Africa (Congo, Chad) and, in the Balkans, civil-military cooperation has proved successful. Also, in August 2008, 200 observers were deployed in Georgia at

the end of the Russian-Georgian war. EU's crisis response capacity was tested in these occasions and demonstrated that, in order to become a global player with an effective and efficient contribution to international peace and security, the Union must achieve the objectives set by the security strategy.

In this context, Common Security and Defence Policy (CSDP) plays an important role in managing global security challenges.

In its first ten years, the Common Security and Defence Policy was defined and analyzed in relation to an existing security system – NATO, without diminishing the latter's role in any way, by launching the European initiative in Cologne, in 1999. NATO was and remains the main pillar of Western security policy; therefore, the relation between the two organizations should be clarified to the smallest detail. The lack of discussion in this area could lead to duplication of effort in the Euro-Atlantic security.

CSDP missions are not based on individual interests. CSDP power derives precisely from the principle of consensus of all EU members.

But we should not neglect the contribution of EU strategic partners in ensuring security, stability and world peace, which complements the efforts of the Union. Canada, Norway, Russia, USA and Turkey are active in crisis response missions led under the EU's aegis.

** Associate professor PhD Gheorghe CALOPĂREANU (geocal81@yahoo.com), PhD in military sciences, is deputy commandant with "Carol I" National Defence University in Bucharest, Romania.*



Common Security and Defence Policy

On 4th of December 1998, at St. Malo, British and French governments signed a protocol that paved the way for launching the Common Security and Defence Policy (June 1999, Cologne Summit of the European Council) and identified the need for the European Union to hold its own military forces, to ensure its capacity to develop autonomous actions in response to international crises.

In the early years of the CSDP, European Union governments focused on developing military capabilities and, from a geographical perspective, EU focused on the Western Balkans. EU's intention, expressed by EU governments in December 1999 in the document entitled "Helsinki Headline Goal", was to create a military force that totaled about 60,000 troops¹, called European Rapid Reaction Force (ERRF), also comprising air and naval forces, all available to develop military operations under EU command.

The EU member states' governments allotted the European Rapid Reaction Force a total of 100.000 soldiers, 400 combat aircraft and 100 vessels, all being available for both NATO and/or EU missions at the time of allocation².

The fact that, in order to intervene in Bosnia and, later, in Kosovo, EU called for the participation of US forces was decisive in the decision of EU member states' governments to create their own army, especially as the war in Kosovo broke out between the two defining moments of security and defence policy of Europe – the summit of St. Malo and the one of Cologne.

Despite the achievements of CSDP since its launch, we can now see that there are many challenges and difficulties which, at least for the time being, don't seem to have a solution to satisfy the entire European community. Of course, we agree that the proper developments of CSDP within the EU equal to sensitivities as visible as the transition to the euro and EU foreign policy.

Nowadays, the biggest challenge for the EU is to avoid the occurrence of a gap between what is desired by the CSDP in the area of security, on the one hand, and, on the other, the forces and means which Member States can make available to cover the full range of crisis response missions. In fact, up to a certain level, these differences do exist; the real challenge of the moment is the exacerbation of

these differences, mainly through the combination of the current financial crisis with the increased role and engagement of EU's Member States in NATO-led operations in Afghanistan. The effects of this baleful combination will be certainly felt in the following years and will greatly reduce EU's ability to lead operations at the level set at the launch of the European Security Strategy. It is well known the situation created within NATO, UN and EU by the shortages of transport helicopters and aircraft in the operations led by these organizations.

The reduced engagement of great EU Member States in parallel with increasing the contribution of other Member States (especially, those recently received into the Union) is a paradox that becomes more obvious with each operation.

Alone, the will to engage of the countries comprised in the second category is commendable, but it does not help solving the issue of CSDP development at the level required by the international situation, by the frequency and extent of world crises to which the Union decides to respond. Mobilizing the resources of EU small and medium states, on the one hand, and, on the other, mobilizing strategic partners represent a major contribution of the Union and its main asset, but this can not ensure CSDP's development. Regardless of the size and response capacity of the units such as the combat groups formed by the states in this category, the latter can not run long-term and high-intensity response operations without the contribution of large states.

Another challenge that needs to be discussed at this point is whether, in the future, France will continue to contribute consistently to EU operations, given, on the one hand, its new position in NATO and, on the other, the reorganization of its defence system which is in progress.

NATO-EU security relationship in this area has been dominated by some contradictions. The US, the main contributor to NATO, want a more committed EU and willing to devote more resources to ensure international order, while regarding with reluctance the increased role in the military area as well as the growth of Europe's political independence.

The second contradiction is manifested within the European chancelleries, as they want a greater role in international politics, without supporting this task by the creation of appropriate military capabilities within the EU.



CSDP development depends overwhelmingly on the application of the Lisbon Treaty as a whole, on the degree to which this treaty will succeed in gathering all the Member States³ around the table of negotiations. Achieving coherence and interoperability of equipment and personnel seems to be the main advantage of CSDP revival. The establishment of a European army is obviously a goal even more difficult to achieve, but this does not prevent EU Member States to train their own military forces to deploy military and civilian resources under the idea of unitary action to solve the international crises.

EU Battlegroups

NATO Summit in Prague, in 2002, brought a range of changes in the structure of Alliance's forces, creating NATO Response Force (21,000 troops, backed by air and naval forces, mostly from EU countries). The concept inspired the EU, which decided to restructure its forces, the by transformation of peacekeeping forces in smaller military units, but capable of performing specialized military missions; these new units are known under the name of "Battlegroups".

The term "Battlegroup" can have different meanings depending on the context in which it is used and on the field of activity and experience of those using it. Clearly, it is understood differently by an initiate, for example, an officer of the armed forces, by comparison with a civilian with no military knowledge and practice. But, even for the initiated, the concept may create confusion.

A member of the naval forces will by this term a naval battle group consisting in an aircraft carrier and support ships accompanying it and served by about 7,500 people.

For an Army officer, a Battlegroup is a unit composed of personnel and equipment from different arms category and specialties, which has the size of a reinforced battalion or regiment of tanks and totaling about 1,500 people. This description probably reflects most accurately the image of a Battlegroup in the EU's sense.

In other words, the battle group is, in the view of the European Union, a package of credible, coherent⁴, staffed, endowed and equipped military forces at a minimum level in order to ensure fast deployment to theaters of operations and be able to support logistically in the first phase of operation.

The celerity of decision regarding the intervention is critical to achieve the expected success in any military operation. From this perspective, the European Union expects to reach the performance to be able to take the decision to deploy the Battlegroups at need, in five days after approval of crisis management concept by the European Council. Regarding the stage of implementing the mission's objectives in the theatre of operation, the Union sets itself to begin no later than ten days since the decision to launch the operation.

A European Battlegroup may consist in forces from several nations or from a single country and may be reinforced with elements taken from other EU members or partners.

From a conceptual point of view, EU Battlegroups originate in the summit of the European Council of 10th-11th of December 1999, which concluded that, in the near future, particular attention will be paid to the creation of rapid response capabilities. The Presidency's Conclusions demanded that EU Member States should be able to provide EU's "rapid response elements"⁵, able to be deployed, if necessary, in a short time; within these conclusions, it was also set to man this force with 50,000-60,000 people until 2003 (Headline Goal 2003)⁶.

Franco-British meeting at La Touquet, on the 4th of February 2003, detailed more the notion of Battlegroup in the European Union. Then, it was set as a European priority the need to increase European capabilities in planning and displacing forces where necessary. The document states that the initial forces (land, sea and air) must be able to be deployed for specific operations in a "period of 5 to 10 days"⁷.

The idea of Battlegroups has proven useful in the same year, in the Democratic Republic of Congo, where, at the request of UN, EU mobilized and deployed in the theater about 2,000 people within the Operation "Artemis", with the mission to restore the order in Ituri region. The success of the operation and the ability to deploy forces in a short period of time created, for most EU policymakers, the certainty that the Union will be able to perform such a task quickly.

Shortly after the operation "Artemis", in February 2004, Britain, France and Germany laid the formal foundations of the "Battlegroup Concept", embodied in a document with the same name.



This document proposes the establishment, within the European Union, of battle groups of about 1,500 people⁸, able to perform specific actions autonomously⁹, mainly at the request of the UN. The main mission of Battlegroups is to maintain stability for a period of time, usually, until the arrival in the area of UN peacekeeping forces or forces belonging to organizations operating under UN mandate.

The proposal initiated by the three countries makes specific reference to the organization of such a military organization – possible mission, ways and terms of deployment in the theaters of operations and command and control aspects of battle groups.

In March 2004, EU Military Committee was responsible for the implementation of the Battlegroup Concept and, a few weeks later, at a meeting held in Brussels, the EU defence ministers agreed to establishing the first such units until 2007.

Each EU Battlegroup must be able to use, in order to accomplish their mission, sea and air transport and logistics, using three methods.

The first option involves placing an already established national working group at EU's service and, currently, the only countries able to provide this with relative ease are France and Britain.

The second method of achieving an EU battle group is that in which a nation with developed military capabilities (for instance, Germany, Italy, Sweden, and Spain) forms a core-framework which will be completed by other countries with specific personnel and equipment up to the expected level.

Finally, a last option is that several countries allocate forces and means of creating multinational military units, similarly to Eurocorps model (Belgium, France, Germany, Luxembourg and Spain)¹⁰.

No matter which one of the last two methods discussed could be applied, one thing is certain: EU Member States must develop modern equipment, plans, programs and strategies in common, in order to ensure not only the establishment of units the Union needs in crisis situations, but also to deploy them timely and successfully wherever and whenever needed.

Conclusions

There are more and more voices asserting that CSDP needs a revival and many are looking at France and Britain as the potential organizers of a new St. Malo.

The lack of EU's member states' political will regarding the nature, level and type of operations and capabilities that the EU battle groups may be called to participate in is an obvious dysfunction of the Union. The attitude of EU's governments on the security policy, in general, and the use of military means in solving the crises, in particular, differs from state to state.

This difference of opinion limited the participation of EU military structures at low-risk missions and diminished Union's ability to apply its strategic vision – the one to become a real global player engaged with determination in the fight against global threats, stipulated in the European Security Strategy.

Scaling down defence expenditures, at EU's level, amplified by poor or even wasteful allocation of funds, is clearly a consequence of the difficulties faced by most EU's Member States.

The extension of recession, bankruptcy risk and fears that EU might divide or disintegrate, which are present in certain circles, suggest that, in the near future, EU's Member States won't make a priority out of the allocation of sufficient funds for defence and equipment procurement to support large-scale missions.

Adverse effects on the development and application of the Battlegroup concept will not delay to appear. Their timing will be, at best, postponed, although the gloomy fears may suggest even more undesirable implications, such as the complete fail to achieve it.

Reality shows that a closer cooperation between the EU and NATO in the area of defence and global security is required. Simultaneous steps can not bring efficiency. Missions performed in parallel by the two organizations in Kosovo, for example, jeopardize the safety of NATO military as well as the one of police forces, due to the limitations of information flow between them.

BIBLIOGRAPHY:

1. GREVI, Giovanni; HELLY, Damien; KEOHANE, Daniel *European Security and Defense Policy, The First 10 Years (1999-2009)*, EU Institute for Security Studies 2009, Paris.
2. de VASCONCELOS, Alvaro, *What ambitions for European defense in 2020?*, EU Institute for Security Studies 2009, Paris.
3. EVERTS, Steven; FREEDMAN, Lawrence;



GRANT, Charles; HEISBOURG, Francois; KEOHANE, Daniel; O'HANLON, Michael, *A European way of war*, Centre for European Reform, 2004, London.

NOTES:

1 Daniel KEOHANE, *10 Years After St Malo*, http://www.iss.europa.eu/uploads/media/10_yrs_after_St_Malo.pdf, accessed at 28.09.2011.

2 Giovanni GREVI, Damien HELLY, Daniel KEOHANE, *European Security and Defense Policy, The First 10 Years (1999-2009)*, EU Institute for Security Studies, 2009.

3 Treaty of Lisbon was signed in 2007, after many other European constitutional treaty projects had been prepared in order to consolidate all existing EU agreements and treaties. The treaty confirmed EU's right and ability to act in areas such as human rights, justice and foreign policy and reiterated that EU citizens are also members of the union. At the same time, the Treaty endowed the EU with legal personality, thus, strengthening the independence of the Union. However, the constitutional project encountered difficulties, particularly, with regard to the consensus in its approval. To enter in force, the treaty needs ratification by all EU Member States. In 2008, following a referendum in June, Ireland decided not to ratify the treaty in the proposed form, which provoked intense debate within the EU and even the uncertainty that it would ever become feasible. In order to convince Ireland on the need to ratify the treaty, the EU decided to negotiate and then added new protocols to the initial project. Following these interventions and discussions, Ireland organized a referendum, which led to the ratification of the Lisbon

Treaty in October 2009.

4 EU Council Secretariat Factsheet, *EU Battlegroups*, EUBG, 02 November 2006.

5 European Council Presidency Conclusions, Annex IV, *Concluziile Președinției Consiliului European*, Anexa IV, Helsinki, 10-11 December 1999.

6 Gustav LINDSTROM, *Enter the EU Battlegroups*, Chaillot Paper No. 97, European Union Institute for Security Studies, February 2007.

7 *From Copenhagen to Brussels-European defense: core documents*, vol. I, Chaillot Paper No. 67, Paris, European Union Institute for Security Studies, December 2003, p. 39.

8 *The Battlegroup concept UK/France/Germany food for thought paper*, 10 February 2004, in *EU security and defence – Core documents 2004*, vol. V, Chaillot Paper No. 75, Paris, European Union Institute for Security Studies, December 2003, p. 10.

9 In the sense of the concept, "autonomous" suggest the participation in actions "independently" from other organizations (NATO, OSCE etc.).

10 Eurocorps was founded in 1992, as a result of the political will of the five member states mentioned above, based on a concept that was developed since the early '50s. Eurocorps' Commandment in which, besides EU's member states military and civilian personnel, also works staff from Austria, Finland, Greece, Italy, UK, Netherlands, Poland and Turkey, has its headquarters in Strasbourg, France. Recently, it has executed a series of missions in Bosnia (SFOR) and Kosovo (KFOR). Within Eurocorps' Commandment about 900 soldiers and 70 civilians are working and it acts as a rapid reaction unit command for NATO and EU and includes the command group, the major staff, the logistic battalion commandment, four national detachments and the multinational support brigade.



INTERNATIONAL SECURITY INSTITUTIONS AND LIBYAN CRISIS – – CO-OPERATION OR COMPETITION

*Pascu FURNICĂ, PhD**

The article analyzes the reaction of international institutions (United Nations, NATO and European Union) in Libyan crisis, focusing on the role of each institution. The lack of reaction of OSCE is identified, together with the UN role of mandating institution. The immediate reaction of NATO and the initial wishful thinking, but lack of political will of the EU are emphasized. The article concludes that NATO was the leading institution during the military support of the Libyan Transitional Council, leaving this role to another organization, maybe the EU, immediately after the military phase ended.

Key-words: Qadhafi regime; NATO; UNO; EU; mandating institution, Security Council resolution, leading institutions, legitimacy.

Some time ago, I published in this prestigious publication some articles regarding the co-operation (or lack of it) among the most important international security institutions, analyzing both the official documents (concepts, strategies), and the coordination of these institutions in theatres of operation around the world.

In the article called *Security Concepts - Field of Coordination, Cooperation, Competition for European Security Institutions* published in issue no. 1 [22]/2007, in which NATO and European Union security programmatic documents were analysed,

I concluded that “NATO limits its interest to Euro-Atlantic Area, and mentions surrounding areas (Russia, Ukraine and the Mediterranean Area) in the articles related to co-operation and partnership, so not of interest for the first priority: defence. EU expands its area of concern globally, speaking about its operations in Democratic Republic of Congo and Afghanistan, but by using the phrase “[we] need both to think globally and act locally”, limiting its area of real action to Europe and its neighbourhood. Also, by mentioning the conflicts in the proximity of Europe and giving clear guidance related to the need to broader engagement with the Arab World, it brings into attention the future probability to embark on the international efforts to solve these conflicts.”¹ Despite the fact that this article was published in 2007, that the international situation has dramatically changed and even the documents of these institutions were updated, in 2011, international organizations continue to plan operations beyond the borders of the Member States, in support of United Nations.

In another article, *European Security Environment: Coordination, Cooperation, Competition*, published in issue no. 4 [21]/2006, I studied NATO and EU actions, by comparing their evolution and their Bosnia-Herzegovina operations.

If currently Bosnia-Herzegovina does not often appear in the media, it could be because these

** Colonel Pascu FURNICĂ (pfurnica@unap.ro), PhD in Military Sciences, is the Director of Crisis Management and Multinational Operations Department within “Carol I” National Defence University in Bucharest, Romania.*



institutions “continue the ‘learning process’ which took place inside them in the last fifteen years, continuing to apply the principle of “form follows function”², being able to efficiently co-operate in order to accomplish their missions. If we open these days the sites of NATO and the EU missions in Bosnia, we can read titles such as *Children visit NATO in Camp Butmir, Commander NATO HQ Sarajevo attends a round table meeting in Banja Luka, or Western Balkan Countries’ Cross-Border Cooperation, ‘My Neighbourhood’ Photo Competition Opens for Entries*.

But year 2011 has brought new challenges for the international security institutions. The *Arab Spring* created the premises for new interventions of the international community to solve situations when national authorities neither wanted nor were capable to find solutions in accordance to international documents, namely UN Charter, for internal problems. These situations ranged from Tunisian case, which had organized free elections, to Syria, where there is still violence between national security forces and rebels. But nowhere was international intervention needed to support the population to change the regime, except in Libya.

I will not detail the conflict in Libya, as the purpose of this article is to find out if NATO and the EU have coordinated their efforts in this case in order to support the UN intervention to impose a solution. The thesis is that the institutions have learnt the lessons identified during their intervention in Balkans and they really applied them.

The UN Reaction to Libyan Crisis

The UN, by issuing resolutions 1970 and 1973, authorized, under Chapter VII of the UN Charter, limited international intervention carried out by states and regional security arrangements. The purpose was initially to **impose** an arms embargo (Resolution 1970, article. 9-14), extending it by Resolution 1973.

In the Resolution 1970, the request was mainly addressed to Libya (“*Urges* the Libyan authorities to: act with the utmost restraint, respect human rights and international humanitarian law, and allow immediate access for international human rights monitors; ensure the safety of all foreign nationals and their assets and facilitate the departure of those wishing to leave the country; ensure

the safe passage of humanitarian and medical supplies, and humanitarian agencies and workers, into the country; and immediately lift restrictions on all forms of media”³), asking for “an immediate end to the violence and calls for steps to fulfil the legitimate demands of the population.”⁴ When the Resolution requests to impose the embargo, it emphasize that states must act **on their territory**, not in the international waters or space. Articles 9 and 11 mention clearly that the arms embargo is applicable only in seaports and airports of the respective states. These kind of provisions limit the intervention of the international community, both states and institutions/regional arrangements.

But Resolution 1973 (2011) changed the approach. Introducing the expression “on the high seas” in article.13, the text that replace article. 11 from the previous Resolution, permitted the international community to extend and make the embargo more efficient, because they were allowed to deploy ships in the Central Mediterranean.

Resolution 1973 changed something else: introducing in article 4 the expression “all necessary measures”, it allowed military operations on the Libyan territory to protect the civilians, “excluding a foreign occupation force of any form”⁵.

By resolution 1973, UN had corrected the limiting provisions of Resolution 1970, because the former became obsolete in less than a month, because it did not permit the protection of civilians which, as it is stated in the press statement released when the provisions of these two resolutions were cancelled.

Resolution 2016, issued on 27th of October asks for cancelling both the *no fly zone*, the embargo and the support given to the civilian population, namely all the military operations in Libya, showing that the UN decided the successful end of its operation which opened new opportunities for the development of Libya.

NATO and the Libyan crisis

NATO immediately reacted to Libyan crisis and the UN documents related to it. On 8th of March, NATO AWWACS surveillance aircrafts were deployed in Central Mediterranean Sea, having the mission to permanently observe the Libyan airspace.

On March 10th, North Atlantic Council (NAC), at Defence Ministers level, approved SACEUR



decision to deploy vessels in the area in order to apply the UN Resolution.

On 24th of March, after the Resolution 1973 was issued, being allowed to operate in Libyan air and maritime space, NATO extended its Area of Operation (AOR) and the NATO Secretary General, Anders Fogh Rasmussen, stated clearly that “the organization will implement all provision of the UN Resolution, nothing less, nothing more.”⁶

Because non-NATO states declared their availability to participate in the operation, applying the already used model, NATO became and had been recognized by all the non-NATO contributors as *leading institution*. NATO and non-NATO contributors organized a meeting of Foreign Ministers in Berlin so as to decide the purpose of the operations carried out by this new ad-hoc coalition of willing:

- “All the civilians and all the populated areas will be protected;
- The Qadhafi regime will withdraw all its military and paramilitary forces in barracks;
- All the Libyan population will have free access to humanitarian support.”⁷

This is a very important moment, not only because it allowed an efficient planning and execution of the mission, but because it legitimated NATO for this operation.

This political decision permitted to the ad-hoc coalition created for Libyan operation to extend its area of responsibility in order to permit an efficient accomplishment of the mission, despite the fact that quality of military action is debatable.

On 22nd of August, after the Libyan capital Tripoli was conquered by the forces of the National Transitional Council, NATO Secretary General made an important statement. In front of the “Friends of Libya”, a summit of Heads of Governments and of International institutions participating to the operation, he stated that NATO will participate only if it is requested and necessary, although UN and the Contact Group’s participation will play an important role in the international community’s effort in post-conflict Libyan stabilisation. By this statement, NATO Secretary General wanted not only to clarify the leading role of the organization in military operations, but to increase the legitimacy of international community actions, because NATO previous operations in the Muslim world are contested. After the UN set up its Libya mission, NATO stated that its operation would last

up to 90 days. This self-imposed limitation had the same purpose: **legitimizing Operation Unified Protector**.

All these statements made by the NATO political decision level allowed the military to decide the parameters of the operation. They imposed another time limit to the operation: when the Qadhafi regime would not threaten the civilian population and when National Transition Council would be able to provide security to the Libyan citizens, NATO would end its operations. When I am writing this article, at least one of the conditions is achieved: Qadhafi regime is not threatening the civilian population, making the UN to decide that the international community military operation should end. NATO immediately decided to end its mission on 31st of October, 23.59. Despite all this decisions of the UN and NATO, reading the international media, the news from Libya is not totally good. One of the threats is that violence will continue. Despite the fact the National Transitional Council stated that they control the entire territory, there are news saying that there are loyalists grouped around Muammar Qadhafi’s son, Saif al-Islam. Another threat, much more important and credible than the previous, is that a civil war is going to start. The heterogeneity of the National Transitional Council could lead to such a situation. Jason Ditz, analyst at *Antiwar* on-line publication, says that Libyan leaders should not worry too much about Saif al-Islam because they have more important challenges to face, such as a civil war.

European Union and the Libyan crisis

Because of the closeness, both geographical and economic of Libya, the European Union was another institution that reacted to the crisis in this country. The first reaction was the extraction of the European citizens out of the conflict area. According to EU documents, 4.400 citizens were evacuated from Libya.

In order to accomplish this first mission, EU activated the following elements:

- Consular Unit of the EU Situation Centre;
- The Humanitarian Aid department of the European Commission (ECHO);
- Non Combatant Evacuation Coordination Group in EU Military Staff.

On 1st of April, the European Council approved Operation EUFOR LIBYA, having the mission



to support by military means the international humanitarian effort. In order to command and control the operation, an operational HQ was created in Rome and Rear-admiral Claudio Gaudiosi was appointed Commander of the operation. The forces should be ready to launch operation at the request of United Nations Office for the Coordination of Humanitarian Affairs (OCHA). But the request never came! Ana Gomes, European Parliament member, in her article *Was EUFOR Libya an April fool's joke?*, published in EUObserver, said that the real motive for non/activation of EUFOR LIBYA was that the Member States were not able to reach an agreement regarding this mission. As she wrote in the article, "it should have military and civilian components (namely police for supporting security sector reform and disarmament, demobilisation and re-integration operations). It should aim at the enforcement of the EU-UN arms embargo, surveillance of borders and, chiefly, the protection of civilians in Libya."⁸ I consider that the momentum was not totally lost, because despite the fact that the conflict has been declared closed, violence is still present. Even after violence is ended, effort is still needed for support in demobilization, reconciliation, reintegration of the former combatants and reconstruction of Libya, tasks in which EU has competence and a lot of experience, because it has been involved in such missions for years now.

The EU was one of the important participants to the London conference, alongside with African Union, Arab League and UN. At this conference, the Contact Group was created. This group included not only these organization, but EU Member States as individual donors too. The initiative belonged to János Martonyi, Hungarian Foreign Affairs Minister, EU Commissioner Cecilia Malmström, the Egyptian Government and representatives of the Libyan Transitional Council.

On 12th of April, after a step forward – the creation of EUFOR LIBYA – and two backwards, by its lack of engagement, EU took the political way by calling "for an immediate ceasefire and respect for human rights in Libya. Those working within the regime face a choice: to continue to associate themselves with the brutal repression of Colonel Gaddafi or to work for an orderly transition to democracy. Immediate after this, High Representative Catherine Ashton officially opened a European Union office in the rebel

capital of Benghazi. This office will facilitate the channelling of resources and improve contacts with those fighting for democracy."⁹

On 10th of October, Foreign Affairs Council took act welcomed the collapse of Qadhafi regime and made the Union available for supporting the new Libyan authorities to rebuild their country, based on democratic principles.

Based on the UN Resolution 2009, EU announced that, reacting to the Libyan authorities request, and respecting the ownership of these authorities, "the EU, UN and the World Bank have taken the lead for different sectoral assessments, and the EU is leading in the key fields of border management, civil society and women's rights, as well as communications and media. The EU will also participate in other sectoral assessments led by the UN and the World Bank."¹⁰ Additional to this, EU opened an office in Tripoli and recommended the Member States to open their embassies in the Libyan capital. In order to show its wiliness to support, the EU also offered to Libya membership in the Union for the Mediterranean and, with this occasion, deepened the approach to its Neighbourhood Policy to provide better support to the countries in transition.

There are some voices, including from inside the EU, saying that the organization could have had a better approach to this crisis. Some requested the activation of the EU Battlegroups, but the reaction of some Member States to this proposal was negative (Netherlands, which have forces in the German-Dutch Battlegroup did not agree, Sweden wanted to reduce funding in order to reduce capabilities of the EU to activate a CFSP mission, and Finland, which did not want to spend money to send its soldiers in Northern Africa) made the Union unable to provide military support. Even the opening of the Operational HQ and the nomination of the Italian admiral as Commander were contested. For example, in the *European Voice*, a national senior diplomat is cited, not nominated, saying that "it is a bit strange to put an Italian rear-admiral in charge of a command centre in Rome for an operation that doesn't exist at present and is unlikely ever to be launched. But, the diplomat continued, "there was a lot of pressure by the French and others to demonstrate that the EU is a military player..."¹¹

It can be concluded that, despite the fact that European Union officials really wanted the organization to be deeper involved in solving



the Libyan crisis, making everything they could (opening the HQ, nominating a Commander, activating elements of the EUMS, some states were not interested, other states were restrained in sending their military in this Area of Operation, and the possibility for the EU to participate in this operation was limited. In order to compensate this, EU offered its leadership in the domains listed above.

Conclusions

The evolution of the Libyan conflict and the reaction of the international community lead to a clear conclusion: many institutions wanted to participate in this mission, but many promises did not come true. But, as the purpose of the article was to analyze how the most important international/regional security institutions were involved, I drew the following conclusions:

1. Organization for Security and Cooperation in Europe (OSCE) did not approach this crisis at all. The motive could be that Libya is not a member of this organization. Or it may be the fact that this institution has somehow the decision process blocked, or it may be because the institution is focused on the crises in the Member States (not very few at all). Anyway, I consider that the areas of interest of OSCE cover perfectly the situation in post-conflict Libya: from freedom of media to political pluralism, legal/judicial reform, going to the energy issues. All these are covered by OSCE experience, and the involvement of this institution could have brought a lot to the international community participation.

2. The UN reacted in its normal way to this crisis: noticed the situation, requested support from states/institutions/regional arrangements, mandated and authorized the intervention. The UN reaction was gradual, starting with mandating interventions out of Libyan territory, latter authorizing actions in air and maritime space of Libya. The series of Resolutions – from that of 1970, which authorized the international action, up to that in 2009, when the end of military support was declared – were respected by the international community. No UN Force (Blue Helmets) was created, mainly because other institutions (NATO and initially the EU, in this case) created it.

3. NATO reacted in its own way, having now enough experience in this type of operations. It

presented political will to provide for maintenance of peace in its area of interest. It strictly respected the UN Resolutions and wanted all the time to legitimize its presence in the operation. In order to do this, NATO created ad-hoc institutions, such as “Friend of Libya”, the Summit of head of state/governments supporting the intervention, which increased NATO legitimacy and internationalization. Clear institutional relation between political and military decision levels permitted a detailed and rapid planning of the military operations, increasing their efficiency. The political will of the Member States to participate in a new NATO operation, despite the fact that they have already forces deployed in other NATO operations, showed that this organization still has force and legitimacy to participate in the international community efforts to maintain peace.

4. The EU made a lot of efforts to show its willingness to become an actor in international security. The attempts to create a force on time did not materialise, reasons being listed above. Important to mention is that the organization manifested interest to participate in the post-conflict reconstruction of Libya, area where the EU has experience and expertise, due to missions in Congo, Ach Province in Indonesia and especially EUFOR Bosnia-Herzegovina. All these missions recommend the European Union to support the new Libyan authorities on their way to create a new society based on democratic principles, to organise free elections and rebuild their country. The EU capabilities to deploy police forces, demonstrated in Bosnia-Herzegovina, economic interests of the European Union Member States in Libya, make the Union capable to accomplish the mission as *leading institution* in the domains listed above.

Finally, we can state that the unofficial and unrecognized hierarchy of international/regional security institutions worked in this case too. UN kept its role of the unique mandating institution in the cases of violating the provision of the Charter, asking for support from Member States and from regional arrangements, as it is stated in Chapter VIII of the UN Charter. NATO, being, in the understanding of the before-mentioned Chapter, a *regional arrangement*, made its organizational and reaction capabilities available to accomplish the mandate received from the UN, as *military leading institution*. The European Union can take over the mission of *leading institution* in other areas, such



as economic, political, judicial, in order to continue the process of stabilisation and reconstruction and reduce as much as possible the probability for the violence to reignite.

NOTES:

1 Furnică, Pascu PhD, *Security Concepts – Field Of Coordination, Cooperation, Competition For European Security Institutions*, Strategic Impact No.1 [22], 2007.

2 Furnică, Pascu PhD, *European Security Environment: Coordination, Cooperation, Competition*, Strategic Impact No. 4 [21].

3 Resolution 1970 (2011), Adopted by the Security Council at its 6491st meeting, on 26th of February 2011, paragraph.2

4 *Ibidem*, paragraph 1.

5 Resolution 1973 (2011), Adopted by the Security Council at its 6498th meeting, on 17th of March 2011, paragraph 4.

6 NATO Secretary General Statement, available at http://www.nato.int/cps/en/natolive/news_71808.htm.

7 NATO and Libya - Operation Unified Protector, available at http://www.nato.int/cps/en/natolive/topics_71652.htm.

8 Ana Gomes, *Was EUFOR Libya an April fool's joke?*, EU observer, available at <http://euobserver.com/7/32624>.

9 Developments in Libya: an overview of the EU's response, available at <http://www.european-council.europa.eu/home-page/highlights/developments-in-libya-an-overview-of-the-eu%27s-response-%28updated-23-may%29.aspx?lang=en>.

10 Council conclusions on Libya, 3117th Foreign Affairs Council meeting Luxembourg, 10 October 2011.

11 Quoted in Toby Vogel, *EU battlegroups wait for Libya operation „unlikely ever to be launched*, European Voice, 2011.



SOUTH AFRICA – EMERGING POWER

*Dorel BUȘE, PhD**

South Africa is the most developed country in Africa, which is why it could build a strong foreign policy in time, so that after the fall of the apartheid regime, South Africa focused mainly on relations with the African continent. The elements that determine the strength of a nation show us that South Africa is by far in the top of the most areas that contribute to maximizing national power: geography (it has access to two oceans and is the 9th country in Africa in terms of occupied area), natural resources (South Africa produces much of the products it needs and holds the largest reserves of manganese, chromium, gold, vanadium, aluminum silicate, platinum in the whole world), industrial capacity (South Africa is the most industrialized country in Africa), national morale (South Africa is one of the most patriotic countries in the world), the quality of diplomacy (103 embassies and 14 consulates), quality of governance (in 2005, 63% of South Africans believed that their current government has a good performance). Another important aspect to be noted is that South Africa has the strongest economy on the African continent, with an estimated Gross Domestic Product (GDP) in 2008 of 495.1 billion dollars.

Key-words: emerging power; regional security; sustainable development; global player; power sources.

Before the end of the Second World War, South Africa¹ played an active role on the international scene. But along with the coming of the apartheid regime, the country quickly became a “pariah”

within the international community. In the early ‘90s, South Africa identified itself with the African continent, as on the one hand, South Africa is able to provide a democratic example with one of the most democratic constitutions in the world² and on the other hand, it can’t develop if Africa continues to be plagued by conflicts and authoritarian regimes. Thus, “South Africa’s foreign policy has experienced major changes over the period in which the country has moved from isolation to acceptance and then taking the lead”³ of the African continent.

Foreign policy priorities and limits of a state are determined by the available national power of that state⁴. In this context, reference is to be made to the dynamics of South African foreign policy after 1994, the year of the first democratic elections and to the position South Africa holds on the African continent, analyzing the responsible factors for the strength of a nation facing another, after the model Hans J. Morgenthau offered.

The priority of South Africa’s foreign policy since 1994 was the African continent. “South Africa made from the African continent the main piece of its foreign policy, its clear purpose being economic growth and security”⁵. President Nelson Mandela held in June 1994 a speech in front of the members of the African Unity Organization, saying that “our aim is for South Africa to become a good neighbour and an equal partner for all countries on the continent, a partner that would use its skills and potential so that South Africa occupies its rightful place in the world’s political and eco-

** Major Dorel BUȘE, PhD (dorel_buse@yahoo.com) is Associate Professor, chief of Geopolitics, Geostrategic and International Relations teaching commission with the Joint Operations Department, Strategic and Security Studies within “Carol I” National Defence University in Bucharest, Romania.*



conomic system”⁶. This goal has remained largely the same throughout the entire term of Thabo Mbeki, mentioning that the idea of African Renaissance was positioned in the centre of his foreign policy. In his speech in April 1998, Thabo Mbeki, at that time, Vice President of South Africa, stated: “Time for the renaissance of the African continent has come (...). South Africa is in itself part of the African movement to transfer power to the people. (...) Political imperatives of the African Renaissance are inspired not only by the painful history of recent decades, but by the recognition of the fact that none of our countries is an island which can be isolated from the rest of the countries and that none of us can succeed if the other one fails”⁷.

During all this period, South Africa played the role of “regional pivot”⁸, Southern African Development Community (SADC) being “the most important tool through which South Africa can help the economic development of this region.”⁹. Therefore, it played an active role in peacekeeping operations conducted under the auspices of SADC. In 1999, foreign minister of South Africa said: “the conflicts in the Democratic Republic of Congo and those from Angola are one of the most important challenges for our foreign policy and for SADC members (...) and if we don’t obtain peace, we won’t be able to gain the economic and social development of the region”¹⁰.

Regarding relations with the African Union (AU), South Africa was the first African country to hold presidency of the African Union in the period of July 2003 - July 2004. Also, South Africa participated in numerous peacekeeping missions conducted under the auspices of AU on the African continent. In this context, we could mention the AU mission in Darfur driven “to monitor the compliance of ceasefire temporary agreement from April 2004, in order to sign the Global Peace Agreement”¹¹. In its relation to the African continent it is expected “that post-apartheid South Africa provides answers to problems facing African countries, providing both a development model and tools to support economic growth through trade and investments. For Africa, this assistance is the ultimate hope to make things right, and South Africa plays a difficult role in a continent facing many problems”¹².

Analyzing the role South Africa plays in Africa, can we see to what extent South Africa has all the components necessary to assume leadership of the African continent. The geography of a country

is “the most stable factor on which depends the strength of a nation”¹³, and South Africa is a country located at the southern extremity of the African continent. Its total area is 1,219,090 square kilometres, being situated on the 9th place in Africa.

The fact that South Africa is among the 10 largest countries on the African continent offers it an important position¹⁴. South Africa’s borders are surrounded to the West, South and East by the Atlantic Ocean and the Indian Ocean and the country has 3,000 km of coastline¹⁵, which is a considerable advantage. South Africa “is a strategic point, the more so as Suez Canal is sometimes too small for heavy ships to sail it. Thus, an intensive traffic towards Asia, America and Europe is recorded”¹⁶.

Natural resources are “another relatively stable factor that exerts a powerful influence over a nation’s power in relation to others”¹⁷. South Africa “produces most of the products it needs and in the same time it is an exporter of agricultural products. So, South Africa is vital for development and stability in the South region of the African continent”¹⁸. Between 2002 and 2007, “agricultural exports represented about 8% of total exports.(...) Mainly, there were exported wine, citrus, sugar, grapes, rice, wool and non-alcoholic beverages, meat, avocado and pineapple.”¹⁹ Raw materials are another crucial element to determine the strength of a nation. In this regard, South Africa has the largest reserves of manganese, chromium, gold, vanadium, aluminum silicate in the entire world.²⁰ “One of the elements that will play a major role in the future concerning the level of development in South Africa is platinum. South Africa holds 85% of platinum reserves in the world that is used in the automotive industry to reduce pollution caused by the fuel.”²¹

Mineral resources represent a highly important indicator for determining the power of a nation, though these would be of no use without a strong industry. South Africa is the most industrialized country in Africa. The Minister of Trade and Industry – Dr. Rob Davis was saying that “one of the main priorities of South Africa is the industrial development”²². The mining industry is the most important industrial field of South Africa, “50% of export earnings belonging to mining”²³. This industry is “one of the most developed in the world, especially in terms of deep sea drilling.”²⁴



Military training “gives to all factors discussed above - geography, natural resources and industrial capacity - the real importance for a nation’s power”²⁵. South Africa is among the most “powerful military countries²⁶” on the African continent, participating in peacekeeping missions. Thus, by “September 2007, South Africa was having troops in numerous countries from Africa, including the Democratic Republic of Congo, Sudan, Ethiopia and Eritrea”²⁷.

As for military technology, South Africa is “equipped with professional very well trained armed forces”²⁸. South Africa has developed a series of projects for modernization of military technology. Thus, in 2007, in South Africa were “constructed and upgraded seaports on the Atlantic Ocean and Indian Ocean. This involved installing a modern satellite technology and the latest electronic surveillance”²⁹. The number of men available for the military service, “aged between 16 and 49 years amounts to 5,802,096 and the number of women (aged 16 to 49 years) is 5,729,939. Regarding the number of men who could be used in military service (aged 16 to 49 years) it amounts to 11,622,507, while the number of women is almost equal, i.e. 11,501,537.”³⁰ Concerning the amount allocated to the South African government for military activity, experts estimated that in 2005 South Africa spent 3.5 billion dollars. Therefore, South Africa is the 33rd in the world and the 1st in Africa in terms of military expenses.³¹

Population distribution remains relevant in the context in which “no country can become or remain a great power if it is not part of the most populous states on earth”³². The results of the second census conducted during the democratic regime, made public in July 2003, shows that on October 10, 2001, South Africa had a total population of 44,819,778 inhabitants. Out of these, 79% considered themselves Africans, 9.6% white, 8.9% black population and 2.5% Indians / Asians. The 2010 statistics situate South Africa on the 25th place in the world and on the 5th place in Africa in terms of population reaching 49,109,107 inhabitants. It should be noted, however, that mortality rate in South Africa is due to increased incidence of HIV³³. In terms of races, “in South Africa there is the largest white population except for the West (Europe and the American continent)”³⁴.

National character has a “permanent and often decisive influence over the force that a

nation is able to exert in international politics”³⁵. South Africa is a “divided society, but it has an extraordinary unifying capacity when key events take place, such as the World Cup in 2010 or 1995 Rugby Championship. Also, the South African people is a very proud people, whether if we refer to the national anthem, the flag or the president Nelson Mandela and what he represents for South Africa”³⁶.

National morale is an important factor in determining the very power of a nation. “The degree of determination by which a nation supports the external strategies in peacetime and wartime (...) affects all the activities of that nation”³⁷. An example like this is supporting UN missions in Africa. Polls show that 47% of the polled South-Africans responded affirmatively to the question whether the UN Security Council should or not have the right to authorize military interventions to prevent human rights violations, while only 15% were against.³⁸ In this context, South Africa participates along the UN in a series of missions carried out on the African continent. “UN missions in South Africa increased significantly in the recent years. (...) African troops participating in UN operations come from a relatively small number of countries: Nigeria, South Africa, Rwanda, Senegal, Ghana and Kenya”³⁹.

Diplomacy plays a key role in our approach to evaluate the power and the role South Africa plays on the African continent because “of all the factors that make up the power of a nation, the most important, no matter how unstable it goes, remains the quality of diplomacy [because] a competent diplomacy can enhance the strength of a nation”⁴⁰. Since the early ‘90s, “South Africa’s priority became the African continent. For instance, if we refer to the economic diplomacy, although, traditionally, South Africa exported the majority of raw materials at its disposal, in Europe, there was a will of reorientation of the exports towards the African continent. Another example, supporting the above statement is the dynamics of the diplomatic missions.

In 2005, South Africa became the country with the largest number of diplomatic missions in Africa.⁴¹ Diplomatic isolation ended the same with the apartheid regime, and South Africa, opened “the gates to any state willing to establish diplomatic relations with the country”⁴². South African official representation on the international scene has seen a



peak between May and December 1994, when South Africa joined the 16 multilateral organizations, including United Nations, SADC, OAU, the Non-Aligned Treaty and the Commonwealth⁴³. Thus, by 1996, “the diplomatic representations of South Africa in Africa doubled⁴⁴”.

There have been cases in which South Africa has chosen to close some diplomatic representations in order to open embassies or consulates on the African continent. One such case was Romania. South Africa established diplomatic relations with Romania in 1991, but the government in Pretoria decided to close the embassy in 1999, so to pursue its already set foreign policy priorities. “In 1991, we established formal diplomatic relations with Romania. Over that period, the apartheid in South Africa was coming to an end. Obviously, there was a change in the Romanian political system. So, in 1991, we opened a mission here, and then to close it in the late ‘90s, for the simple reason that we were opening more missions in Africa – that was our priority. You should always look at the financial part – we were confronting costs limitations. During this period, Romania has kept its diplomatic missions in South Africa”.⁴⁵

Compared to other countries in Africa, South Africa has the largest number of diplomatic missions, both at international and continental level. South Africa has 103 open diplomatic missions worldwide, 14 consulates and 64 honorary consulates, out of which 53 diplomatic missions on the African continent. Thus, if we compare the number of its diplomatic representations with the number of the diplomatic representations of three of the most economically developed countries in Africa, as is the case of Egypt, Nigeria and Algeria⁴⁶, we notice clear differences concerning the number of these diplomatic missions. The Egypt has 35 missions in Africa⁴⁷, while Nigeria has 36 diplomatic missions on the African continent.⁴⁸ Algeria has 87 diplomatic missions, of which only 27 are in Africa.⁴⁹

Good governance is one of the most important factors that determine the strength of a nation because even “the best designed and most professional foreign policy applied, having an abundance of material and human resources as a background worth nothing if not based on good governance. This (...) implies two aspects: balance between resources that make national power and the foreign policy to implement and balance

between resources and the support for external actions.⁵⁰ In 2000, during the mandate of President Thabo Mbeki, 52% of South Africans believed that their government had a good performance. In 2005, just a year after Mbeki’s re-election, their number increased to 63%.⁵¹

In conclusion, South Africa is the most developed country in Africa, which made this country to build, in time, a strong foreign policy, focusing, after the fall of the apartheid regime, mainly on relations with the African continent. After the 1994’s elections, one of the major steps was to establish priorities and objectives that were to be pursued from that moment on in the foreign policy. Though, to achieve these goals, the reference to South Africa’s national power is mandatory, just as evaluating its position on the African continent.

The elements that determine the strength of a nation, identified by Hans Morgenthau, show us that South Africa is by far in the top of the most areas that contribute to maximizing national power: geography (it has access to two oceans and is the 9th country in Africa in terms of occupied area), natural resources (South Africa produces much of the products it needs and holds the largest reserves of manganese, chromium, gold, vanadium, aluminum silicate, platinum in the whole world), industrial capacity (South Africa is the most industrialized country in Africa), national morale (South Africa is one of the most patriotic countries in the world), the quality of diplomacy (103 embassies and 14 consulates), quality of governance (in 2005, 63% of South Africans believed that their current government has a good performance). Another important aspect to be mentioned is that South Africa has the strongest economy on the African continent, with an estimated Gross Domestic Product (GDP) in 2008 of 495.1 billion dollars.⁵² In this context, South Africa’s political leaders – Nelson Mandela and Thabo Mbeki – have turned their foreign policy strategies to the African continent, either through active participation in regional and continental organizations, such as SADC and the AU, or by promoting values and concepts to represent the whole African continent: human rights in the case of Nelson Mandela, and the African Renaissance in the case of President Thabo Mbeki.

It remains an open question how the role assumed by South Africa – that of continent leader–



will evolve, and for now it seems that President Jacob Zuma is determined that South Africa would continue to assume it. A relevant example in this way is the term of two years as non-permanent member of UN Security Council, position in which South Africa was chosen in October 2010, thus answering the insistent demands of African diplomats to stop the excessive emergence of the West in the region, and finding some *African* answers to *African* problems.⁵³

From this position, South Africa will decide in the next period on the most important problems of the African continent, as the conflict situations in Sudan, Zimbabwe, Somalia and the Democratic Republic of Congo. Also, South Africa joined in 2011 the BRIC group, which became those BRICS (Brazil, Russia, India, China, South Africa).⁵⁴ Although South Africa's accession to BRICS was initially contested, given the economic and demographic much lower level compared to other members, finally it was considered to be an appropriate member to represent the African perspective on the world stage⁵⁵.

BIBLIOGRAPHY:

1. *About South Africa*, in http://www.southafrica-ghana.com/about_sa.php, South Africa High Commission, Ghana website, accessed on 10.05.2010.
2. *Africa de Sud și-a redeschis ambasada pentru susținerea intereselor economice*, interview with the South Africa Ambassador - Pieter Swanepoel, in http://www.financiarul.com/articol_32381/africa-de-sud-si-a-redeschis-ambasada--pentru-sustinerea-intereselor-economice.html, viewed on 10.05.2010.
3. ALDEN, Chris; PERE, Garthle, *South Africa's Post-Apartheid Foreign Policy – from Reconciliation to Revival?*, Oxford University Press, New York 2003.
4. *Annual Review of Global Peace Operations 2007*, "Project of the Center of International Cooperation at New York University", in http://www.cic.nyu.edu/internationalsecurity/docs/peacekeeping_BRIEFINGPAPER.pdf, viewed on 12.05.2010.
5. BALDAUF, Scott, *South Africa to join UN Security Council. Will it take lead on African conflicts*, in <http://www.csmonitor.com/World/Africa/2010/1013/South-Africa-to-join-UN-Security-Council.-Will-it-take-lead-on-Africa-conflicts>, viewed on 08.05.2011.
6. *Department of Trade and Industry*, in <http://www.test.thedti.gov.za/>, viewed on 10.05.2010.
7. *Embassy of Egypt in Pretoria*, in http://embassy-finder.com/egypt_in_pretoria_south-africa, viewed on 10.05.2010.
8. *Global Sherpa Journal*, in <http://www.globalsherpa.org/china-africa-brics>, viewed on 08.05.2011.
9. MAZRUI, Ali A., *A Tale of Two Africas. Nigeria and South Africa as Contrasting Visions*, Adonis & Abbey Publishers Ltd., London, 2006.
10. MILLS, Greg, *The Wired Model. South Africa, Foreign Policy and Globalisation*, in "The South African Institute of Foreign Affairs Jan Smuts House", Johannesburg and Tafelberg Publishers Limited, Cape Town, 2000.
11. MORGENTHAU, Hans, *Politica între națiuni. Lupta pentru putere și lupta pentru pace*, Polirom Publishing House, Bucharest, 2007.
12. *Interview with the Ambassador of South Africa in Romania, H.E. Pieter Swanepoel*, taken on 14.06.2010.
13. *Ministère des Affaires Étrangères de l'Algérie*, in http://193.194.78.233/ma_fr/stories.php?topic=03/05/15/3791201, viewed on 10.05.2010.
14. NEL, Philip; TAYLOR, Ian; VAN der WESTHUIZEN, Janis, *South Africa's multilateral diplomacy and global change. South Africa's multilateral diplomacy and global change*, Ashgate Publishing Limited, Burlington, 2001.
15. *Nigeria Immigration Service*, in <http://www.immigration.gov.ng/Foreignmissions.htm>, viewed on 10.05.2010.
16. Background note on the political and Human rights situation in Sudan and Darfur, European Parliament, Bruxelles, November 2007, in http://www.europarl.europa.eu/meetdocs/2004_2009/documents/dv/696/696365/696365en.pdf, accessed on 14.05.2010.
17. *Pocket Guide to South Africa*, in http://www.gcis.gov.za/resource_centre/sa_info/pocketguide/2009/015_mineral_resources.pdf, South African government website, viewed on 10.05.2010.
18. *Poll of 18 African countries finds all support democracy*, Afrobarometer, in <http://www.worldpublicopinion.org/pipa/articles/brafricara/209.php?nid=&id=&pnt=209&lb=brafr>



accessed on 10.05.2010.

19. *South African Consulate General*, in <http://www.southafrica-newyork.net/consulate/foreignrelations.htm#africa>, accessed on 10.05.2010.

20. *South African Deputy President Thabo Mbeki speech at the United Nations University*, 9.04.1998, in <http://www.unu.edu/unupress/Mbeki.html>, accessed on 18.04.2010.

21. *South Africa Yearbook 2007-2008*, Formeset Printers, Pretoria, 2007.

22. *Statement of the President of the Republic of South Africa, Nelson Mandela, at the OAU meeting of Heads of State and Government*, 13-15 June 1994, in <http://www.anc.org.za/ancdocs/history/mandela/1994/sp940613.html>, accessed on 10.05.2010.

23. TALJAARD, Raenette, *Think Again: South Africa*, în „*Foreign Policy*”, April, 2009, in http://www.foreignpolicy.com/articles/2009/04/13/think_again_south_africa, accessed on 8.05.2011.

24. *The Darfur Crisis: African and American Public Opinion*, “*Global Scan Incorporated, The Program on International Policy Attitudes*”, Knowledge Networks, 29.06.2005, in <http://www.worldpublicopinion.org/pipa/articles/brafricara/71.php?nid=&id=&pnt=71&lb=braf>, accessed on 12.04.2010.

25. *United Nations Industrial Development Organisation*, in http://www.unido.org/fileadmin/user_media/Publications/Pub_free/CDM_investor_guide_South_Africa.pdf, accessed on 12.04.2010.

NOTES:

1 South African Union, 31 May 1910 – 31 May 1961. In May 1961 it was proclaimed South Africa Republic

2 Raenette Taljaard, *Think Again: South Africa*, in „*Foreign Policy*”, April, 2009, in http://www.foreignpolicy.com/articles/2009/04/13/Think_Again_South_Africa, accessed on 8.05.2011.

3 Greg Mills, *The Wired Model. South Africa, Foreign Policy and Globalisation*, in “*The South African Institute of Foreign Affairs Jan Smuts House*”, Johannesburg and Tafelberg Publishers Limited, Cape Town, 2000, p. 28.

4 Hans Morgenthau, *Politica între națiuni. Lupta pentru putere și lupta pentru pace*, Polirom Publishing House, Bucharest, 2007, p. 183.

5 Greg Mills, *quoted work*, p. 28

6 *Statement of the President of the Republic of South Africa, Nelson Mandela, at the OAU meeting of Heads of State and Government*, 13-15 June 1994, in <http://www.anc.org.za/ancdocs/history/mandela/1994/sp940613.html>, accessed on 10.05.2010.

7 *South African Deputy President Thabo Mbeki speech at the United Nations University*, 9th of April 1998, in <http://www.unu.edu/unupress/Mbeki.html>, accessed on 18.04.2010.

8 Chris Alden, Garth le Pere, *South Africa's Post-Apartheid Foreign Policy – from Reconciliation to Revival?*, Oxford University Press, New York 2003, p. 57.

9 *South Africa Yearbook 2007-2008*, Formeset Printers, Pretoria, 2007, p. 260.

10 Chris Alden, Garth le Pere, *quoted work*, p. 41.

11 Background note on the political and Human rights situation in Sudan and Darfur, *European Parliament*, Bruxelles, November 2007, in http://www.europarl.europa.eu/meetdocs/2004_2009/documents/dv/696/696365/696365en.pdf, 14.05.2010.

12 Greg Mills, *quoted work*, p. 2.

13 Hans Morgenthau, *quoted work*, p. 149.

14 According to <https://www.cia.gov/library/publications/the-world-factbook/>, accessed on 12.04.2010.

15 *South Africa Yearbook 2007-2008* ..., p. 6.

16 *Interview with the Ambassador of South Africa in Romania, H.E. Pieter Swanepoel*, taken on the 14th of June 2010.

17 Hans Morgenthau, *quoted work*, p. 153.

18 *South Africa Yearbook 2007-2008* ..., p. 50.

19 *Ibidem*.

20 *Pocket Guide to South Africa*, in http://www.gcis.gov.za/resource_centre/sa_info/pocketguide/2009/015_mineral_resources.pdf, the website of the South-African government, accessed on 10.05.2010.

21 *Interview with the Ambassador of South Africa in Romania, H.E. Pieter Swanepoel*, taken on the 14th of July 2010.

22 According to the Department of Trade and Industry, in <http://www.test.thedti.gov.za/>, viewed on 10.05.2010.

23 *Pocket Guide to South Africa...*

24 According to United Nations Industrial Development Organisation, in http://www.unido.org/fileadmin/user_media/Publications/Pub_free/CDM_investor_guide_South_Africa.pdf, viewed on 12.04.2010.

25 Hans Morgenthau, *quoted work*, p. 161.

26 Ali A. Mazrui, *A Tale of Two Africas. Nigeria and South Africa as Contrasting Visions*, Adonis & Abbey Publishers Ltd., London, 2006, p. 17.

27 *Pocket Guide to South Africa...*

28 Ali A. Mazrui, *quoted work*, p. 17.



- 29 *South Africa Yearbook 2007-2008* ..., p. 431.
- 30 *About South Africa*, in http://www.southafrica-ghana.com/about_sa.php, site of South Africa High Commission, Ghana, accessed on 10 May 2010.
- 31 According to <https://www.cia.gov/library/publications/the-world-factbook/>, accessed on 12.04.2010.
- 32 Hans Morgenthau, *quoted work*, p. 165.
- 33 According to <https://www.cia.gov/library/publications/the-world-factbook/>, accessed on 12.04.2010.
- 34 Ali A. Mazrui, *quoted work*, p. 17.
- 35 Hans Morgenthau, *quoted work*, p. 168.
- 36 *Interview with the Ambassador of South Africa in Romania, H.E.Pieter Swanepoel*, taken on the 14th of July 2010.
- 37 Hans Morgenthau, *quoted work*, p. 176.
- 38 *The Darfur Crisis: African and American Public Opinion*, "Global Scan Incorporated, The Program on International Policy Attitudes", Knowledge Networks, 29th of June 2005, in <http://www.worldpublicopinion.org/pipa/articles/brafricara/71.php?nid=&id=&pnt=71&lb=braf>, viewed on 12.04.2010.
- 39 *Annual Review of Global Peace Operations 2007*, "Project of the Center of International Cooperation at New York University", in http://www.cic.nyu.edu/internationalsecurity/docs/peacekeeping_BRIEFINGPAPER.pdf, accessed on 12.05.2010.
- 40 Hans Morgenthau, *quoted work*, p. 179.
- 41 *Interview with the Ambassador of South Africa in Romania, H.E.Pieter Swanepoel*, taken on the 14th of July 2010.
- 42 Greg Mills, *quoted work*, p. 261.
- 43 Philip Nel, Ian Taylor, Janis Van der Westhuizen, *South Africa's multilateral diplomacy and global change. South Africa's multilateral diplomacy and global change*, Ashgate Publishing Limited, Burlington, 2001, p. 21.
- 44 According to South African Consulate General, in <http://www.southafrica-newyork.net/consulate/foreignrelations.htm#africa>, accessed on 10.05.2010.
- 45 *Africa de Sud și-a redeschis ambasada pentru susținerea intereselor economice*, *Interview with the Ambassador of South Africa in Romania, H.E.Pieter Swanepoel*, in http://www.financiarul.com/articol_32381/africa-de-sud-si-a-redeschis-ambasada--pentru-sustinerea-intereselor-economice.html, accesat la 10.05.2010.
- 46 According to <https://www.cia.gov/library/publications/the-world-factbook/>, accessed on 12.04.2010.
- 47 *Embassy of Egypt in Pretoria*, in http://embassy-finder.com/egypt_in_pretoria_south-africa, accessed on 10.05.2010.
- 48 According to Nigeria Immigration Service, in <http://www.immigration.gov.ng/Foreignmissions.htm>, accessed on 10.05.2010.
- 49 According to Ministère des Affaires Etrangères de l'Algérie, in http://193.194.78.233/ma_fr/stories.php?topic=03/05/15/3791201, accessed on 10.05.2010.
- 50 Hans Morgenthau, *quoted work*, p. 182.
- 51 *Poll of 18 African countries finds all support democracy*, Afrobarometer, in <http://www.worldpublicopinion.org/pipa/articles/brafricara/209.php?nid=&id=&pnt=209&lb=braf>, accessed on 10.05.2010.
- 52 According to <https://www.cia.gov/library/publications/the-world-factbook/>, accessed on 12.04.2010.
- 53 Scott Baldauf, *South Africa to join UN Security Council. Will it take lead on African conflicts*, in <http://www.csmonitor.com/World/Africa/2010/1013/South-Africa-to-join-UN-Security-Council.-Will-it-take-lead-on-Africa-conflicts>, accessed on 08.05.2011.
- 54 *Ibidem*.
- 55 According to Global Sherpa Journal, in <http://www.globalsherpa.org/china-africa-brics>, accessed on 08.05.2011.



ENERGY POTENTIAL OF UKRAINE AS PART OF THE EXPANSION OF RAW MATERIALS AND ENERGY BASE OF THE EUROPEAN UNION

*Andryi VOLOSIN, PhD**

The energy potential of Ukraine is part of the energy potential of Europe. Its implementation is important both for Ukraine and the European Union. Therefore, holding this brief analysis is important for assessing the capacity of Ukraine better integration into the EU energy sector.

Key-words: Ukraine; energy potential; European Union.

1. Energy Potential of Ukraine

The energy sector is of key importance for the national economic development.

Large energy operations have been established in Ukraine which in conjunction with other energy companies make up the Power Grid of Ukraine. The latter is connected with power systems of Western and Central European countries, as well as the CIS countries, including primarily Russia, Republic of Moldova and Belarus. The sector restructuring shows itself in separation of generating companies from power supply network companies, which favors regularization and commercialization of the energy market of Ukraine.

Three types of generation facilities are operated in Ukraine, including thermal power plants (steam turbine and diesel types), hydroelectric plants (hydroelectric proper and hydroelectric

accumulating plants) and nuclear power plants. The role of wind and helium power plants is growing.

At present, the situation in the energy sector is characterized by the following parameters: the total capacity of all Ukrainian power plants exceeds 53 million kW, including 34.8 million kW (65.3%) for thermal plants, 13.8 million kW (25.9%) for nuclear plants and 4.7 million kW (8.8%) for hydroelectric plants.

The major producers and consumers of power are the Dnipropetrovsk, Zaporizhzhya, Donetsk and Luhansk districts. The main areas of condensing power plants operation include the Dnipropetrovsk, Zaporizhzhya, Donetsk, Kharkiv and Luhansk districts in the East of Ukraine, the Lviv and Ivano-Frankivsk Oblasts in the West of Ukraine, and the Kyiv and Vinnytsya districts in the central part of the country.

Power resources of Ukraine are mainly formed by domestic generation capacities (nearly 98%), with the import share being insignificant (2%). The power is largely consumed inside the country (97%), with a small part exported (3%).

Ukraine operates five nuclear power plants, including the Zaporizhzhya, South-Ukrainian, Rivne, Khmelnytsky, and Chernobyl, and hydroelectric power generation cascades, of which six on the Dnipro are the largest.

** Andryi VOLOSIN, PhD (cras_andy@yahoo.com) is an expert of the Center for Strategic Partnership within the Regional Branch of the National Institute for Strategic Studies in Uzhorod, Ukraine.*

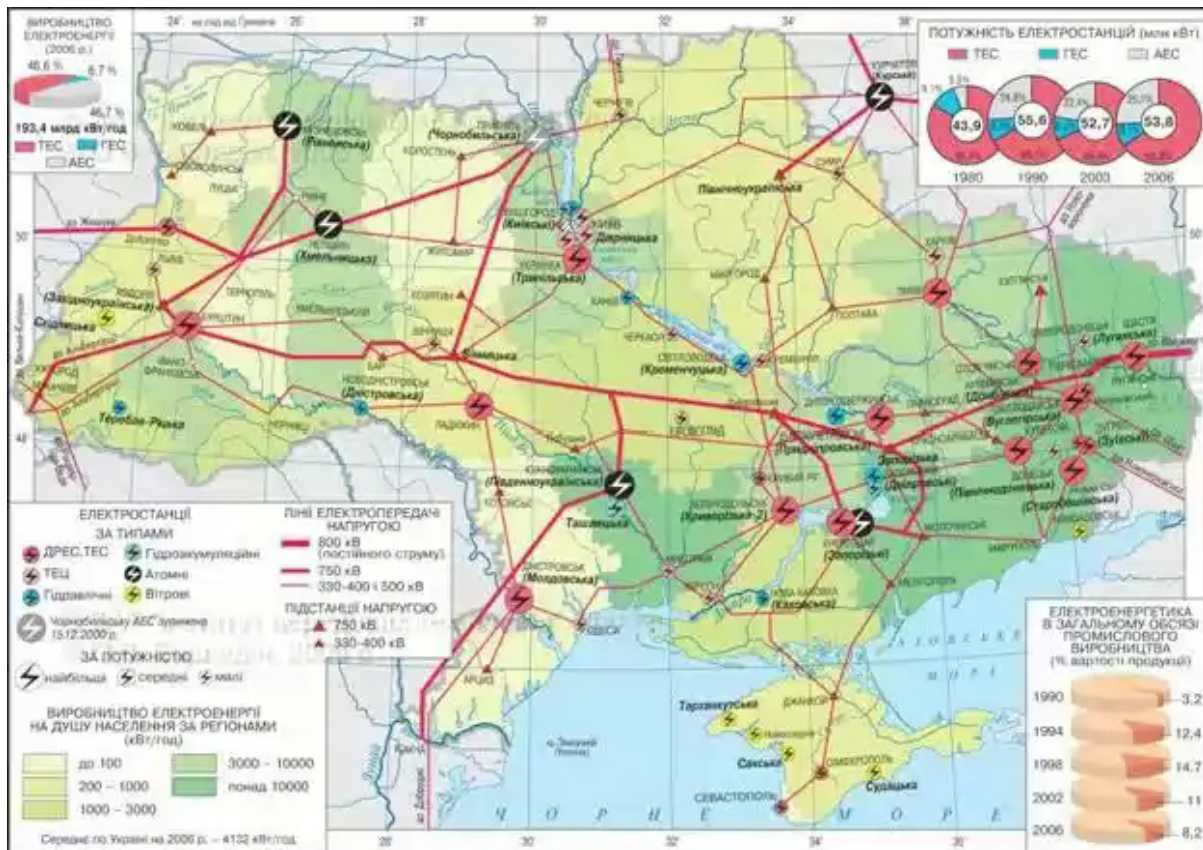


Figure no. 1 Power stations in Ukraine
 Source: <http://ukrmap.su/uk-g9/914.html>.

In the future, the need for power is expected to grow calling for intensification of the sector development and optimizing of the organization structure and economic mechanisms of functioning in the market environment¹.

The **United energy system** is interconnected with 7 power grids of neighboring states by 75 power transmission lines.

Technically feasible amount of electricity interchange is more than 50 billion kWh.

Burshtyn Island operates synchronously with Union for the Co-ordination of Transmission of Electricity (UCTE) and has potential to increase electricity export.

Main electricity producers include 14 thermal, 8 hydropower and 4 nuclear power stations with a total capacity of 53 million kW. Thermal Power Plant (TPP) and Combined Heat and Power (CHP) – 57.8%, Nuclear Power Plant (NPP) – 26.6%, Hydroelectric Power Plant (HPP) and Hydroelectric Pumped Storage Power Plant (HPSPP) – 9.1%, other sources – 6.5%.

Natural uranium reserves in Ukraine allow

meeting demand of domestic nuclear power sector for over 100 years.

Coal – the only energy carrier, which reserves are sufficient to cover the needs of the national economy for over 300 years (proved domestic coal reserves - 177 billion tons, recoverable reserves at productive mines – 6.5 billion tons, among them steam coal – 3.5 billion tons)².

2. Hydrocarbon Resources

Ukraine, as a net importer of energy, has a generous endowment of hydrocarbon resources, both onshore and offshore in the Black Sea. Hydrocarbon resources of Ukraine are estimated at 7-8 billion tons of fuel equivalent. The hydrocarbon potential of the Ukrainian Black Sea shelf is substantial; however, it has been inefficiently and insufficiently explored up to date. It is a common view among oil and gas industry specialists that, in spite of a number challenges, the benefits both for investors and for the country from successful oil and gas exploration and production projects are



Figure no. 2 Map of Ukraine's minerals

Source: (<http://radikal.ru/F/i023.radikal.ru/0803/90/af59ab1d45f5.jpg.html>).

potentially very high. And in this context, the clear, transparent and predictable rules relating to long-term use of subsoil bearing hydrocarbons reserves is of much importance for potential investors in the sector³.

Ukraine has developed hydrocarbons transport:

1. The gas transport system

- length – 37.8 thousand km of gas pipelines;
- 13 underground gas storages with capacity over 33.5 bcm;
- input capacity - 290 bcm;
- output capacity - 175 bcm;
- average annual transit volume throughout territory of Ukraine makes about 130 bcm and about 80% of it to Europe.

2. The oil transport system is capable to cover the needs of Ukraine and has the capacity to increase oil transit to EU:

- length – 4.8 thousand km in one-line calculation;
- Eastern input capacity of the system – 114.0 million tons/annum;

- output capacity (transit) – 56 million tons/annum.

Oil refineries

- refining capacity – up to 45-50 million tons/annum;
- utilization of the installed capacity in 2006 – 30%;
- dependence on imports – 85%.

3. Hydrocarbon resources in Ukrainian sector of Azov and Black Sea continental shelves – about 2,280 million tons of conditional fuel:

- in South Eastern part of Black Sea shelf – 862 million tons;
- in continental shelf slope and deep water of Black Sea – about 1,005 million tons;
- in Azov Sea water area – about 413 million tons;
- 14 gas fields discovered in water area of Black and Azov Seas;
- 26 sites prepared for deep exploration and drilling;
- 63 sites proved by the results of seismic studies⁴.



Figure no. 3 Gas transport system

Source: (http://qclub.org.ua/energy_issues/energy_transportation/gas/).

3. National Indicative Programme

In connection with the global economic crisis and lack of adequate investment in the energy sector in 2010, Ukraine felt the reduction of energy raw materials production.

According to the report of the State Statistics Service, in 2010, energy production in Ukraine fell by 3.1%, including:

- In December 2010 compared to November 2010, the production of energy minerals rose by 7.7%.
- In January-December 2010, the coal production decreased by 0.7% compared to the same period of 2009, to 54.4 million tons, while in December 2010 compared to November 2010 it increased by 8.1%, to 5.1 million tons.
- During the 12 months of 2010, crude oil production decreased by 11.5%, to 2.566 million tons, while in December 2010 compared to November 2010 it fell by 0.5%, to 206,000 tons.
- In January-December 2010, the production of gas condensate fell by 8.8%, to 928,000 tons, while in December 2010 compared to November 2010 it increased by 3.7%, to 72,400 tons.
- In the 12 months of 2010, natural gas

production fell by 5.5%, to 19.1 billion cubic meters, whereas in December 2010 compared to November 2010 it rose by 3.2%, to 1.6 billion cubic meters⁵.

To avoid further decline rate of extraction of energy resources, starting with 2011, Ukraine has focused on the intensive care unit of the **Energy Strategy to 2030**, making it relevant in the current situation changes.

Ukraine's key energy policy and priorities are defined in its own Energy Strategy to 2030.

The strategy proceeds from the understanding that Ukraine has a limited endowment of conventional energy resources and also lacks in primary energy sources, such as oil, natural gas, and nuclear fuel. Therefore, in order not to rely on imports, the strategy highlights the importance of rational energy use, the promotion of domestic energy production, and switching to alternative energy sources. Obviously, the strategy also recognises the significance of (and threats to) Ukraine's position as a key transit route for predominantly Russian oil and gas and, therefore, a basic premise of the strategy is to maintain and enhance this transit role. The rudiments of the strategy are depicted diagrammatically below.



Figure no. 4 Oil transport system

Source: http://qclub.org.ua/energy_issues/energy_transportation/oil/.

As shown in the figure above, the overriding objectives of Ukraine's energy strategy are to ensure its energy security and status as a significant transit country. These then translate into a set of priorities, which include increasing transit volumes via its territory, reducing the economy's energy intensity, improving its energy efficiency, integrating with the European energy system and expanding domestic energy production. In order to meet these objectives and priorities a set of policy measures is specified, which include modernising and rehabilitating infrastructure that transports hydrocarbons, diversifying supplies and routes, increasing domestic production of coal and nuclear energy, implementing broad-ranging energy efficiency measures, adopting relevant EU laws and undertaking pricing reform. Moreover, these measures represent and entail a radical shift in the underlying principles governing the Ukrainian energy sector as they require a move from monopoly organisation to more competitive structures, the modification of the State's role from manager to regulator, forsaking central planning for liberalisation and providing opportunities for private sector participation (rather than relying solely on state ownership).

The strategy calls for significant energy savings by the end of the projection period (specifically, a

50 per cent reduction in energy intensity compared to 2005), which is anticipated to derive from structural shifts in the economy, as it moves away from heavy industry and toward the tertiary sector, and significant „technological improvements”. The document also envisages a doubling or more in the production of coal and nuclear power to reduce reliance on natural gas⁶.

4. EU-Ukraine Cooperation in the Energy Field

Beyond the adoption of the umbrella agreements, collaboration on energy matters was further reinforced by the „Memorandum of Understanding on Cooperation in the Field of Energy between the EU and Ukraine” (MoU)⁷, signed on 1 December 2005 in the context of the implementation of the EU-Ukraine Action Plan. The MoU sets out how the two sides plan to organise their work to advance convergence in the seven areas highlighted in the Action Plan.

The MoU establishes a joint strategy towards the progressive integration of the Ukrainian energy market with that of the EU and consists of road maps covering five specific areas:

- Nuclear safety;
- Integration of the electricity and gas markets;

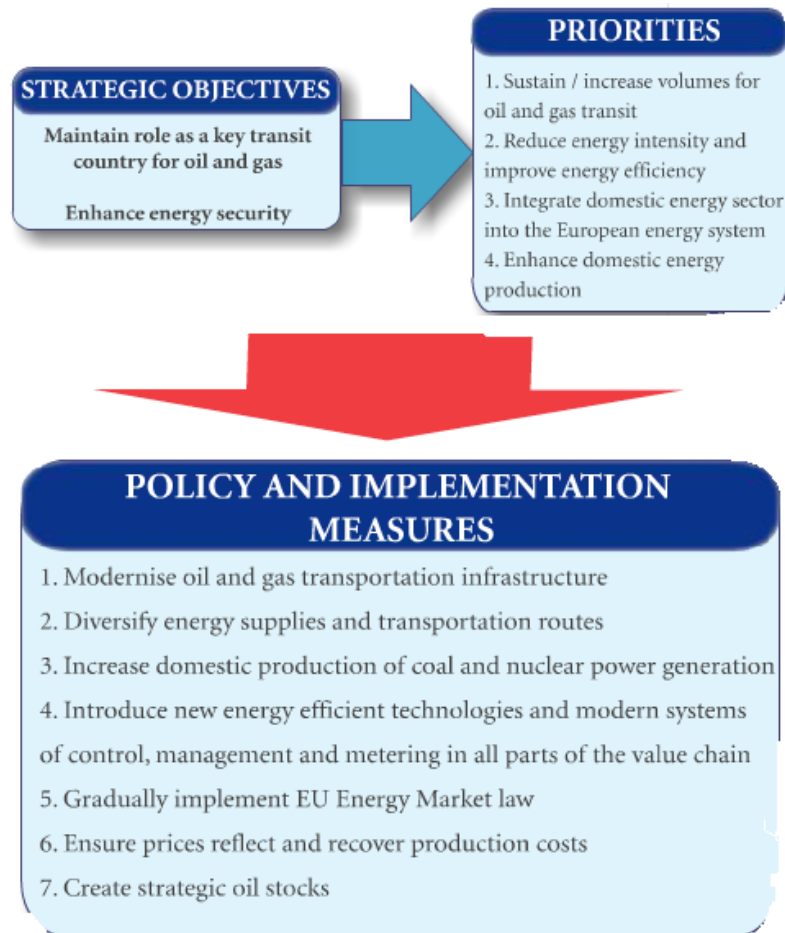


Figure no. 5: The rudiments of the Ukraine's Energy Strategy to 2030

Source: Complementary Technical Assistance to the EU-Funded Budget Support to Ukraine's Energy Strategy Implementation (ESBS Project), <http://esbs.kiev.ua/uk/energy-sector-cooperation-and-reforms/energetichna-strategiya-ukrayini-na-period-do-2030-roku>.

- Enhancing the security of energy supplies and the transit of hydrocarbons;
- Improving the effectiveness, safety and environmental standards of the coal sector;
- Increasing cooperation in energy efficiency and the promotion of RES ⁸.

For each of these five areas, joint expert groups have been established and considerable work is being undertaken in all thematic areas.

The EU is a political mechanism, which regulates relations between the two sides in all areas of cooperation. The Action Plan was approved by the Council on cooperation in February 2005 and accepted a three-year term. The Action Plan aims to promote the objectives and implementation of the Partnership and Cooperation Agreement (PCA), including Ukraine's further integration into Europe in political, social, legal and economic spheres, as well as maintaining economic growth, social

cohesion and sustainable development. The Action Plan contains a separate chapter on energy, which aims to promote convergence and (or) progress in the following areas:

- energy policy and related sub-sectoral strategies;
- principles by which functioning electricity and gas markets, including the structure and opening of markets, pricing policy and regulation;
- efficiency of energy networks (ie, reduction of losses) and the development of links between systems, expansion of infrastructure, diversification of energy supply, including supply routes;
- efficacy, safety and security of the gas transportation network, financial and legal restructuring associated with gas;
- restructuring of the coal mines in order to reduce the number of mine accidents and enforce standards and practices of EU mine safety;



- energy efficiency, renewable energy sources;
- nuclear energy and nuclear safety⁹.

5. Key Recent Developments

According to research conducted by the Complementary Technical Assistance to the EU-Funded Budget Support to Ukraine's Energy Strategy Implementation (ESBS Project), the objectives under the various energy reform road maps and the measures both undertaken to date and those requiring further development correspond to a large degree with the performance indicators for disbursement attached to the Financing Agreement regarding the provision of budget support for the implementation of Ukraine's Energy Strategy. It is therefore reasonable to expect that these elements are likely to feature prominently in discussions with the beneficiary regarding the development of priority areas for the provision of further ad hoc advice and assistance.

There are a few recent developments of particular relevance and importance that deserve highlighting:

1. Impending Ukrainian membership of the Energy Community (EnC) Treaty – following Ukraine's application for full membership of the EnC in November 2008 –, negotiations for its entry were recently concluded and their outcome was submitted for approval through the formal procedures of both the EU and Ukraine. Moreover, a memorandum of understanding was signed in October 2009 by Deputy Director-General Fabrizio Barbaso, on behalf of the European Commission, with Ukraine's Fuel and Energy Minister Yuriy Prodan, which sets out a series of deadlines for implementing EU legislation in the areas of electricity, gas, environment, renewable energy sources (RES) and security of supply. Specifically, the terms and conditions to Ukraine's accession annexed to the memorandum commit Ukraine to the following timetable:

The preparation of implementation plans by 1 July 2011 regarding the acquis on RES, namely the implementation of the directives on the promotion of electricity produced from RES and the promotion of the use of bio-fuels or other renewable fuels for transport. In this period the Ukrainian government adopted the Law on Amendments to Certain Laws of Ukraine on renewable energy sources (2010), Resolution N 243 on approval of the State Target

Economic Program on energy efficiency and the development of energy production from renewable energy sources and alternative fuels for 2010-2015, and others. After this period, the Ukrainian side adopted Resolution of the Cabinet of Ministers from 17 October 2011, N 1056. Some questions about the use of funds in energy efficiency and energy conservation¹⁰, Law № 8028 on Amendments to Article 17 of the Law of Ukraine on Electricity, which sets the ratio of "green" tariff for biogas¹¹ and so on;

2. Implementation of the EU's 2003 electricity and gas directives and the associated regulations and decision on network access and cross-border exchange, respectively, by 1 January 2012;

3. Implementation of the directives on the security of natural gas supply and on measures to safeguard security of electricity supply and infrastructure investment, also by 1 January 2012;

4. The directive relating to the reduction of the sulphur content of certain liquid fuels by 1 January 2012;

5. A range of other acts in the environmental field must variously be implemented by January 2013, 2015 and 2018; and

6. All non-household electricity and gas customers must become "eligible" from 1 January 2012 and all other customers from 1 January 2015.

Ukraine's application for full membership of the Union for the Coordination of Transmission of Electricity (UCTE), the European synchronous electricity grid (as of July 2009, the work of UCTE has been fully integrated into ENTSO-E, the European Network of Transmission System Operators, but we maintain the UCTE terminology to avoid confusion) - in March 2006 Ukraine and Republic of Moldova jointly applied for full membership and integration of their respective power systems with the UCTE synchronous area. In response, during that same year the UCTE launched a project group with the immediate task of developing terms of reference for the project and goals to assess all the technical, regulatory and operational requirements for the full integration of the two countries' electrical systems into the UCTE system. The terms of reference were finalised in January 2008 and cooperation since then has been ongoing to finalise all the contractual arrangements for project financing, so that all necessary activities may commence. The implementation period of the



project, covering studies, the implementation of recommendations and the conduct of tests and trial operations, is estimated at 7.5 years.

After the joint EU-Ukraine International Investment Conference on the Modernisation of Ukraine's Gas Transit System in 2007, a preliminary audit of the gas transit system was undertaken with assistance from the EU, which concluded that € 2.5 billion investments in Ukraine's gas pipeline infrastructure for the period 2007-2013 are required to preserve the current volumes of gas transit. Following this, UkrTransgaz (the Naftogaz subsidiary responsible for gas transit) developed a master plan for modernising and rehabilitating the gas transit system, including the identification of discrete priority projects requiring funding and which would improve the technical efficiency of the system. The Master Plan and the identified bankable projects were presented at a joint EU-Ukraine investment conference in March 2009 with the participation of the EIB, EBRD, the World Bank, private financial organisations and the national financial agencies of EU Member States and other countries. According to the Joint Declaration issued after the conclusion of the conference's proceedings, Naftogaz undertook to form a dedicated technical coordinating unit to further advance and detail the modernisation plan (we understand this group has now been established), while International Financial Institutions will soon commence their due diligence procedures in view of providing loans for the implementation of the selected projects¹².

Although not a recent development, specific mention ought to be made of the establishment of the National Electricity Regulatory Commission (NERC), as this represents a significant achievement in the institutional and market reforms of the Ukrainian energy sector. NERC was founded in December 1994 to regulate the electricity sector, but since then its authority and functions have been extended to other sub-sectors – district heating, oil and natural gas. Moreover, with EU support, there have been ongoing efforts to strengthen both its capacity and independence. NERC is currently coordinating the preparation of a draft Electricity Market Law, which is expected to establish new electricity market arrangements replacing the current single buyer wholesale electricity market model with a balancing market model. Two draft Laws of Ukraine “On State Regulation in Energy

Sector of Ukraine” and “On National Energy Sector Regulatory Commission of Ukraine” have been submitted to the Parliament of Ukraine¹³.

Conclusions

Given that Ukraine has proclaimed a course for economic integration with the European Union, a significant transformation of its economy is required, particularly in the energy sector.

In this respect, there are significant difficulties, including:

- obsolete industrial base and lack of sufficient funds and technology for its modernization;
- scarcity of resources that could provide the EU in connection with the global economic crisis;
- increased competition from Russian energy companies conducted by the company's takeover of energy sectors of their neighbors through direct price blackmail and infiltration to the major energy companies through third countries (under the guise of investors or shareholders of the leading Western countries). The purpose of these measures is the monopolization of energy sector in Europe.

Since the reform of Ukraine's energy sector is very important – it can take a very long time and will require significant investment of money – the priority becomes activated cooperation with the EU. Given that Ukraine has considerable export potential and energy, in the future this could “relieve” the energy sector of the European Union; thus, investment in this area is important for both parties (both from the environmental and from the economic point of view).

BIBLIOGRAPHY:

1. *Energy sector*, Ukraine Gateway, <http://www.ukraine-gateway.org.ua/gateway/gateway.nsf/webcontent/05020100>.
2. *Ukraine Energy: European Context* - speech of the Ukrainian Vice-Prime-Minister, Mr. A. KLYUYEV, at the European Energy Forum, available at <http://www.ukraine-eu.mfa.gov.ua/eu/en/news/detail/3595.htm?lightWords=%D1%81%D0%B5%D0%BA%D1%82%D0%BE%D1%80>, *The Main Priorities of Energy Policy of Ukraine*, available at http://eprints.kname.edu.ua/21503/1/==MB-CДC-1_кypc-2011-PDF.pdf.
3. *Ukraine – Oil and Gas potential is large – A market for minor and medium sized oil and gas*



companies to explore and produce?, available at <http://neftegaz.ru/analysis/view/7638>.

4. *Ukraine Energy: European Context*, available at <http://www.europeanenergyforum.eu/archives/european-energy-forum/security-of-supply-matters/ukraine-energy-european-context>.

5. *Ukraine reduces production of energy resources in 2010*, available at <http://www.ukrinform.ua/eng/order/?id=210281>.

6. ***, *Ukraine's Energy Strategy to 2030*, available at <http://esbs.kiev.ua/en/energy-sector-cooperation-and-reforms/ukraine-s-energy-strategy-to-2030>.

7. ***, *Memorandum of Understanding on Cooperation in the Field of Energy between the EU and Ukraine (MoU)*, available at http://ec.europa.eu/dgs/energy_transport/international/bilateral/ukraine/doc/mou_en_final_en.pdf, EU-Ukraine Cooperation in the Energy Field, <http://esbs.kiev.ua/en/energy-sector-cooperation-and-reforms/eu-ukraine-cooperation-in-the-energy-field>.

8. *EU-Ukraine Cooperation in the Energy Field*, <http://esbs.kiev.ua/en/energy-sector-cooperation-and-reforms/eu-ukraine-cooperation-in-the-energy-field>.

9. План Дій “Україна - Європейський Союз” Європейська політика сусідства, http://zakon1.rada.gov.ua/cgi-bin/laws/main.cgi?page=2&nreg=994_693.

10. Постанова від 17 жовтня 2011 р. N 1056 про Деякі питання використання коштів у сфері енергоефективності та енергозбереження, <http://zakon.rada.gov.ua/cgi-bin/laws/main.cgi?nreg=1056-2011-%EF>.

11. Україна підключила нове джерело «зеленої енергії» - 10 Октября 2011, <http://zptown.ucoz.ru/news/2011-10-10-284#>.

12. *Key Recent Developments*, <http://esbs.kiev.ua/en/energy-sector-cooperation-and-reforms/key-recent-developments>.

NOTES:

1 *Energy sector, Ukraine Gateway*, <http://www.ukraine-gateway.org.ua/gateway/gateway.nsf/webcontent/05020100>.

2 *Ukraine Energy: European Context* - speech of the Ukrainian Vice-Prime-Minister, Mr.A.KLYUYEV, at the European Energy Forum, available at <http://www.ukraine-eu.mfa.gov.ua/eu/en/news/detail/3595.htm?lightWords=%D1%81%D0%B5%D0%BA%D1%82%D0%BE%D1%80>, *The Main Priorities of Energy Policy of Ukraine*, available at http://eprints.kname.edu.ua/21503/1/==MB-СДC-1_кypc-2011-PDF.pdf.

3 *Ukraine – Oil and Gas potential is large – A market for minor and medium sized oil and gas companies to explore and produce?*, available at <http://neftegaz.ru/analysis/view/7638>.

4 *Ukraine Energy: European Context*, available at <http://www.europeanenergyforum.eu/archives/european-energy-forum/security-of-supply-matters/ukraine-energy-european-context>.

5 *Ukraine reduces production of energy resources in 2010*, available at <http://www.ukrinform.ua/eng/order/?id=210281>.

6 ***, *Ukraine's Energy Strategy to 2030*, available at <http://esbs.kiev.ua/en/energy-sector-cooperation-and-reforms/ukraine-s-energy-strategy-to-2030>.

7 ***, *Memorandum of Understanding on Cooperation in the Field of Energy between the EU and Ukraine (MoU)*, available at http://ec.europa.eu/dgs/energy_transport/international/bilateral/ukraine/doc/mou_en_final_en.pdf, EU-Ukraine Cooperation in the Energy Field, <http://esbs.kiev.ua/en/energy-sector-cooperation-and-reforms/eu-ukraine-cooperation-in-the-energy-field>.

8 *Ibidem*.

9 *EU-Ukraine Cooperation in the Energy Field*, <http://esbs.kiev.ua/en/energy-sector-cooperation-and-reforms/eu-ukraine-cooperation-in-the-energy-field>.

10 План Дій “Україна - Європейський Союз” Європейська політика сусідства, http://zakon1.rada.gov.ua/cgi-bin/laws/main.cgi?page=2&nreg=994_693.

11 Постанова від 17 жовтня 2011 р. N 1056 про Деякі питання використання коштів у сфері енергоефективності та енергозбереження, <http://zakon.rada.gov.ua/cgi-bin/laws/main.cgi?nreg=1056-2011-%EF>.

12 *Key Recent Developments*, <http://esbs.kiev.ua/en/energy-sector-cooperation-and-reforms/key-recent-developments>.

13 *Ibidem*.



RAPID REACTION FORCE - BASIC COMPONENT OF THE EUROPEAN DEFENCE SYSTEM

*Ion BĂLĂCEANU, PhD**

The European Union represents, through all its integrationist aspects, a possible model for globalization; therefore, as European citizens, we must take knowledge of this under political, economical-financial and military aspects. The integration phenomenon is visualized from two points of view: on the one hand, the perspective of globalization and, on the other hand, the perspective of creating a new entity as a new phase of the world reorganization. At the European Council held in Köln (3rd and 4th June 1999), EU leaders established that the Union must have independent action capacity, credible military forces, means of decision and availability to respond to international crisis, without interfering with NATO's engagements, therefore the idea of necessity of the rapid reaction force in critical situations (ERRF), which might become the basic element for a possible European army (common European defence system).

Key-words: common European defence system; European Rapid Reaction Force (ERRF); Synchronized European Armed Forces; Battlegroup.

Nowadays, EU has enough military and civilian capabilities, including military structures and headquarters that can easily solve a crisis management (including naval operations). But European Union

has no common military force that could allow it to develop complex military operations, even if the total number of European soldiers reaches 2 million persons, more than the quantum of the U.S. or Russian armies. The recent Lisbon Treaty, entered into force on December, 1st, 2009 allows the creation of a common European army if the Member States wish for it and express their will in this respect. At the Lisbon Summit (19th-20 November 2010), NATO developed a New Strategic Concept „Active commitment, modern defence”, by which the Alliance admits that a stronger and more capable European defence is necessary and also important, encouraging the Lisbon Council's legal decision to approach the security problem from a common point of view.

The problem of the Battlegroup, basic element of the ERRF, was debated and established through *2010 Global Objective*, according to Requirement Catalog (RC 05), Force Catalog 07 (CF 07) and Catalog of Progress 2007 (CP 07). The concept of the “EU Battlegroup” (EU BG) is an example of EU military will of rapidly intervention anywhere on the Globe and showing its military capability side by its economic power. This concept was subsequently completed by other ones, like Maritime Rapid Reaction Concept-MarRRC and Air Rapid Reaction Concept-AirRRC.

** Ion BĂLĂCEANU, PhD (balaceanuion@yahoo.com) is a professor at Hyperion University from Bucharest and a fellow professor with “Carol I” National Defence University; also, he is the scientific director of the research project code ID 622, financed by CNCSIS.*



The problematic of *European Rapid Reaction Force* is tightly related to globalization problem approaching this from the research point of view, European security and defence, their interdependence, as well as the influence that these problems have on the Member States' security and defence, including on Romania.

Romania has always expressed and is still expressing the concern about its security at national level, without neglecting the importance of international security, being one of the first countries participating in debates on this particular problem. Obviously, the initiative of the EU to conceive an own defence and security dimension is not an easy one; therefore, the most important requirement is to run over an entire process of assimilation of the new terms and conditions. This will also require an increase of adaptability and capacity on the structure's levels and the procedures involved.

a) Globalization and its effects on the international security and defence environment

Globalization is the main phenomenon influencing nowadays the security environment, creating opportunities as well as risks or threats. Our world is composed at present of states that have open borders and the relation among them is tighter than these lines. We analyze a state by analyzing its membership to an alliance or another. States are forced to interact and compete for survival, national existence or international supremacy. In this context, no state can isolate itself or remain outside of alliances, no state is safe and none must remain outside global processes. Globalization is a challenge, a justification and a stimulant of integration, competition and freedom of trade. The dynamics of globalization seems to have had another dimension as well: new opportunities for the EU to assume its main role in the world governance.

Restoring the current security environment by reorganizing international security organizations, redefining concepts of fighting together against the terrorism require new aspects at global level. Revolution in the military domain takes place on the background of all social changes and *concerns all the elements of the military system: leadership, structure, organization and usage of the forces, military art and theory, endowment etc.* The new structures are related in such ways that they can accomplish multiple missions on their own.

The European Union and globalization must be a serious matter of discussion for our country, as the Lisbon Treaty, ratified by Member States' Parliaments, entered into force on the 1st of December 2009, involved Europe's transformation in an active factor of this process. Therefore, a reflection on europenization and globalization is necessary, including here aspects related to integration and efficiency. The concepts of *border, citizenship* and *security*, approached from an European perspective, are being redefined through the EU *sui generis* specific, that encompassed at the same time a national and post national dimension.

The world is changing, as it experiences changes imposed by the general security environment, achieving a global character; new challenges and threats appear, new forms of violence are generated, motivated by ethnical and religious misunderstandings and last but not least the current security system is changing. In this context, there can be noticed the tendency of the factors of power to increase the importance of the structures they rule, with a main purpose to assure for themselves advantageous positions in the new security architecture. The globalised world we are living in has as much positive as negative effects on human security, which cannot be analyzed separately but within in a global system of relations and interdependences. The economic-financial crisis the world is facing is another proof of the complexity and interdependence of the globalised world. The crisis destabilized developed economies as well the developing ones and it may be a weak point towards the European and world security.

International Relations actors feel more and more the implications of globalization on security, in the involving multiple effects, major exigencies and stages/phases of achieving it. States tend to unite, forming thus regional and global institutions in order to protect themselves from common threats.

As to Romania as a European state, its national security, in the *globalization era*, must be approached from its national interests. But this must be done in accordance with regional and zonal security policies of the organizations it is part of and as a component of global security. Romania, as a NATO and EU member, has a connecting role between the two structures. The military and political experience confirmed Romania's strategic position in the Balkan and Black Sea Area. As a country situated at the EU



and NATO border, Romania must assure the security of these common borders and face world current and future challenges, just as any other state. We can mention here international terrorism, proliferation of weapons of mass-destruction, organized crime etc.

b) Common security and defence, requirements to consolidate the European position at global level

At present, EU is engaged in developing a global profile in the international security architecture. It benefits of a strategic vision, integrated in its own Security Strategy, and also of the necessary tools in order to assume a new role in the crisis management domain. The European Union has been playing this role in past or present numerous international missions (23 missions since 2003), in the process of security management in the West Balkan Area, Caucasus, Asia, Africa and Middle East. In this way, we assist to a complex process of reconfiguration of the role that the EU has in managing global security.

CSDP allows the EU to develop civilian and military capabilities of crisis management and international conflicts prevention, helping thus in peace-keeping and security according to the United Nation Charter. CSDP never involved the idea of creating an European army; the idea evolved in a compatible and coordinated way with NATO. On 20th February 2009, the European Parliament voted in favour of creating *Synchronized Armed Forces of Europe*, (SAFE) as a first step towards a real European military force. Lisbon Treaty, which came into force on 1st December 2009, renamed the ESDP into Common Security and Defence Policy (CSDP) and created the basis for a *common European defence*, if the European Council, in unanimity will decide so. This decision will be adopted by Member States according to their own Constitution requirements so that the EU can assert itself as an important actor in terms of security, capable of intervening anywhere on the Globe.

The EU Reform Treaty of Lisbon introduces mutual assistance clause in the event of armed aggression (“mutual defence clause”), which is an embryo of Article 5 of NATO agreement, stipulating that “If a Member State is the victim of armed aggression on its territory, the other Member States shall have towards it an obligation of aid and assistance by all the means in their power”. Nowadays, any development project of a European

armed force should take into account current challenges. Consequently, the future EU military force provided, should consist of operational units subordinated to a single European command headquarters and should be composed of professional soldiers from the Member States. *The Army may be separated from national military forces, preferably a rapid reaction force*, limited in number, able to develop forwarding operations of different intensity and always be available for EU actions.

The idea of the *Common European Army* could be the solution to many current problems. This Common European Army could provide a stable, efficient, highly integrated force, could eliminate the problems generated by the limitation of the contingents’ contribution of each country and establish transparent and efficient ways to finance operations. On the long term, NATO and CSDP evolution will depend on the EU development as economic and political-military actor, as well as on the NATO transformation.

The EU is trying to redefine itself, to update its priorities and objectives in the field of security and defence policy based on major changes that have occurred in recent years. In order to do this, the EU will seek to increase its defence ability, to lead a policy for maintaining security and stability by managing crisis which affects its interests. The projects for the EU defence policy are, in our opinion, efficient and have already been implemented according the security interests of the Union: there is a security strategy, there are plans to set up joint military structures, their objectives are already defined, and their achievement is based on agreements with the UN, NATO and OSCE, in order to coordinate European and American actions (see Berlin-Plus agreements).

The *European common defence* is advancing with sure steps, being caused by multiplying global threats with high risk weight, by the Lisbon Agreement (1 December 2009), determining European political leaders to promote and strengthen collaboration and cooperation. The battlegroup concept highlights the need for accelerated decision. Not only EU bodies should be prepared, but also decision-making processes at national level must be synchronized in order to meet deadlines and schedules for concept implementation. The establishment of a battlegroup package is an opportunity to strengthen military cooperation among Member States. This improves mutual understanding on the capabilities of military



and political decision making. The “battlegroup” concept eventually strengthens EU military identity in a practical way.

c) The Rapid Reaction Force, basic element of military defence capacity of the EU

In the current European and international context, the establishment of operational structures necessary for national or collective defence is an imperative, important for the functioning of alliances, as well as for the coalitions in which modular groups occupy a basic role. *In this way, rapid reaction structures become the basic element and they can form on the one hand, specialised units or large units for any army, and on the other hand permanent operational forces, capable of performing almost any type of missions under any conditions. Adapting to new threats in the security environment by switching from large military structures, characteristic to the Cold War, to smaller and more efficient forces, with strategic mobility and a high response speed is the essence of the current transformation process, in which are involved military dimensions of the main political and military organizations worldwide. The complexity and proliferation of new threats and dangers to international security require quick and comprehensive answers, as well as developments in multiple domains. In the military field, operationalisation of the Rapid Reaction Force and military capabilities is the viable solution of the moment.*

The European Rapid Reaction Force, as the common European arrangement of its establishment was initiated in December 1999, at European Council in Helsinki, when the EU set a military target known as the Helsinki Headline Goal, following the acquisition of autonomous action capacities, objective expressed by the so-called *rapid reaction force*. Later, the EU Member States, through the Headline Goal 2010, approved by the European Council in June 2004, aims to take a series of improvements to the Helsinki Headline Goal established to address gaps appeared within it, while introducing the concept of *Tactic Battle Groups* (inspired by an initiative of France, Germany and the United Kingdom adopted in April 2003) in order to solve the *rapid EU intervention*.

The BG concept is based on the principle of multinationality and *BG package* could be formed by a framework-nation or by a multinational coalition of the Member States. Key criteria are interoperability and military efficiency. The decision to

provide the EU with BG package is a political decision. The EU Member States participating in the BG program are responsible for training preparing of forces in order to comply with the BG standards and criteria. In principle, in order to accomplish an operation, a BG goes through the following stages: *planning, preparing, waiting, development*. In planning and developing an evaluation process, there are taken into account the following nine criteria, standards and recommendations for EUBG: *availability; flexibility; commitment and development; support in theatre; connectivity; readiness status; capacity of survival; medical protection of force; interoperability*.

The forces were never used, but expectations are rising. This raises the question whether the EU should have a more *flexible vision of BG* when it should be put into action. There has been noticed recently that the problems with the EU Rapid Reaction Forces have contributed to the reform of the armed forces in European countries.

The ERRF may face different risks compared to a force generated and developed as a standard military response. Considerations and factors contributing to the risk of ERRF are: training, sustainability, the incomplete image in terms of information, force protection, vulnerability of infrastructure, logistics, medical support and other types of support. Planning for an operation should overlap fighting capabilities with the expected level of risk.

For certain types of missions, which engender the possibility of pursuing tough combat in order to accomplish them, the forces involved will be trained in advance with such tasks. Therefore, BGs are consolidated with combat support forces and appropriate logistic support. Therefore, together with these subunits, the total number of soldiers of a BG can now reach 3,000 people.

The future *military crisis management operations*, in which may also take part Romanian military forces should not only be carried out jointly, but also integrated as part of a coalition led by the UN, NATO, EU, or made ad-hoc. In this context, adapting the national defence capacity is a sine qua non requirement in order to achieve other goals of strategic defence.

d) Romania in the context of common European security and defence

Security interests and objectives of European countries are not generating conflicts, the security environment being positively influenced by



the processes of European and Euro-Atlantic integration, by the expansion of the community of states sharing and promoting the values of democracy and market economy, as well as by the deepening of regional cooperation. The risks of traditional military confrontation on the European continent fell significantly.

In 2000, Romania has made an initial offer of military forces and capabilities to carry out Petersberg tasks, and in 2004, in the frame of the supplement to the EU Force Catalogue, Romania's contribution consisted of units and subunits of ground forces, naval forces as well as strategic and tactical air transport capabilities such as helicopters for medical evacuation. The forces proposed to be made available to the EU are part of the package of forces available to NATO and all three categories of forces are represented in this package.

Currently, the security and defence policy is stipulated in detail in the National Defence Strategy (SNAp) "*For a Romania guaranteeing security and prosperity of future generations*", 2010 edition and the National Security Strategy of Romania (SSNR) "*European Romania, Euro-Atlantic Romania: for a better life in a democratic, secure and prosperous country*", 2006 edition. Romania continuing to act as a promoter of regional stability and cooperation, as a member of EU and NATO, has a strong interest in being surrounded by neighbour states which are stable, prosperous and democratic, which is a condition for peace, stability and regional economical growth.

Regarding the battle groups (BGs), in 2007 Romania participated in the establishment of such structures together with Greece (framework nation), Bulgaria and Cyprus (BG HELBROC), and since 2010 it has been contributing to the second structure, together with Italy (framework nation) and Turkey (BG ITALY). Romania participates in the establishment and operationalization of the EU BGS with platoon / company forces.

Romania's agreement in supporting the operationalization of security and defence component of the EU has included involvement

in the development, supported by elements of forces and capabilities commitments under the EU's planning process and effective participation in crisis management operations conducted by this organization.

In conclusion, the new responsibilities of security and defence, which the EU voluntarily assumes, will increase its role of global political actor. The active involvement of the Union in crisis and conflict prevention and resolution, as well as in promoting democracy and prosperity beyond its borders become more and more a reality. Knowledge of aspects of the organization and functioning of the EU is a necessity for political and military leaders who must act knowingly, in order to reform the national security in accordance with the developments in the contemporary political and military phenomenon.

BIBLIOGRAPHY:

- Council of the European Union, *Berlin plus agreements*, Brussels 2004;
- Council of the European Union, *Headline Goal 2010*, Brussels, June 2004;
- Council of the European Union, *Focus on Battlegroups*, IMPETUS - bulletin of the EU Military Staff, Brussels, 2006;
- European Parliament, Directorate General External Policies of the Union, *The battle groups: catalyst for a European defence policy*, Briefing Paper, Brussels, 2007;
- Council of the European Union, *EU Battlegroup Preparation Guide*, Brussels, September 2008;
- Council of the European Union, Military Staff, *EU Military Rapid Response Concept*, Brussels, 2009;
- European Council, *EU Battlegroups*, July 2009;
- European Union, Common Security and Defence Policy, *EU Battlegroups, BG Factsheet, Brussels, 2010*.
- Treaty of Lisbon, Official Journal of the European Union C 306, December 2007.



“NATIONAL INTEREST” CONCEPT IN EUROPEAN CONTEXT

*Cristina BOGZEANU**

The present study is meant not only to contribute to fathoming the understanding of the mechanisms lying beyond European actors' behavior on the regional and international arena, but also to make some conceptual clarifications. Within this article, the concept of “national interest” is approached from the perspective of International Relations and the manner in which this concept is understood and utilized at European level is examined. The first part of this paperwork analyses from a theoretical point of view the concept mentioned above, relying on the visions of different International Relations schools on it. The second section is meant to study the way in which this concept is applied at European level. In this sense, there are considered not only the EU official documents, but also EU's role on the international arena, with the purpose to identify the logic behind a certain action of the EU or of its Member States, to find if they act accordingly to the idea of “common good”, at the European level, or to that of their own interests. This study ends with a research on the way in which Romania's national interests have been formulated before and after its admission to the EU, the objective of this demarche consisting in demonstrating the two-way relation between national interests and the common ones, defined by the European official documents.

Key-words: national interest; International Relations; Realism; instruments of power; economical and financial crisis; common interest.

It is obvious that Europe has reached a moment of crisis. The previsions and the analyses which have marked the approach of the EU on the international arena seem to turn out to be true – the EU is just a sum of its Member States' voices and is able to act on the international stage as a unitary actor only when their interests coincide. European interest becomes the summation of its Member States' national interests and exists only when they are not contradictory and the Member States don't focus exclusively on their own national interests. If, until a few years ago, EU seemed to be a reification of the “power concert” concept, nowadays, we witness a revival of the Realist paradigm as far as the European continent is regarded, as one may speak about states looking prevalingly after their national interests, the principles lying at the basis of the EU seeming to recede into the background.

EU Member States have elaborated national security strategies within which they define their national interests in security matters, interests which act as catalysts of their actions on the international arena, inclusively within the EU.

1. National interest – core concept of International Relations' study

The concept of “interest”/“national interest” originates in the Realist paradigm of International Relations, but it is also used by the Idealist paradigm as well as by the Constructivist, critical

** Cristina BOGZEANU (cristina_bogzeanu@yahoo.com) works as scientific research assistant at the Centre for Defence and Security Strategic Studies, within “Carol I” National Defence University, Bucharest, Romania and is a PhD candidate in Military Sciences within the same institution.*



theory or post-modernist approaches, playing a more or less important role in identifying the mechanisms lying behind actors' behavior on the international arena. Within the Realist paradigm, the concept of "interest" is closely linked to the principle of rationality referring to the belief that all international entities which have resources of power and use the power, are rational actors, namely they can identify their interests and direct their actions towards defending and promoting them. So far, realists are of one accord, but, regarding national interest's content, their opinions become divergent as the representatives of the different Realist theories associate them to interests ranging from intern groups of interests, to the need to win the conflicts with other states or to the ability to cooperate¹. Additionally, some of the most famous Realists define national interest merely as power maximization². In other words, according to traditional realists, interest is defined in terms of power, which is seen as a sum of the resources of power, as well as relying on state's relative position in comparison with the other actors. Neo-realism is another Realist theory in whose vision state's survival and security are the main goals of state's action and not its relative power maximization. Survival and security are still perceived as vital, primordial interest of each state.

The development of national interest content was also realized by Liberal Institutionalism theory, another critical theory to Realism. Similarly to Realism, representatives of this school affirm state's central role in international relations, but they extend the content of national interests beyond security issues, taking into account a large number of actors and factors influencing the decisions made by an international actor. According to Liberal Institutionalism, ideas and ideologies can influence states' behavior on the international stage, but their importance in the equation of the factors determining a certain strategy of establishing relations with other actors is subordinated to some material interests that are also translated in terms of security and economic advantages. The idea sustaining that the EU represents the institutional basis on the economic cooperation of its Member States may be an exponent of this causal chain³.

In the Liberalist approach, states' interests are not limited to the efforts of maximizing their power unto other actors. The connection between rationality and national interest is called in question,

as states' behaviour on the international arena often seems to undermine their national interests, this being the reason why the term *preference*, not the one of national interest, is much more acceptable in this vision. Idealists agree that international actors can renounce their interests on short-term in order to achieve the welfare of their community, on the long term, this being, in their opinion, the real rational behavior. Actually, rationality, in realist terms, equals to a unilateral and narrow search of national interests and, in idealist terms, the same principle is understood as the efforts to participate at long-term common benefits. Neo-liberalism is another critical theory of realism which mainly concentrates on international institutions' capacity to reduce inter-state conflicts which the realists consider to be inherent in the international system. In fact, states can learn to cooperate in order to promote their mutual interests on the long term.

The fact that states are unitary actors studying in a rational way their own interests are realist assumptions also accepted by the neo-liberalists, but the latter lays a strong emphasis on the idea of cooperation which is possible to be reached at international level and it is even an option which may be often identified in the relations between states⁴. This manner of conceptualizing the relations between states was at the basis of the elaboration of "collective security" concept reified in the creation of organizations such as UN, NATO or the EU. Although they have different natures – political-military alliance, inter-governmental organization etc –, "collective security" concept stood at the base of their creation as all of them suppose Member States' cooperation with a view to ensure collective security, may it be military, economic, political or of other nature. Security dimensions are included in the signification of "interest" concept relying on the specific of each organization and on the evolution of the international security environment. NATO's Strategic Concept is a good example in this regard, as it is a programmatic document meant to lead the entire alliance's vision on security according to the characteristics of the international security environment as well as to the character of identifiable risks and threats. For instance, 2010 Strategic Concept refers, among others, to the need of ensuring security unto energy or cyberspace related risks.

From the subsequent approaches in International Relations – constructivism, theory



of power transition, critical theory, feminist and postmodernist approaches – we will focus only on the constructivist one, which, in our opinion, implies a greater degree of applicability and objectivity, as it takes into account enough factors to explain the way in which states interact on the international stage. Constructivist approaches are characterized by a pronounced connection with social sciences and emerges as a reaction to the fact that classic paradigms fail to take into consideration the social dimensions of the subjects they approach. Constructivists consider that both the ideational and material factors constitute the fundament of international reality⁵. Under these circumstances, the vision on national interest will also be different. National interest is not considered as pre-designed anymore, an immutable factor acting as a catalyst of the actor's behavior on the international arena. The identity and interests of the actors are flexible and create reality in the same way in which social structures create actors and to whom their behavior conforms⁶.

Overall, the concept of interest is a core idea in International Relations, no matter if we consider it pre-designed, constant, accordingly to the Realist logic, or the main mechanism generating a certain type of behavior on the international arena, a mechanism which has the ability to harmonize with other similar mechanisms so that the result of cooperation should be beneficial for all the parts involved in this process or a social construct, a reflection of group identity. Nonetheless, it is relevant that irrespectively of the actor of International Relations one might take into account, its behavior on the international arena is guided by a set of interests defined at national level or at the level of international organizations. Obviously, the primordial, vital interests of each of these actors is survival and security, although the strategies taken into consideration during this study also mention other types of interests, which, altogether, also serve to the achievement of these vital interests.

At the same time, another constant in the issue of national interests is connected to the instruments of power, no matter if we refer to national interests' conceptual approach or to its materialization within official documents or in states' behavior. The instruments of power are sources of power by whose implementation national interests are defended and promoted and consist in the diplomatic, economic, information

and military instruments. Actually, instruments of national power are “perceptible sources which can be shaped, modified, according to the strategic situation of the internal and international environment, according to national interests and objectives at a certain moment and to the general political line imposed to the state by the national administration”⁷. Moreover, one shall not omit that the instruments of power are also determined by the state's level of power. Their flexibility and the possibility to operate them depend on the main factors which have to be considered when one sets itself to analyze the power of a state in international context (quantitative and qualitative factors).

2. European characteristics of the approach of “national interest” concept

As far as the European construction is concerned, security and defence dimension is not only one of the most recent ones (the crystallization process of this dimension at the EU level is considered an unfinished process, still in progress), but also a dimension implying substantially the notion of “national interest”, its definition by each Member State, the relation between the Member States' national interests, as well as the inclination and possibility to harmonize these interests.

Actually, as long as one speaks about security interests, at the EU level, there can not be identified a European interest as a correspondent of national interest, but only a “common interest” which, in our opinion, is nothing but the reification of the convergence of national interests in a certain situation.

In this sense, we consider it is useful to remind that the Common Foreign and Security Policy (CFSP), which includes the Common Security and Defence Policy (CSDP), has remained EU's inter-governmental pillar. This means that decisions are taken by Member States' heads of state and government. Decisions related to CFSP/CSDP are under the competencies of the European Council, which establishes the guidelines and common strategies. This forum takes its decisions according to the unanimity principle and the EU Council takes the necessary decisions for implementing CFSP/CSDP relying on the guidelines established by the European Council. Sovereignty concept also plays a central role in the approach of this matter. Of course, at EU level, security strategies



can be defined as those elaborated in 2003 and 2008, but they usually refer to “Union’s interests” when we speak about the main security risks and threats common for all its Member States or when the question of the necessity to increase “the convergence of European interests is raised”⁸. Similarly, the Report on the Implementation of the European Security Strategy⁹ often uses the formula “our interest”, which implies the existence of different entities, “our interest” being understood as the area of preoccupations in security and defence where Member States’ interests converge or are in unison.

The CFSP/CSDP evolution, the reaction of EU and its Member States to some events happening on the international arena, as well as world economic and financial crisis have shown that EU’s federal aspiration is still a desideratum far from being reached. EU remains an association of nations which is capable of acting as a unitary actor on the international arena only when the nations composing it succeed in reaching a consensus of their position in relation to some events. Therefore, consensus, disagreement, multiplicity are equally characteristic for the way in which the EU works. The elaboration of a common, homogenous position on the interests they have to defend and on the actions which shall be undertaken at international level in order to promote them are conditioned by two factors – sovereignty and a set of European society common values. The common cultural and civilisational fundament characterizes the European reality, but the implications of sovereignty, national cultures and national interests which, by the treaties lying at the basis of its organization and functioning, the EU commits itself to respect¹⁰ make the “common interest” to exist only when Member States’ national interests coincide or are not contradictory.

Thus, in order to be able to speak about the EU as a unitary actor on the international arena, studies in International Relations affirm that it is necessary for the EU to benefit of autonomy, namely to have the authority to act, to be politically independent, to be out of the control of any other authority¹¹. Autonomy, independence unto other state actors is considered, by the quoted source, the key-condition for being able to speak about institutional independence. But, in the EU case, as far as security and defence are concerned, the guidelines are established by unanimity by the

heads of state and government within the European Council, which may become a framework for promoting and defending national interests.

Additionally, the conceptual novelties brought by the Treaty of Lisbon create new frameworks within which states may pursue their own interests without affecting the functioning or the decision-making process at the EU level. As a consequence, if a certain option of action conforms to its interest, a state may rally to it, but, if not, it may remain outside EU action. The procedure of permanent structured cooperation is such an example, as it is subordinated to the reification of “multi-tier Europe” concept.

This type of cooperation allows to a certain group of states to create an increased degree of integration, being supposed that the others will catch up with them as they will develop the necessary capabilities. But, beyond the implications for strengthening EU’s capacity to assume responsibilities in the international community, inclusively to respond to the increasingly frequent requests of the UN, this also supposes an enhancement of Member States’ liberty to decide in security matters. Actually, each Member State decides in a sovereign manner, in conformity with its national interests whether it is apposite or not to become involved in a European project or action. Permanent structured cooperation approaches this issue, increasing the flexibility of the framework within which security and defence supplementary capabilities can be created. Thus, states which are able and have the will have the possibility to engage in an effort of increasing European military and/or civil capabilities, and states which are not able or/and do not have the will to do so cannot hinder this to happen. Moreover, the effort of the states engaged in a form of permanent structured cooperation does not impact on the interests of the states which have chosen not to involve themselves.

The European political crisis generated by the US decision to attack Iraq in 2003 may be considered an eloquent example of this European characteristic way of making decisions on security and defence. EU Member States’ political elite was divided in two sides – one supporting the intervention in Iraq, which rallied to US position, whose main representative was the United Kingdom, and one opposing to the intervention, represented by France. The lack of cohesion and



the impossibility to reach a consensus among the European leaders made the EU intervention in Iraq difficult to undertake and, finally, without a considerable impact on the crisis management or in increasing the level of security and stability in the region. EU Member States' different, even divergent interests had a considerable contribution to this state of facts. Even more, because of this, EU did not succeed in contributing substantially neither on the civil dimension to the process of crisis management in Iraq.

In this regard, NATO's central role on the European security arena is relevant. North-Atlantic Alliance functions as a collective defence system which supposes the "engagement of all states to mutually defend themselves from an exterior aggression"¹². Beyond the obligations implied by the membership in such an organization, this type of defence also supposes an important national component, reflecting a certain degree of states' responsibility towards promoting and defending national interests, as a consequence of an objective evaluation of their national situation and of the awareness on certain deficiencies regarding the means to fulfill their national interests. The EU, on the other hand, sets itself to develop in the direction of a common security system, which would equal to developing a range of structures endowed with all the necessary means to ensure security and defence; the management of this structure would be entirely assigned to the supra-national organization having constituted it. Therefore, EU's aim is to create a defence system irrespective of the borders established between the Member States but, as long as NATO remains the main security provider in the area and the states' will continue being reluctant towards a supra-national organization's involvement in security matters, progresses in this domain will be registered with difficulty. CFSP/CSDP remain EU's instruments of assertion on the international arena and of promoting its Member States' common strategic interests, but without representing a clearly defined defence system between EU's borders, ignoring the borders between the states composing it, although there are progresses in this direction.

Furthermore, another argument supporting the idea that, concerning the action on the international arena, the EU remains a sum of its Member States' voices is the position adopted by EU and its Member States towards Kosovo's declaration of inde-

pendence. This former Serbian province declared its independence in February 2008, a fact which was not recognized by Serbia, which sustains that this act is, in reality, an ethnic secession undermining the fundamentals of international law. This is the reason which lies at the basis of Romania's decision to rally to Serbia's position towards this issue. The official declaration justifies the position of our country by "Romania's profound and constant attachment to international law and its full and comprehensive observance"¹³. Romania's position is contrary to that of EU and NATO, as well as to that of the majority of states constituting them and may be interpreted as an action through which Romanian state defends one of its vital, fundamental national interests – maintaining its integrity, unity, sovereignty, independence and indivisibility. In this case, one shall take into account whether the creation of such a precedent on the European continent might lead to the emergence of similar requests from some national minorities living on Romania's territory; in this context, one might consider the eventual reclamation of this precedent by the Hungarian minority's radical faction in order to claim independence or political and administrative autonomy of the counties with a Hungarian majority population¹⁴.

The world financial and economic crisis, which began at the end of 2008, brought once again into relief the fact that EU can function coherently only when its Member States' interests coincide. Actually, the world economic and financial crisis has represented a crossroads on the national and European economic security dimension, many of the EU's Member States being under the necessity either to request foreign financial assistance or to provide financial support to other EU Member States, putting to the test the solidarity among them. Interdependency between national economies has made it necessary to identify measures to be taken at European level, but they turned out to be difficult to be established due to the great gap between Member States' development, on the one hand, and, on the other, due to each state's tendency to save, first of all, its own economy. Perhaps this gap created by the economic and financial crisis is most visible at EU level¹⁵. There have been even voices which forewarn on a new "iron curtain" dividing Europe.

Actually, under these conditions, the very basis of the European construction is subjected to a ma-



major challenge as it has to prove that its economic and financial system, which lies at the basis of its development as supranational organization of political integration, is viable and that the EU, per ensemble, is not a project functioning only when the economic conditions are favorable and failing when international economic systems go through changes. Or, in other words, the EU has to find resources to identify a minimum of common interests to keep its Member States united within this supranational organization in order to avoid generating a Realist behavior among them, which would determine a unilateral study of their interests.

Thus, we reckon as eloquent the declaration made by Angela Merkel with the occasion of the EU summit within which there were decided the European banks' recapitalization and the writing off of 50% of Greece's debt; in this context, German chancellor asserted that what is good for Europe is good for Germany too and that could be proven by the fifty years of peace and prosperity in Germany and in Europe, but that nobody should take for granted another fifty years of peace and prosperity in Europe, because there is no guarantee. She also stated that if the euro fails, Europe will fail and that this should not happen¹⁶. German chancellor's declaration clearly shows that EU has an economic fundament and if this basis crumbled, the whole European construct would disintegrate. Even more, the mention that European peace is not guaranteed under the conditions of financial and economic crisis confirms the idea that the EU as a political integration organization is founded primarily on its economic dimension. In this context, the progresses which have to be registered in the direction of security and defence integration, of creating and consolidating a common strategic vision for all EU Member States and of reaching a consensus among them seem to belong to the far future as, for the time being, the priority is to outrun not only the economic and financial crisis, but also the political one. The European political crisis generated by the economic and financial one could be understood as a loss of legitimacy by the European political elite. More and more studies argue that the European financial market is not stable and that it could break up¹⁷, implying, at a considerable extent, the possibility for the entire organization to disintegrate, which might throw the European states in a Realist-type behavioral logic. Therefore, although a great part of European

states are led by leaders attached to the European idea, by its benefits, the sequels of the economic and financial crisis are obviously negative and their impact on the political system will be dramatic¹⁸.

Economic and financial advantages brought by the EU cannot be questioned, but the fact that its Member States keep a great extent of their sovereignty, the definition, at national level, of security strategies and of national interests, EU's hybrid character (as it functions both on inter-governmental and community rules) do not allow the EU to be considered a unitary actor on the international scene and to ignore the role of its Member States and their interests on the international arena. For instance, France opposed to the intervention in Iraq in 2003 and determined a shallow contribution of the EU to the management of that crisis. Also, France was the one that, in 2011, assumed the leadership of the coalition which intervened militarily in Libya, an operation which was then assumed by NATO, the EU having again a role which may be considered at least marginal. Behind these decisions, there aren't European interests, but national ones, no matter if one took into consideration the effort to balance US power or an area of strategic interest¹⁹. Additionally, EU's Member States' quality as parties to various international organizations contributes to arguing the idea that European states continue to act, first of all, relying on their national interests.

Concurrently, one shouldn't mitigate the importance of a certain international organization membership, irrespectively of considering the EU, NATO or OSCE. All of them concur to maintaining security on the European Continent and in the area of its close proximity. The choice of being part of such an organization is determined by the interests of each state and its membership supposes not only a set of common values, but also the existence of a consensus between national interests of the states composing the respective organization. Actually, concerning the relation between national and common interests, defined at international organizations' level, one may speak about a two-way relation, as they determine each other.

3. Romania's national interests in European context

A good example of the reification of this two-way relation between the national and the common



interests defined at international organizations' level may be identified in the evolution of Romania's strategic visions. Romania's national interests are established within official documents such as the White Paper (2003), Romania's National Security Strategy (2007), and Romania's National Defence Strategy (2010). All these documents refer to Romania's national interests in international context, adapting them to its new conditions or to the changes which occurred in Romania's status on regional and global level (for example, NATO or EU accession). But Romania's vital national interests are mentioned in the first chapter of the Constitution – "Romania is a sovereign, independent, unitary and indivisible National State"²⁰. This enunciation of Romania's vital national interests constitutes the basis of the definition of the other national interests, taking into account not only the resources of national power, but also the power relations established between Romania and the other actors of the international environment, the convergences and divergences between their interests, their capacity to influence Romania's behavior on the international arena.

Another factor which must be considered when analyzing Romania's national interests is the membership to inter-governmental organizations such as EU, NATO and OSCE. They are not only frameworks within which Romania can capitalize at maximum its instruments of power in order to fulfill its national interests, but they also influence the manner in which these interests are defined, as they are founded on a common set of values and interests uniting their Member States and determining them to act in a concerted way on the international arena. Thus, one could note that the provisions of the national documents referring to national interests are in conformity or complementary to the provisions of NATO or EU official documents, such as the Alliance's Strategic Concept or the European Security Strategy.

Moreover, there are voices sustaining that international environment is becoming an "inter-polar"²¹ one, within which great global and regional powers cooperate to manage the increasingly deep interdependencies between them (see the implications of the current economic and financial crisis) and to build a viable multilateral international order. Inter-polarity is defined, in the vision of the quoted source, as being interests-based and under the influence of the issues with which

states have to cope and founded on the procedures which shall be applied in order to elaborate jointly, within international institutions, solutions for their common challenges. Considering its medium power character, Romania's membership to international organizations equals to achieving supplementary instruments to promote and defend its national interests, to assert itself on the international arena, as part of a global pole of power, but with additional responsibilities and obligations to the organizations, per ensemble, as well as to their members.

Each one of the security interests mentioned in Romania's National Security Strategy (RNSS) and in its National Defence Strategy (RNDS) implies using various instruments of power simultaneously or consecutively. These instruments may support reciprocally in promoting or defending a national interest. In view of Romania's level of power and of its relations with the other actors of the international arena, we consider that the analysis of the way in which state's instruments of power are utilized has to have as a starting point Romania's membership to NATO and EU because the mere membership is an assurance of the defence and promotion of its national interests. As an instance, NATO's New Strategic Concept (2010) provides that the most important role of the Alliance is the defence of all its Member States' freedom and security by political and military means. Plus, collective defence' implications offer another unquestionable advantage in this respect, but also a responsibility to other Member States' security. In this respect, states' vital national interests are not only an issue of their national preoccupations, but also of the entire Alliance. As a consequence, in defending its vital national interests, Romania doesn't benefit only from the contribution of its own instruments of power, but also from those of other allied countries'. Actually, by the increase of these non-state actors' role on the international scene, national interests are not conceived only through their connection to a sole state, but they also become interests of the entire organization to whom they belong.

At the same time, EU membership has a similar value – thus, Romania is part of a structure appreciated as being a global pole of power, even if the specialists do not come to terms in this respect. On the one hand, there is a group of optimists considering the EU a significant power



on the international arena provided for its economic development and its implication in various issues in other regions, in CSDP missions, or for its humanitarian support. On the other hand, there is a group of pessimists getting increasingly ample, as we have previously demonstrated, who claim that the EU is nothing but the sum of the European states' voices which continue to act individually on the international arena. Another argument brought by the pessimists consists in the special importance of NATO's role in ensuring its European Member States' security and defence.

The advantages of NATO and EU membership are, nevertheless, undeniable and have influenced Romania's foreign policy during the negotiation process. Thus, the accomplishment of the conditions requested for becoming a member in the two organizations was mentioned as a national interest by the 2001 Romania's National Security Strategy²². At the same time, although when Romania was an EU and NATO candidate state, this aspiration constituted one of the most important national interests of our state, it wasn't an end in itself as it was also seen instrumentally, by taking into account the fact that it implies both advantages and disadvantages. In this sense, we consider relevant the enunciation of this national interest in 2001 RNSSS – “meeting the conditions for Romania's integration as a NATO and EU member. Romania must become a component *with full obligations and rights* of the two organizations, the only ones capable of *guaranteeing its independence and sovereignty and enable an economic, political and social development similar to that of the democratic countries*”²³. As a consequence, the adhesion was a national interest for whose fulfillment Romania operationalized its instruments of power (diplomacy, economy, intelligence and military) but, afterwards, this status allows our country to make the most of these instruments within these organizations in order to promote and defend its national interests. This happens because Romania is a medium power, with limited resources of power but, within the EU and NATO, in return for fulfilling a series of obligations, minor or medium powers may play a relevant role on the international arena and may take part in decision-making processes besides the great powers of the system.

This evolution of defining and enunciating Romania's national interests is subscribed to the

logic of the Constructivist approach of International Relations, according to which international organizations represent a social context contributing to shaping national interests²⁴.

Conclusions

The way in which states define and enunciate their national interests obviously influences their behavior on the international arena. We considered relevant the analysis of this concept, which plays a central role in International Relations' theories, from the perspective of European states because EU's *sui generis* character, the existence of various economic and political integration organizations as well as NATO's role in guaranteeing European security, together with the preservation of well defined national identities offer one of the most complex frameworks within which one can analyze the interactions between states, between national interests and common interests defined with international organizations. Even more, European states' reaction to the economic and financial crisis emphasizes even more the extent at which they are led by national or common interests, established at the European level on the basis of solidarity and common security and welfare.

Recent events on the European political arena demonstrate an undisputable attachment to national interest and the recession into the background of the European one; the increasingly pessimist visions on the future of European Single Market and of the EU itself confirm this trend. However, the fact that EU passes through the final stages of its existence is still a pessimistic, speculative and incautious perspective for which one could find both arguments and counter-arguments. And this because, although the European construction transits an economic and political crisis, although states act more and more prevalently relying on their national interests, the same interests may constitute the fundament of the efforts to overcome this period and to consolidate this integration organization.

BIBLIOGRAPHY:

1. DINU, Mihai-Ştefan, *Evoluţii geopolitice actuale – consolidări şi aspiraţii*, in *Echilibrul de putere şi mediul de securitate (The balance of power and the international environment)*, The



11th Annual International Scientific Session, 17-18 November, Vol. I, Editura Universității Naționale de Apărare „Carol I”, Bucharest, 2011.

2. DUȚU, Petre; BOGZEANU, Cristina, *Reforma instituțională a UE din perspectiva Politicii de Securitate și Apărare Comune*, Editura Universității Naționale de Apărare „Carol I”, Bucharest, 2011.

3. DUȚU, Petre; BOGZEANU, Cristina, *Interesele naționale și folosirea instrumentelor de putere națională pentru promovarea și apărarea acestora: cazul României*, Editura Universității Naționale de Apărare „Carol I”, Bucharest, 2010.

4. DUȚU, Petre; BOGZEANU, Cristina, *Provocări actuale pentru securitatea europeană*, Editura Universității Naționale de Apărare „Carol I”, Bucharest, 2010.

5. FRIEDMAN, George *Europe's Crisis: Beyond Finance*, Stratfor Global Intelligence, 15 November 2011, <http://www.stratfor.com/weekly/20111114-europes-crisis-beyond-finance>.

6. FRUNZETI, Teodor, *Geostrategie*, Editura Centrului Tehnic-Editorial al Armatei, Bucharest, 2009.

7. GOLDSTEIN, Joshua S.; PEVEHOUSE, Jon C., *Relații Internaționale*, Editura Polirom, Iași, 2008.

8. GREVI, Giovanni, *The Interpol world: a new scenario*, Occasional Paper, no. 79, June 2009, European Union Institute for Security Studies, Paris.

9. KOLODZIEJ, Edward A., *Securitatea și Relațiile Internaționale*, Editura Polirom, Iași, 2007.

10. LAWSON, Stephanie, *Relații internaționale. O scurtă introducere*, Editura CA Publishing, Bucharest, 2010.

11. MORGENTHAU, Hans J., *Politica între națiuni. Lupta pentru putere și lupta pentru pace*, Editura Polirom, Iași, 2007.

12. MOȘTOFLEI, Constantin; DUȚU, Petre, *Apărarea colectivă și apărarea națională*, Editura Universității Naționale de Apărare „Carol I”, Bucharest, 2004.

13. Constitution of Romania, available on-line at http://www.cdep.ro/pls/dic/site.page?den=act2_2&par1=1#t1c0s0a1.

14. A Secure Europe in a Better World. European Security Strategy, Brussels, 12 December 2003, <http://www.consilium.europa.eu/uedocs/cmsUpload/78367.pdf>.

15. Report on the Implementation of the European Security Strategy. Providing Security in a Changing World, Brussels, 11 December 2008, S407/08, http://www.eu-un.europa.eu/documents/en/081211_EU%20Security%20Strategy.pdf.

16. Consolidated Versions of the Treaty on European Union and the Treaty on the Functioning of the European Union. Charter of Fundamental Rights of the European Union (Treaty of Lisbon), Publications Office of the European Union, Luxembourg, 2010.

17. Foreign Policy Romania.

18. International Security.

19. The Journal of Conflict Resolution.

20. <http://www.evz.ro>.

21. <http://www.mae.ro>.

NOTES:

1 See Joshua S. GOLDSTEIN, Jon C. PEVEHOUSE, *Relații Internaționale*, Polirom Publishinghouse, Iași, 2008, p. 111.

2 Hans J. MORGENTHAU, *Politica între națiuni. Lupta pentru putere și lupta pentru pace*, Polirom Publishinghouse, Iași, 2007, pp. 24-29.

3 Edward A. KOLODZIEJ, *Securitatea și Relațiile Internaționale*, Polirom Publishinghouse, Iași, 2007, p. 193.

4 See Joshua S. GOLDSTEIN, Jon C. PEVEHOUSE, *op. cit.*, pp. 149-152 and Charles A. KUPCHAN and Clifford A. KUPCHAN, *The promise of collective security*, in *International Security*, vol. 20, no. 1, Summer 1995, pp. 52-61, available at <http://jstor.org/stable/2539215>.

5 Stephanie LAWSON, *Relații internaționale. O scurtă introducere*, CA Publishing Publishinghouse, Bucharest, 2010, pp. 22-23.

6 Edward A. KOLODZIEJ, *op. cit.*, p. 335.

7 Teodor FRUNZETI, *Geostrategie*, Editura Centrului Tehnic-Editorial al Armatei, Bucharest, 2009, p. 51.

8 A Secure Europe in a Better World. European Security Strategy, Brussels, 12 December 2003, <http://www.consilium.europa.eu/uedocs/cmsUpload/78367.pdf>.

9 Report on the Implementation of the European Security Strategy. Providing Security in a Changing World, Brussels, 11 December 2008, S407/08, http://www.eu-un.europa.eu/documents/en/081211_EU%20Security%20Strategy.pdf.

10 Consolidated Versions of the Treaty on European Union and the Treaty on the Functioning of the European Union. Charter of Fundamental Rights of the European Union (Treaty of Lisbon), Publications Office of the



European Union, Luxembourg, 2010, p. 18. The second paragraph of the fourth article stipulates “The Union shall respect the equality of Member States before the Treaties as well as their national identities, inherent in their fundamental structures, political and constitutional, inclusive of regional and local self-government. It shall respect their essential State functions, including ensuring the territorial integrity of the State, maintaining law and order and safeguarding national security. In particular, national security remains the sole responsibility of each Member State”.

11 Yoram Z. HAFTEL, Alexander THOMPSON, *The Independence of International Organizations: Concept and Applications*, in *The Journal of Conflict Resolution*, Vol. 50, no. 2, April 2006, pp. 255-256, <http://www.jstor.org/stable/27638486>.

12 *Analiza securității internaționale*, în <http://www.studiidesecuritate.ro>, apud. dr. Constantin MOȘTOFLEI, dr. Petre DUȚU, *Apărarea colectivă și apărarea națională*, Editura Universității Naționale de Apărare „Carol I”, Bucharest, 2004.

13 ICJ Advisory Opinion on Kosovo, <http://www.mae.ro/en/node/2853>.

14 Vladimir PASTI, *Să recunoaștem statul Kosovo? Nu. De ce?* in *Foreign Policy Romania*, no. 14, January/February 2010, pp. 65-66.

15 Petre DUȚU, Cristina BOGZEANU, *Provocări actuale pentru securitatea europeană*, Editura Universității Naționale de Apărare „Carol I”, Bucharest, 2010, pp. 13-17.

16 *Ce se întâmplă când liderii europeni folosesc cuvântul „război”?*, *Adevărul*, on-line edition, 31st October 2011, <http://www.evz.ro/detalii/stiri/criza-ca-razboi-cele-mai-dure-avertismente-951902.html>.

17 Romanian mass-media has recently announced that USB Swiss bank elaborated a study titled “Euro

Break Up – The Consequences” which warns that Europe is in danger from this point of view.

18 George FRIEDMAN, *Europe’s Crisis: Beyond Finance*, Stratfor Global Intelligence, 15 November 2011, <http://www.stratfor.com/weekly/20111114-eu-ropes-crisis-beyond-finance>.

19 According to the French White Paper on Defence and National Security (2008), North Africa is considered a one of the four regions which are of critical importance for French interests. For more details, see dr. Mihai-Ștefan DINU, *Evoluții geopolitice actuale – consolidări și aspirații*, in *Echilibrul de putere și mediul de securitate (The balance of power and the international environment)*, The 11th Annual International Scientific Session, 17-18 November 2011, Vol. I, Editura Universității Naționale de Apărare „Carol I”, Bucharest, 2011. 17-18 November 2011, Vol. I, Editura Universității Naționale de Apărare „Carol I”, Bucharest, 2011, pp. 84-87.

20 Constitution of Romania, available on-line at http://www.cdep.ro/pls/dic/site.page?den=act2_2&par1=1#t1c0s0a1.

21 Giovanni GREVI, *The Interpolar world: a new scenario*, Occasional Paper, no. 79, June 2009, European Union Institute for Security Studies, Paris.

22 Government Decision no. 36 of 18th December 2001 on enacting Romania’s National Security Strategy, http://www.cdep.ro/pls/legis/legis_pck.ht_p_ac_t_text?id=31060.

23 Ibidem (Author’s emphasis).

24 Yoram Z. HAFTEL, Alexander THOMPSON, *The Independence of International Organizations: Concept and Applications*, in *The Journal of Conflict Resolution*, Vol. 50, no. 2, April 2006, pp. 254, <http://www.jstor.org/stable/27638486>.



LEVEL OF CORRELATION BETWEEN THE ROMANIAN LAW AND THE EUROPEAN UNION LAW CONCERNING THE MANAGEMENT OF EMERGENCY AND EXTREME RISK SITUATIONS¹

*Mirela ATANASIU, PhD**

The management of emergency and extreme risk situations consists in a type of specialized management defined as the ensemble of the activities and procedures applied by decision-making factors, by public institutions and services designed to identify and monitor risk sources, to assess information and to analyze the situation, to elaborate prognoses, to settle variable of action and to implement them in order to re-establish the state of normality. Thus, the intern normative framework concerning this type of management is grounded on constitutional and national law disposals in the defence and security field, particularly, on normative acts settling attributions/competencies/responsibilities concerning the national defence area that must be undergone by state's institutions. Consequently, the necessity to correlate national law with the European Union law in the regarded field is obvious. The analysis provided in this paper refers to this correlation/ non-correlation of Romanian law for field's branches of emergency and extreme risk situations' management with the normative communitarian system.

Key-words: management; correlation; legislative analysis; EU; emergency situations; extreme risk; communitarian law system.

In the last decades, there have been significant modifications regarding the genesis, evolution, and frequency of civil emergencies. There have been changes in the periods in which it was expected the apparition of events generating emergency risk situations, particularly, following regional and global climate changes. New types of risks appeared mainly related to technologies, communications and information development but also to new unconventional threats potentially generators of serious negative events. The amplexness, intensity and level of gravity of some types of natural, technological and biological risks have increased. Therefore, their effects, consequences and impact are felt on more extended, often trans-border areas.

Emergency situations which are the object of the management of activities undergone by the existent structures, from the local to the national plan, comprise a wide range of manifestations from the CBRN terrorist attacks to the ones which can be determined by many other risk factors such as natural disasters or more or disasters determined more or less accidentally by human activities.

** Mirela ATANASIU (mirela.atanasiu@yahoo.com), PhD, undergoes her activity in the Center for Defence and Security Strategic Studies from "Carol I" National Defence University, Bucharest, Romania. She has a PhD in „Military Sciences and Information” and participated as expert in national and international juridical phenomena in five research projects financed from the national budget.*



1. The general framework and typology of Romanian law regarding emergency and extreme risk situations' management

In Romania, in 2004, a new simple, flexible and hierarchical emergency situations' management was enacted grounded on modern principles of management and aiming at accomplishing concrete objectives. Its operationalization begun in 2005 and was accelerated by the catastrophic floods. System's performances are strongly related to the level of resources' provision and quality. Crises surveillance is mainly done by the range of actions carried on by persons and institutions with attributions and responsibilities in state's leadership. In Romania, at central level, these bodies are represented by the Romanian Parliament, Presidency, the Supreme Council for State's Defence, Government, ministries and services with attributions into the field.

The National System for the Management of Emergency Situations (NSMES) was established, organized and works in order to prevent and manage emergency situations, to provide and coordinate human, material, and financial resources needed to re-establish the state of normality².

If there are other types of risks or threats able to generate emergency situations on Romanian territory and/or trans-border effects unsettled into normative acts in force and distributed to the Ministry of Administration and Interior by the National Committee for Emergency Situations in order to provide the management or some support functions, the ministerial committee will take measures to distribute and coordinate their management activities with the support of ministries and other central bodies designated by law.

In conformity with the draft of National Integrated System for Crises Management, it will comprise the actual systems of management for different types of crises and will generate reconfigurations and the harmonization of intern legislation inclusively modifications of National System for Emergency Situations' Management.

In order to provide a better communication at national level, there is a project of Informational Management System for Emergency Situations (IMSES) which is an important IT project for Romanian public sector with immediate effects on the increase of the quality and efficiency of services used for emergency situations management at all

levels and on the enhancement of Government's capacity to make rapid and opportune decisions in the emergency situations' actions framework.

Also, as a draft project there is a Strategy for the protection of national critical infrastructures essential to maintain the vital functions of society, of human beings' health, safety, security, and of its social or economic wellbeing and whose disturbance or destruction could have a significant impact at national level as a consequence of the incapacity to maintain the respective functions.

Legislation is a constituent of the national system for intern and extern crises resolution which generate emergency and extreme risk situations and comprises all the normative acts regulating crises of any kind occurring in Romania.

The legislation concerning the management of emergency and extreme risk situations produced by events with reduced probability but with maximum impact can be divided taking into account a range factors among which we shall mention:

- *The type of crisis or conflict to manage:* nonmilitary (legislation on natural hazards and technological accidents management); military (serious social accidents).

- *The area of applicability related to the types of risks:*

- Laws with general or multi-sector applicability;

- Specialized law on involved or damaged elements: human (victims, specialists and experts in emergency situations' management); financial institutions (insurance, budgetary allotments etc.); materials (protection of critical infrastructures, requisition of food, machines etc.); environment.

- *The types of surveyed events* – Romania has national law on: natural cosmic, geo-physical, geo-climatic, ecological etc. hazards; technological accidents (nuclear, technical, chemical, road, railway or air transport) or serious social accidents (wars, revolts, revolutions and extremely serious terrorist attacks).

- *The types of approached risks:* risks for population's health; environmental risks; material risks (damages produced on the infrastructure – buildings; transport networks, grids, IT networks etc.; financial risks (there are included the risks regarding the loss of some contracts, investments etc.).

- *The type of the action pursued in the emergency and maximum risk situations' management* in: the



preventive legislation concerning the insurance of material goods, social and health insurances, environment (water, air, soil, forests) protection, labor protection and security, fire covering and extinction, intolerance, discrimination and social exclusion reduction and the promotion of the respect for diversity and human dignity etc.; juridical regulations regarding: the involved structures, human, material and financial resources distributed, strategies of action, emergency communication etc., post-action legislation constituted by juridical norms adjusted after the experiences accumulated after the interventions in emergency or extreme risk situations, as well as the settled sanctions when perpetrators are identified.

On the national plan, it is seen a juridical interaction at macro (general) and micro (specialized) levels, meaning that legislation has an up-bottom application as there are laws, Government decisions, emergency ordinances, ministerial orders and norms of enforcement reflected in strategies, plans of actions and institutional regulations of functioning with the role to prevent and combat risks.

The general national legislation on emergency and extreme risk situations' management builds the juridical framework the organizations should respect in order to avoid potential risks, and the occurrence of huge crises generated by natural, technological or social factors.

Also, at their turn, juridical regulations are adapted to the means of action for different types of organizations, actors susceptible to be damaged by risks or to be involved in actions undergone in the framework of extreme risk situations' management.

Thus, as regards *natural hazards risk category*, there are needed preventive legislative measures related to the maintenance of critical infrastructure, insurance and consolidation of buildings, means of medical intervention in case the civil population is damaged, means of supply during and after such an event, respectively, all that is related to civil intervention in case of disaster. So, in conformity with the Regional Report of Disaster Preparedness and Prevention Initiative (DPPI) Operational Team³ accomplished under the direct coordination of Stability Pact for South-Eastern Europe, Romania is exposed to the following types of natural hazards: earthquakes, floods, fires, landslides, nuclear, extreme temperatures, drought and storms. Thus,

for this range of natural hazards, there was created a juridical framework comprising regulations used in these situations' management.

It can't be stated that the preoccupation to control the risks is something new. Every organization, every person aiming at reaching some objectives, establishes the activities leading to the assumed goals and, consequently, looks up to identify as many of the "threats" hindering it/him to do so and to take the necessary measures to prevent them in time. So, even we aren't familiarized with risks and risk management concepts, consciously or unconsciously, we act many times in this concern. Therefore, *another category of juridical acts is regarding technological accidents' management*, the means of preventing and combating them. Thus, here are included a series of regulations on the technological risks (juridical norms concerning technological risks, notions of liability, technical risk and technical security, classification of specific risks, presentation and exemplification of risks and their effects in industry, technological risk factors and their analysis, means to diminish technological risks, management certifications etc.).

Romania adhered to the international law on technological hazards field and it was elaborated an inventory of industrial units which subsumed to Seveso II Directive (96/82/CE). This directive refers to the control of activities which may provoke major accidents involving dangerous substances and was implemented in Romania through Government Decision no. 95/2003, entered into force on the 25th of August 2003.

Seveso II Directive settles two categories of risk (major and minor) for industrial units using or storing dangerous substances. In Romania, there are 333 industrial objectives subjected to this directive (245 in the category of major risks and 88 in the one of minor risks). Most of them are related to chemical and petrochemical industry (144 units of major risk and 55 of minor risk)⁴.

One of the most important standards composing the Intern Control Code approved by Order of the Minister of Public Finances no. 946/2005 is the standard referring to risks' management. In conformity with the mentioned standard, every public entity has the obligation to systematically analyze at least yearly the risks incidental to the development of its activities, to elaborate correspondent plans in order to diminish the possible consequences of those risks and to



In millions of American dollars					
2005	2006	2007	2008	2009	2010
2.403	2.476	2.375	2.617	2.225	2.164

Table no. 1 – Military expenditures in Romania

Source: <http://first.sipri.org/search?country=ROU&dataset=military-expenditure>

assign responsible persons for respective plans' implementation.

This practice migrated from the private sector to the public one, therefore, many EU Member States' governments have integrated risks' management in public management reforms undertaken in the late years.

The environment in which every state exists and functions is characterized by some situations regarding the nature and the manifestation form, in a given period of time, of the existent relations between its components as well as the ones between the considered state and other states and international bodies. Usually, in national basic legislative texts, the state of peace is a matter of course and there are direct references to the possibility of the state of war, as well as to some exceptional states (siege, emergency, necessity, alert, etc.)⁵. Therefore, another type of legislation refers to the *management of intervention in the situation of serious social accidents as wars, revolts, revolutions and extremely serious terrorist attacks*.

We consider as part of a special category of legislation, *the juridical norms on emergency situations' management regarding the bilateral or multilateral cooperation on sectors with countries or bodies in areas of common interest*.

National legislation related to the intervention mechanisms in emergency situations by financial allocations from the state budget was transposed in annual plans to assure resources for the structures involved in such interventions. So, in the National Plan for the provision of human, material and financial resources for the management of emergency situations (2008), 11,157,659,000 RON were distributed in this regard, from which 10,608,120,000 RON were allotted to the ministers with attributions in this domain and the rest of the sum to other bodies involved in this activity.

This happened under the conditions when defence budget represented 1.5% from Romanian

GDP (2.617 million American dollars – see the below table), representing 7,558,000,000 RON⁶, and the European Commission evaluated, by its experts, the damages determined by the 2008 floods occurred in the North-Eastern part of our country at almost 11 million Euros⁷ (approximately 36,000,000,000 RON at that date), a sum granted from the EU Solidarity Fund in order to combat this disaster's consequences.

Other normative acts in this area refer to *the way in which the intervention in disaster and emergency situations is made*.

2. European legislation

The European Union has known a net increase as regards the number and gravity of natural and manmade disasters, mainly the first of them registering a significant growth. There is envisaged that casualties in human lives, in economic and social infrastructure destruction, and the already fragile ecosystems decay will aggravate due to climate changes leading to the increase of the frequency and magnitude of extreme meteorological phenomena such as waves of heat, storms and torrential rains⁸.

There are a series of reasons for which disasters' prevention must be examined at European level. It is more than obvious that the disasters aren't limited to national frontiers and can have trans-border dimension (as happened in 2002 floods and forestry fires in 2007). In order to standardize the means of action in emergency or extreme risk situations is necessary a legislative harmonization of the structures involved at national, European and global levels. Also, there were elaborated plans of strategies and many communications and reports between different European institutions.

Disasters can have a negative impact on communitarian policies referring to agriculture and infrastructure. Disasters' economic consequences can negatively affect the economic growth and



EU regions competitiveness (and, consequently, the entire EU). Therefore, there were instituted financing programs to develop the resources and capabilities necessary for the management of some unexpected events' consequences, especially terrorist attacks using chemical, biological, radiological and nuclear (CBRN) weapons.

The Union instituted two instruments to strengthen cooperation between the Member States in the management of natural, industrial or manmade crises and emergencies.

The instruments the Union created to confront these situations are the Civil Protection Community Mechanism (CPCM) and the EU Emergency and Crisis Coordination Arrangements (CCA). The first was created in 2001, under the European Commission's Directorate-General for Environment and the latter has been developed since 2005 and was put under European Council's responsibility.

CCPM was created without referring peculiarly to the crisis situations generated by terrorist attacks but by "Natural and technological disasters"⁹, being mostly meant to consolidate the inter-state cooperation in such situations.

The Council Decision of 8th of November 2007 establishing a Community Mechanism for Civil Protection, the CCPM reform document, also mentions the possibility of "military assets and capabilities" request in order to be used "at a last resort" as part of assistance in the civil protection field assessed by CCPM as transport, logistical and medical means¹⁰.

Still, the reform act also creates another instrument which can involve, in certain situations, the military resources, consisting in the modules for civil protection. By "module" the law-maker understands a group of capabilities of self-sufficient and autonomous, predefined and task- and needs-driven arrangement of Member States' capabilities, or an operational mobile team of Member States that represents a group of human and material resources and can that be defined relying on its intervention capacity or by the mission it can accomplish¹¹. The modules can be composed of resources of one or more Member States granted on voluntary basis. Moreover, these modules are endowed with equipments, training and an operation procedure in conformity with the international regulations.

Thus, at European level, there are created specialized operational, mobile, autonomous,

interoperable and easily sustainable intervention teams. They can be deployed beyond the national borders for a short period of time (from 3 to 48 hours), being able to act individually and also in cooperation with the other modules. At the end of 2007, by a special decision¹², the Commission settles few specialized modules for civil protection as: high capacity pumping; water purification; medium urban search and rescue; heavy urban search and rescue; aerial forest fire fighting using helicopters; aerial forest fire fighting using airplanes; advanced medical post; advanced medical post with surgery; field hospital; medical air evacuation of disaster victims; emergency temporary shelter; CBRN detection and sampling; search and rescue in CBRN conditions. It is good to know that, usually, civil protection modules have mixed character as regards the involved parties, their activity presuming the cooperation between civil and military forces¹³.

In conclusion, the aforementioned modules are the CCPM operational component. They are instruments by which there are managed effectively the consequences of a natural disaster or of CBRN terrorist attack although this isn't mentioned explicitly in the community documents.

Due to the dual nature of disaster types (sudden or slow), the European Union adapted its financial mechanisms of intervention emphasizing, on the one hand, the preventive management activities in the situations of predictable disasters with slow evolution such as pollution and the degradation of the environment and, on the other hand, the countering management activities in sudden emergency situations.

In the category of preventive financial means are the Structural Funds administrated by the European Commission with the goal to grant support at structural level. The Structural and Cohesion Funds are the European Union's main instruments designed to promote the economic and social cohesion and solidarity. Structural Instruments represent an important complement of national policies and contribute directly or indirectly to EU's harmonized development as a whole, and also to promoting a sustainable environment. Both of them are very important for obtaining a sustainable development of competitiveness and labor market. The financial support of Structural Funds is mainly designed to the underdeveloped regions in order to strengthen economic and social



cohesion in the European Union. So, there is the European Regional Development Fund (ERDF) meant to strengthen the economic and social cohesion in the European Union by the diminution of regional unbalances.

ERDF can intervene to support three objectives of regional policy: convergence; regional competitiveness and labor force occupation; European territorial cooperation. For 2007-2013, Romania was granted almost 20 billion euros for the “convergence” objective¹⁴ and 455 billion euros for “European territorial cooperation” objective¹⁵.

The improvement of basic transport and accessibility of the infrastructure is considered an essential priority. Almost 5.3 billion euros (the equivalent of 28% from the total quantity of the distributed quotes) will be expended to reduce our country’s big deficit in infrastructure. The construction of about 1,400 km of new roads will be granted from funds as it is provided by the Trans-European Network of Transport (TEN-T) crossing the EU.

About 445 billion euros from the funds will be invested to develop modern networks of roadways and online public services for enterprises and citizens. The entire sum distributed for investments meant to contribute directly to the environment’s improvement (inclusively water treatment) it’s rising to 8.9 billion euros (namely, almost 45% from the entire sum distributed, representing the biggest proportion, in relative terms, in comparison to other Member States).

About 2.8 billion euros (representing 14.6% of the entire communitarian contribution) will be invested in fields which will contribute directly to the climate change attenuation through a pack of projects on the energy efficiency and also on renewable energy sources benefiting of 604 million euros¹⁶.

The European Union Solidarity Fund (EUSF) is the main financial instrument the EU disposes of to confront natural disasters and to manifest its solidarity unto the regions damaged by a disaster. The Fund was created as a reaction to the devastating floods that affected Central Europe in 2002 summer. Six years later, it was used in 26 disasters of different types: floods, forest fires, an earthquake, a volcano eruption, storms and droughts. Until now, there were assisted 20 different European countries, the total distributed sum going beyond 1.5 billion euros¹⁷.

EUFS can offer financial aid to its Member States and to the countries undergoing EU adhesion negotiations when a major natural disaster occurs, if the direct total prejudices caused by the disaster go beyond 3 billion euros (at the costs of 2002) or 0.6% from the GNP taking into consideration the least number. EU member and candidate states affected by the same disaster can get assistance at their turn even if the prejudices’ value doesn’t reach the settled limit.

Exceptionally, the fund can be also used in the situation of an exceptional natural catastrophe affecting the majority of a region’s population with serious and long-term consequences on economic stability and living conditions. These cases are evaluated individually by the Commission.

EUFS has an annual budget of one billion euros. Every year, a quarter of this sum must still be available at the 1st of October in order to be able to cope with the eventual needs which might appear until the end of the year. For exceptional situations and if the resources remained for the rest of the year aren’t enough, the deficit can be covered from the budget allotted for the following year. The annual sum for extraordinary regional disasters is 7.5% from the EUFS yearly budget (or 75 million euros)¹⁸.

EUFS comes to complete the budget granted by the Member States in order to take some urgent measures as: a) immediate restoration to working order of infrastructure and plant in the fields of energy, drinking water, waste water, telecommunications, transport, health and education; b) providing temporary accommodation and funding rescue to meet the immediate needs of the population concerned; c) immediate securing of preventive infrastructures and measures of immediate protection of the cultural heritage; d) immediate cleaning up of disaster-stricken areas, including natural zones.

EUFS wasn’t meant to cover the costs generated by natural disasters. Mainly, the Fund limits to the losses that aren’t the insurances’ object and don’t compensate, for example, the losses suffered by natural persons. As a matter of fact, the long-term actions, such as the durable reconstruction, economic conversion or prevention can get financial aid by some other instruments as Structural Funds and the European Agricultural Fund for Rural Development (EAFDR).

In 2005, Romania suffered losses of 489 million euros after the spring floods and, latter, 1,050



million euros, following the summer floods. The Solidarity Fund granted Romania 18.8 million euros and, respectively, 52.4 million euros as assistance in confronting those two natural disasters¹⁹.

EU intervention in the fight against natural disasters in its Member States is also materialized as the allotted budgets such as the ones granted to Romania for 2007-2013 period of time by two projects. The first consisted in the construction and rehabilitation of road infrastructure intending to improve the commercial flows and to eliminate the traffic blockages by an increase of the road capacity (thus to be diminished the number of serious accidents and human casualties) and of the railway infrastructure in conformity with actual international technical standards (221.3 million euros/EU contribution). The second program aimed at eliminating the wastes come from a plant in Piatra Neamț and improperly stored on the streets. Thus, by the introduction of safe methods of collection, the program contributes to the diminution of health risks for the area's population by the substantial growth of wastes recycling, the diminution of wastes eliminated in the wastes storages and also by the reduction of water and soil pollution levels.

The reserves and bails inputted in the European Union budget assure the needed flexibility to solve unpredicted situations which may occur along the financial exercise. In the 2001 year budget, as example, were provisioned 0.9 billion euros from which: 0.5 billion euros represent the monetary reserve to cover the currency-related differences of the expenses for agriculture; 0.2 billion euros, the reserve for emergency aid; 0.2 billion euros, the reserve to the loans granted with European Union bail²⁰.

EU juridical regulations are classified on the fields of interest. Such fields are *food* which may affect on the long-term population's health and to activate an emergency situation and *juridical measures for social protection of the victims of those events*. Another one refers to *the prevention and management of technological accidents*.

Also, we consider as another category of European legislation the one regarding *the emergency situations management focused on the combating the risk brought by the terrorist threat*. In this concern, the European Union believes that the UN developed a comprehensive legal framework which EU decided to implement in totality²¹.

The fully and universal implementation of Security Council Resolution no. 1373/2001 and of other Resolutions of the Security Council regarding the fight against terrorism continues to be a priority for the European Union and its Member States.

In the late years, on the one hand, given the terrorist acts occurrence, the deliberate interruption of energy materials provision toward some states, the production of technological accidents caused by human errors in exploitation and, on the other hand, the effects of some natural disasters/calamities emphasizing some national critical infrastructures' vulnerabilities, the European Union Member States have undertaken firm actions in order to settle a common language and means of action to protect their objectives with strategic value.

In June 2004, the European Council requested a global strategy for *the protection of critical infrastructures*. Answering to this request, the Commission adopted, on the 20th of October 2004, the Communication on the critical infrastructures protection in the fight against terrorism framework; the document presents proposals on the means to improve, at European level, the prevention of terrorist attacks on critical infrastructures, the preparedness against the respective terrorist attacks and the reaction to them.

On the 17th of November 2005, the Commission adopted *The Green Paper on a European Programme for Critical Infrastructures Protection (EPCIP)* that exposed a series of options regarding the implementation of an EPCIP action plan and the Critical Infrastructure Warning Information Network. The reactions to this document emphasized the added value of a community framework on critical infrastructures protection. It was recognized the need to enhance the capacity to protect the critical infrastructure in Europe, to help the diminution of these infrastructures' vulnerable elements and it emphasized the importance of main basic principles as subsidiary, proportionality and complementary as well as the dialogue with the interested parties.

In December 2005, The Council of Justice and Intern Affairs invited the Commission to present a proposal for an EPCIP and decided that it should be based on an approach covering all the risks giving priority to the terrorist threat. As this approach is concerned, manmade, natural calamities and technological threats should be taken in consideration in the process of critical



Elements	Romanian legislation
1. General legislative framework	Existent.
2. Instruments to plan the interventions in emergency situations	There are structures, action plans, but not scenarios for different types of disasters and concrete means of intervention.
a) Distribution of resources for emergency situations	There are resources for emergency situations but they are small, by comparison with the losses that can be produced.
b) Distribution of personnel	On a par 90% from the necessary.
c) Distribution of material goods	Uncertain, because there isn't a centralization of them at national level.
3. Food security	In continuous harmonization.
4. Buildings' consolidation	In progress.
5. Insurances of goods	In progress because, in Romania, insurances' importance hasn't been perceived as in the Occidental Europe yet.
6. Labor security and health	There are norms, but generally can't be integrally respected due to the lack of specific means to provide the employees' safety at the workplace, especially, in constructions, transports (where the mortality rate is high).
7. Norms on the protection of the environment	In general, there is a legislative framework but there are also gaps in its application.
a) pollution (water, air, soil)	Environment agreements with civil society in conformity with the EU norms.
b) wastes	In Romania there is a weaker legal framework than in the EU; waste management is at the beginning, the first attempts to organize this activity having begun recently.
c) exploitation of renewable and nonrenewable resources	There is a legislative framework in conformity with EU norms and also a whole range of financial aid from EU but the funds' absorption in national plan is relatively weak.
8. Accidents in transport (road, air, naval)	There are norms and codes to be respected that converge with EU legislation.
9. Terrorism	There are norms and codes to be respected that converge with EU legislation.

Table no. 2 – The preventive national legislation

infrastructures protection with the accent on the fight against terrorism.

In April 2007, the Council adopted the conclusions on EPCIP where it reiterated the fact that the Member States have the final responsibility to manage the critical infrastructures protection measures inside national frontiers, consequently, saluting Commission's effort to elaborate an European procedure to identify and design

European Critical Infrastructures (ECI) and to assess the need to enhance their protection.

Thus, was elaborated 2008/114/EC Directive on the European critical infrastructures identification and designation and on the need to improve their protection. Therefore, the European Community accepts without reserves the fact that critical infrastructures protection in globalization context is not limited to national borders and involves



Elements	Romanian legislation
1. General legislative framework on the management of intervention in emergency situations	Existent but it is necessary a National Integrated System for Crises Management.
2. The intervention of instruments:	Existent but blunt owed to the complicated mechanism of intervention.
a) distribution of resources for emergency situations	Existent but weak and fragmented because is hard to do the transfer of reserve funds from the national to the local level.
b) distribution of personnel	Existent but can appear problems of mobilization because a large part of personnel is part of the ministries being thrown to continue their activity without those personnel along the emergency intervention.
c) distribution of material goods	Existent but hardly to mobilize because of the lack of centralization.
3. Natural hazards, essential components to the intervention:	There exists juridical framework over the mobilization in case of natural hazards (Programs, Strategies, Manuals, etc. as component parts of some Govern decisions, ministerial orders, etc.).
a) human health and life protection	There exist juridical norms stipulating the mean of medical intervention to disasters. There exists even a medical system of intervention to disasters.
b) environment's protection	Generally, there is respected the EU normative framework.
c) critical infrastructures protection	Another strategy is in elaborative phase therefore critical infrastructures protection is fulfilled fragmentary.
d) the material goods insurance component	In 2001, there was instituted the obligatory assurance of buildings.
e) Volunteering in interventions	Mainly, foreign NGOs. On national plan, volunteering actions in this field aren't developed enough and neither the civil population is organized in this regard in order to protect its own goods.
4. Technological accidents (chemical, biological, radiological etc.)	Existent, compatible with the EU.
a) Human health protection	There is the legal framework in this regard.
b) environment protection	On national plan, there are provisions in this regard but due to the rapid change of the requests in this matter of EU standards, the harmonization is rather unsynchronized.
c) critical infrastructures protection	There is legislation on civil protection where intervention is focused on persons and goods.
4. Revolts	There is a juridical framework of intervention ²² .
5. Terrorism	There is a juridical framework of intervention in conformity with EU regulations.
a) persons' protection	There is the juridical framework concerning persons' protection but concerning situations when terrorist acts might occur, we have a deficit of negotiators.
b) critical infrastructures protection	There is legislation for intervention in case of terrorist attack but we also have a deficit in the urban maps to ground plans and which to constitute the basis for antiterrorist exercises.
c) environment protection	There are preventive norms intervening on this type of situations too.

Table no. 3 – The situation of national legislation on intervention

Elements	Romanian legislation
Sanctioning the guilty persons	Exist
Modification of some juridical norms proving to be obsolete along the emergency intervention	There are but it is seen a de-synchronization determined by the difficult legislative process of our country.

Table no. 4 – The post-intervention national legislation situation

common efforts to identify and evaluate their vulnerable points susceptible of constituting “targets” or important reflection nodes of threats against micro and macro-regional security.

The European Union legislation concerning the cooperation in the military crises management framework is extended because the organization is deeply involved in states affected by humanitarian crises such as crises of human rights infringement.

3. Compatibilities/incompatibilities between Romanian legislation and the EU legislative system

The tables below underline the national legislation on the emergency and extreme risk situations’ management compared to European legislation on the protection of the elements identifiable at community level: human beings (food security, labor and health security, medical intervention in disasters, population’s general health), pollution (chemical, biological etc.), revolts or terrorism.

Thus, the EU’s preventive juridical norms are detailed relying on legislative elements in Table no. 2.

In table no. 3, there are explained the results of the comparison between national juridical norms on intervention on the EU’s ones.

In table no. 4, there are illustrated post-intervention national juridical norms by comparison with the European ones.

Conclusions

Romania already disposes at a certain extent of policies on disasters prevention. The action at European community level should complete

the actions undertaken at national level and to concentrate on the fields wherein a common approach is more effective than the national individual approaches.

Effectual Romanian legislation is generally harmonized with the European norms and standards. Still, the legislative system is in permanent transformation in order to transpose the legal international instruments (international treaties and agreements, European *acquis*) and to integrate in an international legislative system.

Under some circumstances, the new legislation is in direct conflict with the previous legislation applied in by a different political regime. The controversial legislation dissipates the roles and responsibilities of diverse ministries, commissions or governmental agencies and nongovernmental organizations. If there are, the scenarios for action’s planning in disaster situations tend to be very conservative and don’t take into consideration the changes happened at population’s structure level (demographic growth/decrease, density of rural or urban environment, active/inactive population etc.), urban development or the whole area of potential major disasters.

The frequent changes which have occurred in governmental organizations recently impacted on the procedures of disasters’ management. There’s needed a revision of management structures existent at all the levels in order to clearly define their roles, responsibilities and capabilities. A key-element for an effective management on local level or on the scene is represented by a well defined management system. The emergency management system must be delegated to the local authorities by written delegation letters wherein their authority to intervene is provided along with their structures and specialists. The management system must comprise the major functioning areas needed for



an effective emergency management: prevention, preparedness, operations' management, planning, administration and logistics. As example, for a response system to be effective (particularly, when it has national range) it is necessary a common responsive approach to disasters in order to assure the communion in terminology, the qualification of intervention personnel, the used procedures and management orientation. If it occurs a disaster that goes beyond the national frontiers there are also needed pre-arrangements on the means to obtain passing visas for the teams of intervention, reserves of food or other reserves necessary for the intervention procedures, or even for the dogs used in activities of rescue and search of the victims of disasters.

Many governmental and intergovernmental programs are actively preoccupied by the probability for some catastrophic events to happen in vulnerable areas. These programs objectives are double-natured, referring to the counteraction of society's malfunctions and to the improvement of productivity in the damaged areas by developing an efficient management of crises situations based on a modern informational system. The programs comprise the action and prevention plans projection for natural calamities situations and the definition of the optimal means to react and post-disaster-reconstruction. The majority of states develop national programs to diminish the danger of floods, landslides, earthquakes or other specific risk effects, insurances for natural dangers etc. The geographical studies on the possibility for such risks to manifest in certain areas and on the conditions have led in many countries to the creation of specialized organizations to determine adequate governmental policies.

The public administration reform is subscribed to Romanian Government action to promote a modern society compatible with the European standards. The reform involves the adoption, implementation and assimilation by the Romanian public administration system of the set of administrative values defining the European space: transparency, predictability, responsibility, adaptability and efficacy.

The society evolution has set as a "sine qua non" necessity the adoption of some legislative initiatives to provide the legal basis for civil emergencies management with special attention to disasters. Moreover, Romania's option regarding

its integration in NATO and EU provided the connection bridge between the bodies with attributions in the field – NATO's Senior Civil Emergency Planning and also with the European Union special structures.

In Romania, there isn't a National Integrated System for Crises Management. The actual legislation doesn't regulate unitarily the management of resources and means of action for all forms of crisis manifestations. The means in which different types of crises are managed relying on the fields in which they happen (mobilization, war, state of emergency, state of siege, disasters, civil protection etc.) are regulated by specific laws and their management is provided by permanent or temporary structures organized for each field.

Presently, there are plans of cooperation in common crises' intervention and management by structures commissioned with defence or civil tasks. Yet, cooperation isn't sustained by a law settling specific responsibilities for each structure. In this regard, it is needed the harmonization with the European Union legislation so as to determine the creation of a unitary national system of crisis management and to settle the responsibilities for institutions with responsibilities in the field. In order to elaborate law draft project and to organize a national system for crisis management is necessary an inter-ministries workgroup under the coordination of Supreme Council for State's Defence wherein to be part all the structures which develop their activity on the basis of an approved activity program. The first emergency is the civil protection which should include elements concerning the intervention in disaster situations along with the attributions from the actual law.

In 2004, Romanian Government adopted the legislative framework (Government's Emergency Ordinance no. 21/2004) to create the National System of Emergency Situations' Management in order to provide the resources and coordinate the emergency situations under the conditions when Romania has great vulnerabilities to natural and manmade calamities as earthquakes (Bucharest is the European capital with the bigger seismic risk and one of the 10 first most exposed cities of the world), floods are also yearly events producing great losses and casualties, landslides (about 20% from the territory present favorable conditions for disasters); ecological accidents in mine exploitations and not only.



The normative act regularizes the creation at central and territorial levels of structures with attributions in the field of emergency situations management, respectively for the coordination, planning and decisional support, with temporary or permanent activity and placed into a hierarchic system after administrative-territorial and responsibility field criteria. These structures provide the unitary and permanent management of all the planning activity and the achievement of prevention, mitigation and elimination of emergency situations' destructive effects.

The National System for Emergency Situations Management is organized by the public administration authorities and is composed of a network of organisms, bodies and structures responsible for emergency situations management constituted relying on the fields of competence and disposes by the infrastructure and resources needed to fulfill their attributions.

Mainly, the national system composition regards: committees for emergency situations; General Inspectorate for Emergency Situations; professional community public services for emergency situations; operative centers for emergency situations; and the commandant.

Romania must promote and apply the concept of inter-agency cooperation in order to prevent and manage crises. Institutionally speaking, the priority remains the creation of National Centre for Crisis Management and, afterwards, beginning from its structure to promote the project of a Regional Center for Crisis Management.

Also, we consider it is necessary to create, at national level, an action framework to implement Global Platform to reduce the disasters' risk for 2005-2015, adopted in Hyogo (Japan).

Another objective to improve the emergency and extreme risk situations management would be the application, together with the other entities with attributions in the field, of the European Commission Directive provisions on Critical Infrastructure and also the settlement of the national action framework in this regard.

We also consider it will be proper to implement an integrated system for the management of state reserves' stocks, of human, economic and material resources possible to be used in emergency situations because, at present, they are shared among institutions with attributions in emergency management and it isn't exactly known what

material goods are the objects of centralization on national plan.

BIBLIOGRAPHY:

1. Draft Opinion of the Committee of the Regions on Towards a Stronger European Disaster Response, NAT-V-012, the 90th plenary session, 11 - 12 May 2011.
2. Disaster Preparedness and Prevention Initiative (DPPI), Regional Report of the DPPI Operational Team, „*The Gorizia Document*”, May, 2001.
3. *Report no. SEC 2011 709 final from the Commission to the European Parliament and the Council, Annual Report on the European Union's Humanitarian Aid and Civil Protection Policies and their implementation in 2010.*
4. *Revista de Protecție Civilă*, new series, no. 1/2009, 15th year.
5. *Natural and Technological Hazards and Risks Affecting the Spatial Development of European Regions*, edited by Philip SCHMIDT-THOMÉ Geological Survey of Finland, Special Paper 42, 153–167, 2006.
6. *European Union Network for the Implementation and Enforcement of the Environmental Law, Effective Enforcement Needs a Good Legal Base: Final Report of the IMPEL Better Legislation Project*, 2003.
7. *2008-2010 National Budget*, synthesis.
8. Ministry of Administration and Interior, the General Inspectorate for Emergency Situations, *Statistical analysis of prevention and intervention activities in emergency situation between 1st of January and 30th of June 2011.*
9. ALMA-Ro Association, *The management of the risk of disaster – work guide for environment NGOs in disaster prevention*, March 2007.
10. Ministry of Administration and Interior, *National plan of ensuring the human, material and financial resources in emergency situations' management in 2008.*
11. European Commission, *2011 Management Plan*, DG Climate Action.
12. BÎLDEA, Marin, *Comunitate și vulnerabilitate: percepție, comunicare, reducerea riscului dezastrelor*, Editura MIRA, 2007.
13. U.S. Department of Defence, *Report of the Defence Science Board Task Force on Critical Homeland Infrastructure Protection*, January 2007.



14. *Address no. 34146/12.11.2010 of the Commission of Insurances' Control of the Parliament of Romania on the legislative proposal on the modification and completion of the Law no. 260/2008 on the compulsory insurance of accommodations against earthquakes, landslides and floods.*
15. *European Commission, Study on the implementation effectiveness of the environmental liability directive (ELD) and related financial security issues*, final report, November 2009.
16. *European Spatial Planning Observation Network, INTERACT-ESPON thematic study on Environmental Hazards and Risk Management*, Final Report, January 2006.
17. *Strategic Plan of the Ministry of Administration and Interior 2007-2009*, synthesis.
18. *The Government of Romania, The stage of the Implementation of the Regional Operational Programme 2007-2012*, 15th December 2010, Bucharest.
19. *Yokohama Strategy and Plan for a Safer World. Guidelines for Natural Disaster Prevention, Preparedness and Mitigation*, World Conference on Natural Disaster Reduction, Yokohama, Japan, 1994.
20. *International Strategy for Disaster Reduction (ISDR)*, 2000.
21. *Government's Decision no. 95/2003 on the control of the activities presenting danger of major accidents involving dangerous substances.*
22. *Government's Decision no. 2288/2004 for the approval of the assignment of the various support functions ensured by the ministries, the other central bodies and the non-governmental organizations in emergency situations' prevention and management.*
23. *Government's Decision no. 1490/2004 on the approval of the Regulation on the Organization and Functioning of the General Inspectorate for Emergency Situations' structure.*
24. *Assessing the dirty bomb threat*, <http://www.isn.ethz.ch/isn/Current-Affairs/Security-Watch-Archive/Detail/?ots591=4888caa0-b3db-1461-98b9-e20e7b9c13d4&lng=en&v33=106533&id=53998>
25. www.air-dc.org – US Prevention Research Centre.
26. *The Programme for the reinforcement of public buildings – the project of diminishing the risks in case of natural hazards and preparedness for emergency situations – Component B: Mitigation of Seismic risk*, available at: <http://www.mdrl.ro/index.php?p=1111>.
27. *Government's Decision no. 762/2008 on the approval of the National Strategy for Emergency Situations' Prevention.*
28. *Eurisc comments*, <http://www.eurisc.org/publications/eurisccomments.html>.
29. *Environment Counseling*, <http://www.cpmmed.ro/consultanta-de-mediu.html>.
30. *OCON ECORISC*; <http://www.oconecorisc.ro/index.php?page=1031&subpage=2046>.
31. *Four elements of the CDP*, <http://www.eda.europa.eu/Strategies/Capabilities/Fourelements>.
32. *Employment protection legislation database – EPLex*, <http://www.ilo.org/dyn/terminate/termmain.home>.
33. *CISDOC - bibliographic database*, http://www.ilo.org/safework/info/databases/lang--en/WCMS_112523/index.htm.
34. *CISTHES – Occupational Safety and Health Thesaurus*, http://www.ilo.org/safework/info/databases/lang--en/WCMS_112576/index.htm.
35. *EU Statistics*, <http://ec.europa.eu/social/main.jsp?catId=787&langId=en>.
36. *Safety of Nuclear Power Reactors*, <http://www.world-nuclear.org/info/inf06.html>.
37. *International Nuclear Safety Group (INSAG)*, <http://www-ns.iaea.org/committees/insag.asp>.
38. *Natural Hazards Web Sites*, <http://www.riskworld.com/websites/webfiles/ws5aa022.htm>.
39. *Commission Implementing Decision of 30.06.2011, on Instrument for Stability – Crisis Preparedness Component (Peace-building Partnership) – 2011 Annual Action Programme.*
40. *EU Solidarity Fund*, http://ec.europa.eu/regional_policy/thefunds/solidarity/index_ro.cfm#6.
41. *The SIPRI Military Expenditure Database*, <http://milexdata.sipri.org/result.php4>.
42. *indexMundi*, <http://www.indexmundi.com/facts/>.
43. *Law no. 481 of 8 November 2004, republished, on civil protection.*

NOTES:

1 The paper is elaborated within the framework of „Interdisciplinary researches for the projection of economic-financial strategies of action for extreme risk



events. Natural hazard and technological accidents” (Cercetări interdisciplinare pentru proiectarea strategiilor economico-financiare de acțiune în evenimentele de risc extrem. Hazarde naturale și accidente tehnologice – PROSTRACT).

2 www.igsu.ro/snmsu.htm.

3 Disaster Preparedness and Prevention Initiative (DPPI), Regional Report of the DPPI Operational Team, „The Gorizia Document”, May, 2001.

4 Evaluarea și cartografierea hazardelor naturale și tehnologice la nivel local și național. Studii de caz, available at: <http://www.scribub.com/geografie/evaluarea-si-cartografierea-ha21541.php>, accessed on 08.10.2011.

5 Dr. Constantin MOȘTOFLEI, Dr. Grigore ALEXANDRESCU, Cristina BOGZEANU, *Managementul consecințelor*, Editura Universității Naționale „Carol I”, București, p. 46.

6 Romanian military expenditures, <http://www.indexmundi.com/facts/romania/military-expenditure>, accessed on 19.10.2011.

7 http://www.gov.ro/saptamana-financiara-published-in-its-october-26th-issue-the-article-entitled-the-executive-interim-but-financially-omnipotent-which_12a107081.html, accessed on 19.10.2011.

8 Commission of the European Communities, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, A Community approach on the prevention of natural and man-made disasters, Brussels, COM (2009) 82 final, 23.02.2009, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2009:0082:FIN:EN:PDF>.

9 Council Decision of 23 October 2001 establishing a Community mechanism to facilitate reinforced cooperation in civil protection assistance interventions, available on-line at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32001D0792:EN:NOT>.

10 Ibidem, Article 4 (5), p. 5.

11 Ibidem, Article 3 (5), p. 5.

12 Commission Decision of 20 December 2007 amending Decision 2004/779/EC, Euratom, as regards rules for the implementation of Council Decision

2007/779/EC, Euratom, establishing a Community civil protection mechanism (notified under document number C(2007) 6464), accessed on 20.10.2011 at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32008D0073:EN:NOT>.

13 Dr. Constantin MOȘTOFLEI, Dr. Grigore ALEXANDRESCU, Cristina BOGZEANU, *Managementul consecințelor*, Editura Universității Naționale „Carol I”, București, p. 42.

14 The „convergence” objective regards the regions characterized by low levels of GDP and force labor occupation, and where the GDP per capita is 75% less than EU range as it shows the 2000-2002 version. It applies for 99 regions representing 35% from EU-27 population and regards the promotion of proper conditions for economic growth and to those that lead to a real time convergence between the Member States and the underdeveloped regions.

15 European Cohesion Policy in Romania, available at http://ec.europa.eu/regional_policy/sources/doc-gener/informat/country2009/ro_ro.pdf, accessed on 21.10.2011.

16 European Cohesion Policy in Romania, available at http://ec.europa.eu/regional_policy/sources/doc-gener/informat/country2009/ro_ro.pdf, accessed on 21.10.2011.

17 See <http://www.europeana.ro/bani/fsue%20fondul%20de%20solidaritate%20al%20uniunii%20europene.htm>, accessed on 22.10.2011.

18 Fondurile de solidaritate UE, accesibil la: http://ec.europa.eu/regional_policy/thefunds/solidarity/index_ro.cfm, accessed on 21.10.2011.

19 Ibidem.

20 Particularități ale sistemului bugetar al Uniunii Europene, available at: <http://www.stiucum.com/finante/finante-publice/Particularitati-ale-sistemului73896.php>, accessed on 21.10.2011.

21 The guide on the common approach of the fight against terrorism, COTER, Bruxelles, 26 May 2003.

22 The EU doesn’t intervene at a national level in such situations unless its intervention is requested by the host-country through the mechanism of crisis management.



EDUCATION, STRATEGIC FACTOR FOR NATIONAL SECURITY

*Viorel BUȚA, PhD**

In this article, the author focuses on identifying the education's role in the complex national security system. Starting with the security dimensions, which the author connects with everyday human activities, national security and human security are being correlated. Hence, education is identified as one of the major factors at the level of the cultural dimension of security, a level from which it can significantly influence other security dimensions, such as the economic, social or military ones.

Key-words: education; culture; national security; human security; cultural dimension of security.

1. Preliminary considerations

The debate over security components and the means through which security can be achieved has become more and more complex and specialized. However, from the field literature in the last sixty years, there could not be found an unanimously accepted definition, hence, especially nowadays, the concept seems more controversial than ever. Therefore, the concept of security remains ambiguous in its contents, because it refers to various aspects and/or values, this possibility being given mostly by the implications of a wide area of contexts and multiple purposes of individuals, governments or the academic environment. It is a concept that implies both contradictions and subtleties.

** Brigadier-General (ret.) professor Viorel BUȚA, PhD (vbuta@unap.ro) is deputy rector and deputy commandant for education with "Carol I" National Defence University in Bucharest, Romania.*

In general, drawing the boundaries of the research area for security is based on analyzing threats, following two main characteristics: the use of exceptional means, such as: use of force, use of disproportionate force, restrictions and/or interdictions in exercising individual rights and liberties and to be considered *existential*, in other words, to regard the evolution of the object referred to (state, nation, values).

The *fields* that are related to security studies are identified starting with the types of human actions that generate them. Hereby, we talk about the *political field* (which implies authority relations, recognition of states and governments), the *military field* (which infers, in essence, coercive means), the *social field* (usually dealt with through the socio-economic aspect), the *cultural field* (which involves identity, ethnic and/or religious aspects), the economic field (focused on financial, production and energetic resources aspects) and the environmental field (which refers to human activities and their impact on the biosphere). One could also find, in disciplinary studies, analysis of the connection between these fields, thus resulting the political-military domain, the socio-cultural domain and others.

Therefore, one could notice that the objects to which security relates depend on the approached field, mentioning: territory, population, armed forces, sovereignty, political project, background ideology, manpower quality and quantity,



collective identity of a nation or ethnic or religious groups, education, access to resources, mainly energetic ones, raw materials supply, financial system regulations etc., food and drinking water sources, biodiversity etc.

However, a thorough analysis of the modern and contemporary security field reveals the fact that the various attempts to achieve a proper security and stability status did not have the intended results in all cases. Most of the approaches regarding security focused on assuring territorial security to the nation state through power relations, especially through military ones. In the last ten years, the shift of the focus on economic aspects of security has led to the identification of other less researched fields, such as energetic security, resources security in general and aspects that involve supplies, food security being more and more discussed. All these tendencies reveal one single thing: a “humanist” aspect of security studies, a science that revolves around the human, and the individual. The concept of human security is one of the concepts that belong to this trend, a concept that combines economy development and military security and other fundamental human rights. As it was promoted by the United Nations (UN), this term meant the lack of fear and worries regarding fundamental human needs.

Thus, *Human Development Report*, issued in 1994 by the United Nations Development Programme (UNDP), focuses on the concept of human security, being a concept directed toward life and human dignity rather than toward armed conflicts¹. Hence, human security had four main characteristics: it was universal, its components were inter-relational, the most proper means of its assurance was through preemptive instruments, and, above all, the human was the measure of the entire construction of this concept. As any concept regarding security, human security is characterized by two key elements: orientation toward future risks and avoiding any perspective that might lead to a deprivation state. As a result, human security relates to the concept of welfare, which can also be considered a unit of measurement for the level of human security. More precisely, welfare can be indicated, at national level, by the personal income, but, as it is stated in the above mentioned report, for a better evaluation of human security it is necessary to take into consideration two more factors: health and education².

Having these elements, we can create a starting point for our research, namely that all human activity fields are related to the three factors mentioned above, and we state that these might be considered strategic factors for the national security. However, our scientific research will be oriented mainly toward the education factor and its strategic importance for the national security, or better said its place and role in shaping any security strategy: national, European or Euro-Atlantic.

It is obvious that there is a direct connection between national and human security. They are complementary concepts and instruments of assurance with common coverage areas. For their practical applicability they have in common armed force, an assurance for diminishing risks and alienating threats.

2. The cultural dimension of security

For years, in the study of international evolution, there has been imposed a new research direction: the one that involves cultural tendencies, ways of thinking and models that shape ideologies in a certain cultural background. This way, there is a possibility of stepping into the depth of a certain belief, of an elaboration system of representations where motivations and their subtle sectors are formed, even unconscious sometimes, but present in individuals' lives and in societies.

Most of the literature in the field of security analysis in the last half of the 20th century does not seem to pay much attention to the cultural dimension of national security. Even though there are some authors that identify the cultural field as being integrated in the modern concept of national security³ together with the traditional ones, most of the times, cultural aspects (ethnicity, religion, language etc.) are dealt with as part of the social dimension.

However, the changes that took place at an international level between the two millenniums forced both science community and political and military leaders to pay more attention to this field.

Therefore, in our analysis we will deal with cultural and social dimensions separately, but we will not neglect the influences that each has over the other, which is natural since the national security system is considered interdependent (the political, military, economic, social, cultural and environment fields being linked, with the processes

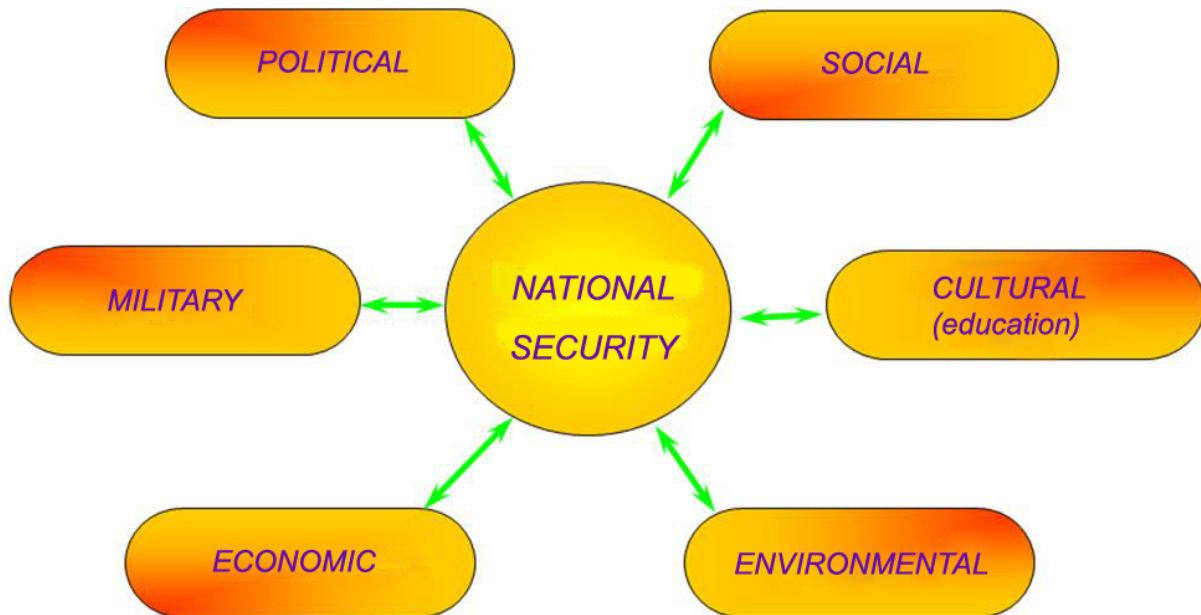


Figure no.1. Security dimensions

at each level changing the entire system in certain cases).

Since states are dominant entities, national security is a main issue not only as related to the state, but also as application on its cultural elements. The states' permeability of both ideas and nations associated with other states, puts an end to the boundary between internal and international security. Therefore, distinctions between citizens of a state and foreigners, between domestic and international policy disappear, and, in this way even the exchange of ideas and communication might lead to cultural threats with political significance (like the reaction of Islamic fundamentalists to the perpetuation of occidental ideas in the Arab world). Language, religion and cultural tradition issues are very important for the idea of state and might need protection in the case of cultural „imports”, sometimes so tempting. A lot of present conflicts are based on beliefs, most of them being the result of religio-political aspects clash of the communities in conflict and their association with governmental policies. The education of adherents in the spirit of hatred or adversity toward everything connected with other cultures, in some cases “militant”, also practicing an „aggressive prozelytism” is an irrefutable fact.

3. The place and role of education in the complex and multidimensional structure of security

As a consequence of the fact that international security environment is more and more fluid, with complex aspects in its evolution, everyday life started to have similar characteristics. In this context, the individual has varied his activities, abilities and attributions, and education plays a very important role in this diversification through its two major components:

- training – transmission of information and knowledge;
- shaping – improving certain abilities, attitudes and behaviours, multiplying the dimensions of the educational process. This is accomplished through proper transposition of strategies at the level of social reality in the socio-cultural environment in which the individual performs his everyday activities. As a result, we may state that education is an organized system of processes of socialization and professional shaping of individuals through which there is created a connection between state's power sources, namely between population, culture and economy/economic production.



Hereinafter, in this study, we will start from the following definition of culture: “*culture consists of derivatives of experience, more or less organized, learned or created by the individuals of a population, including those images or encodements and their interpretations (meanings) transmitted from past generations, from contemporaries, or formed by individuals themselves*”⁴. Therefore, culture refers to habits, practices, language, values and perspectives on the world, derivatives of experience, more or less organized, learned or created by individuals of a civilization, including those images or codes of interpretations (meanings) transmitted from one generation to the other. Hence, individuals are educated in a certain type of culture which shapes and directs the individual’s ability of socializing. Because of this ability of socializing, education has an impact on the mobility of the community social structures, on the society and on the process of the individual’s social integration in a community. So, shifting our focus to security, education is in a functional relation, self-adjustable we might say, with the other dimensions of national security (figure no.1). As we mentioned before, dimensional multiplication of education is achieved through the implementation of strategies at a community/nation/state level. At national level, these strategies are implemented by the state authorities. This implementation process depends on the national interests as they are stated in the national security strategies.

Conclusions

Taking into consideration the issues mentioned above, the military system should develop methods that would allow the evolution of its entire assembly, of the systems that define the necessary capabilities to act in the present security environment.

In a military structure, the command’s practical experience is fundamentally based on the experience gained in the educational process, in school, when conceptual background and military training are learned. For this reason, the educational curriculum for all forms and levels of high military education tries to support a pragmatic approach and to adjust its educational processes to the final beneficiaries: force categories and the General Staff.

Practically, we are dealing with a higher level of the practical nature of the learning process through

focusing on knowledge, and also on the abilities and capabilities that especially command officers and general staff should have, from the battalion echelon to the superior ones, this being the main product that we create.

This is actually an integrated educational process in which its two major components, training and shaping, combine efficiently. The quality of the two components is followed especially by taking into consideration the diversification of the Romanian armed forces missions and their coverage areas, with the accomplishment of the necessary capabilities for successful missions meaning not only interoperability at a technique and equipment level, but also, more important, at human resources level.

BIBLIOGRAPHY:

1. ANTONESCU, Liviu., *Paideia. Fundamentele culturale ale educației*, Editura Polirom, Iasi, 1996.
2. BUTA, Viorel, ION, Emil, DINU, Mihai-Ștefan, *Religie și securitate în Europa secolului XXI – glosar de termeni*, Editura UNAp “Carol I”, 2007
3. BIRZEA, Cezar, *Arta și știința educației*, Editura Didactică și Pedagogică R.A., București, 1998.
4. CUCOS, Constantin, *Pedagogie*, Editura Polirom, Iasi, 1996.
5. DEWEY, John, *Democrație și educație*, Editura Didactică și Pedagogică, București, 1972.
6. LERNER, Richard, *Concepts and Theories of Human Development*, Random House, New York, 1986.

NOTES:

1 Human Development Report, United Nations Development Programme (UNDP), Oxford University Press, New York, 1994, p.22.

2 Human Development Index, United Nations Development Programme (UNDP), Oxford University Press, New York, 1990.

3 Liviu Habian, Ion Giurcă, *Politica de securitate a României în spațiul central și est-european*, Editura A.I.S.M., București, 1995, p. 2.

4 Theodore S. Schwartz, Geoffrey M. White, Catherine A. Lutz, *New Directions in Psychological Anthropology*, Cambridge University Press, Cambridge, 1992, p. 324.



AGGRESIONS TO CRITICAL INFRASTRUCTURES, WITH MILITARY AND NON-MILITARY IMPLICATIONS

*Gheorghe MINCULETE, PhD**
*Daniela RĂPAN***

The unprecedented increase, in the past decades, of risks, hazards and threats towards vital objectives of states and international bodies, at the same time with the increase of their number and vulnerabilities have lead to forming and settling of the new concept generically called critical infrastructure.

The hazards and threats towards critical infrastructures differ from one country to another, from one organization to another; nevertheless, there can be identified common structural elements, measures taken up to now, compatible functions and responsibilities.

Key-words: critical infrastructure; aggression; threats; hazards; vulnerabilities; risks.

1. General aspects

Current geopolitical and geostrategic trends and prospects are increasingly expanding the concept of “national security” on the economic, information technology and communication technology, diplomatic, environment or other type of components. Critical infrastructures are usually vulnerable to actions of internal and external factors

and are at risk of being destroyed or brought into downtime.

Thus, infrastructures are critical or become so because of their vulnerability to those threats which target them directly or are directed against systems, actions and processes of which they are part of; in this respect, Figure no. 1 is an illustration.

Especially interdependent systems and those based on digitised technology making the connection among regions and continents can easily be touched by malfunctions with impact on a large scale - regional, continental and intercontinental.

That is why they have to be remodeled starting from this reality. Taking into consideration the increasing vulnerability of infrastructures and the fact that they can be produced by multiple causes – human, natural or technological, governments and institutions pay a special attention for insuring their security. This explains why both private and public networks and systems (governmental, military a.s.o.) are protected by physical, legal and informational measures against actions or inactions which could affect their functioning and security.

** Colonel professor Gheorghe MINCULETE, PhD (minculetegh@yahoo.com) teaches at the Logistics, Finance and Accounting Department within “Carol I” National Defence University, Bucharest, Romania.*

*** Daniela RĂPAN (daniela.rapan@gmail.com) works as an expert within the Centre for Defence and Security Strategic Studies and is a PhD candidate at “Carol I” National Defence University in Bucharest, Romania.*

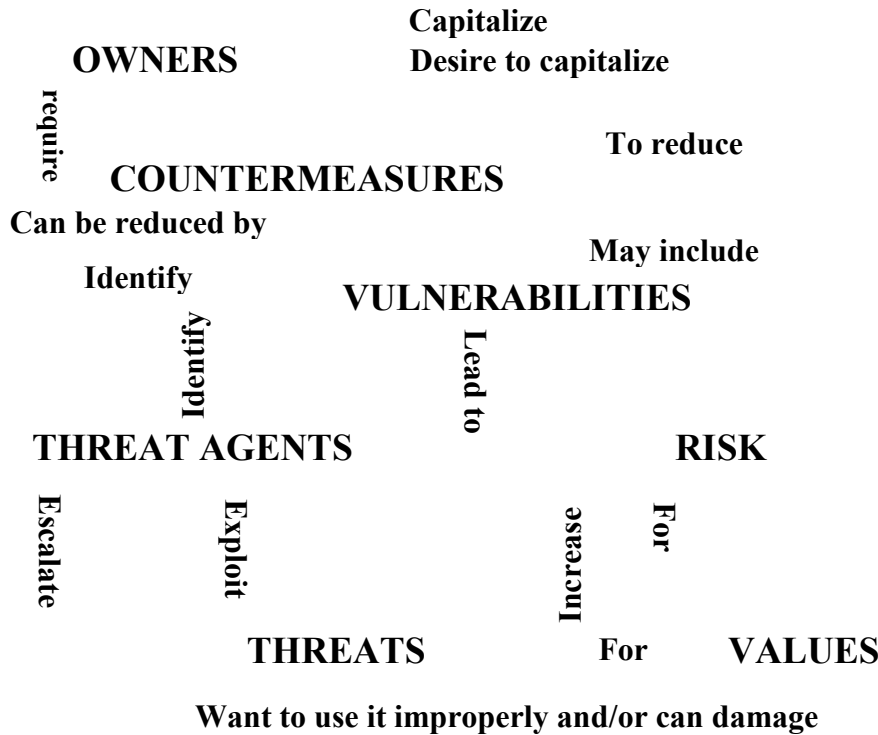


Figure no.1 Aggression mechanism towards CI

Source: http://www.cert-ro.eu/securitate_date/riscuri.html (translated from Romanian), accessed at 14.07.2011

Critical infrastructure's need for security is generated by: a) significant increase in frequency and intensity of natural phenomena, in many cases with extreme events and notable effects throughout the world, especially induced by climate change produced by the evolution of global warming process; b) tendencies of achieving maximum exploitation and operating limits of infrastructure at levels that may affect their stability, due to improper operation, environmental changes, or implementation of new technologies, especially the computer; c) local / zonal events, causing chain accidents or bringing in a state of downtime networks of regional critical infrastructure, and in some cases even global¹.

Threats to critical infrastructures are the capacities, strategies, intentions, plans that enhance a threat to them, materialized by attitudes, gestures, acts, which create states of imbalance or instability and generate states of danger, with an impact on national security. As an indicator of appreciation of a danger or imminent harm, threats can be identified according to the following cumulative characteristics: type of actions envisaged (overt, covert, mixed, violent, nonviolent), shape (attitudes, gestures, acts, facts, events, phenomena, human action), stage (latent, possible, probable,

imminent) and their nature (political, economic, military, social, environmental).

2. Elements of the aggression mechanism towards critical infrastructures

Threats to critical infrastructures are conditioned, favored and facilitated by at least three very important factors:

- lack of flexibility, given by the fixed nature and almost exact location of infrastructures;
- fluidity, perversity of hazards and threats towards critical infrastructures and very broad spectrum of their manifestations;
- the hardly predictable and surprising character of hazards and threats to critical infrastructures.

According to specialists' opinion, the knowledge society redefines the issues and doctrine of national defence; economic issues will not be only the strictly related to business. In this context, security of Romanian critical infrastructures will need to be provided at a high level of complexity, understanding and action.

"Knowledge", as such, will become a "weapon" to defend against the risks, new vulnerabilities that will certainly arise in future decades' society.



Ignorance or mismanagement of public or private economic or technical systems malfunctions can degenerate into risk factors, threats, state of danger or aggression against critical objectives and values, national interests and needs.

Aggression against critical infrastructure usually materializes in violent or nonviolent actions, conducted by artificial means (armed, electronic, psychological or information actions, on the basis of strategies and plans of an entity: states, pressure groups, non-state actors, centers of power) or because of natural disasters (earthquakes, floods, landslides, falling meteorites, etc.).

Owners / operators of infrastructure are more closely monitored in the process of identifying and subsequently reducing the vulnerability of infrastructure elements and preparing of plans (where applicable, their revaluation) of management after disaster and disaster recovery in order to protect common and personal property, as well as to prepare or to meet emergency imposed by the emergence of a disaster that can have devastating effects on the economy.

Vulnerabilities highlight the identification of the set of events external to the economic and technical systems that threaten the existence of critical infrastructure, information systems, in particular, and are starting elements within specialized risk analysis, taking into account the probability of emergence of hazard elements and negative consequences of the disaster spread²².

Vulnerabilities of critical infrastructure can be the result of subjective elements, which means the inability to adopt a risk-resistant behavior, pressures or temptations or the inability to protect against human or technical penetration. It is estimated that there are generally three levels of vulnerability of critical infrastructure, according to its properties and the possibility of penetration: acceptable, unacceptable and critical vulnerability³³.

In Romania, the most striking vulnerabilities are manifested in: *power systems (generation, transmission and distribution of electricity); transportation network (mainly in air and sea transportation system, works of art for road and railway routes, as well as urban transportation - with particular emphasis on services served by the underground component); telecommunications (voice telephony services by telephone and electronically); information structures (obtaining, processing, storage and transmission of information and information products)*⁴⁴.

With the evolution of the processes of globalization at economic, technological and social level, *risks* towards critical infrastructures are becoming increasingly interdependent. Competition in the provision of reliable services increased because services within and between companies are becoming more closely linked. Critical infrastructure elements, in particular, have become so interdependent, that failure in one element can have serious consequences on others as well.

Uncertainty associated to any result is called risk. Uncertainty may refer to the probability of emergence of an event or to the influence or the effect of an event, if it occurs. The risk occurs when:

- an event occurs for sure, but its outcome is uncertain;
- the effect of an event is known, but the occurrence of the event is uncertain;
- both the event and its effect are uncertain.

Risk factors regarding critical infrastructures refer to situations, circumstances, factors, conditions or internal and external circumstances, sometimes doubled by action, that cause or favor the materialization of a threat to them, depending on a certain vulnerability, generating effects of insecurity. Risk factors specific to them are listed in the national security strategies and in information estimates of national interest.

According to national regulations and to Romanian specialists' assessments, risks and vulnerabilities regarding the functioning of critical infrastructure within the socio-economic areas can be classified according to determinant / favoring factors and the environment they come from⁵⁵.

Thus, the risks for critical infrastructures can be classified according to: *structure, expansion, omnipresence and consequences (irreversible, immediate or long-term consequences, etc); malfunctions / failures, the probability levels associated with their production and human action potential (aversion / mobilization); triggering factor (hardly predictable event with major impact, minor events with varying degrees of risk consequences) and the vulnerabilities of a system / systems; the nature, degree of ambiguity and uncertainty involved*⁶⁶.

The fulfillment of the objectives by an organization (company, public institution) classified in the field of critical infrastructure requires knowledge and multiple risk taking. The risk management process for critical infrastructure

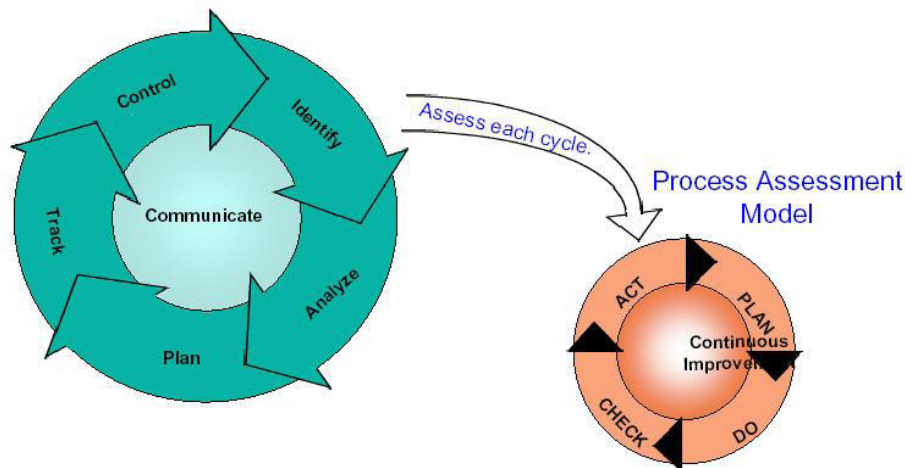


Figure no. 2 A model of the risk management process

Source: Mihaela ULIERU; Paul WORTHINGTON, *Adaptive risk management system (arms) for critical infrastructure protection*, *Emergent Information Systems Laboratory, The University of Calgary*; <http://www.cs.unb.ca/~ulieru/Publications/PubWeb/Ulieru-Worthington-Autonomic-corrected.doc.>, accessed at 15.07.2011.

protection includes several phases, out of which we mention: *risk planning / scheduling*, *risk identification*, *risk analysis* and *risk response*.

In order to be pursued, risks are subject to planning embodied in an appropriate plan. The risk element has a measurable probability to deviate from this plan. Strategies, plans and programs of the organizations are documents that allow reality prefiguring and then confronting actual achievements with expected results in the management of critical infrastructure protection.

Identification of risk is achieved by making checklists, organizing meetings to identify risks and analyzing archived documents. *Risk analysis* uses methods such as: determining the expected value, Monte Carlo simulation and decision trees. *Response to risk* includes measures and actions to reduce, eliminate or risk distribution⁷⁷. A model of risk management process is shown in Figure no. 2.

In all cases, achieving the objectives and projects of an organization involves identification of risks and multiple risks taking, such as: environmental or internal changes, design strategies unrealistic, errors and omissions in design and execution, etc.

Typically, infrastructure is not built based on threats or vulnerabilities, although a certain intrinsic safety standard system is always taken into account, but on the vital requirements - stability, status, function and process – of the system, of the meta-system (system of systems) or of the process to which they belong⁸⁸. For example, to achieve water distribution networks there are taken into

account, firstly, the village needs of water supply, the concrete distribution conditions (drinking water sources, distances, routes for pipelines etc..), but also the security of these networks, meaning water transportation safety, prevention of damage, prevention, restriction or removal of nuisance factors action, etc. So, in the future, other factors will have to be taken into account, such as, for example, protection against terrorist attacks, the frequency and intensity of natural disasters, landslides and many other disturbing agents.

Danger states towards critical infrastructure usually highlight the result of materialization of threat or the imminence of an aggression.

Also, the hazards and threats towards critical infrastructure can be grouped according to the location of these facilities, the type of event, the scope, the manner in which they appear and develop etc.

3. Hazards and threats resulting from human activity

Unfortunately, most of the hazards and threats that seriously affect critical infrastructure are caused by people. To this end, we are going to highlight the main hazards and threats towards critical infrastructure, as well as the ones specific to physical and social processes.

a) The main *hazards and threats towards critical infrastructure* are generated by the infrastructure systems or by systems to which they belong.



These types of threats are very numerous and difficult to avoid, as some are natural, others unpredictable. Basically, hazards and threats are as many as systems. Among the most important might be the following situations:

- aging and degradation of infrastructure, namely, the tendency of some infrastructure to prematurely wear out physically and morally because of increased vulnerability, long-term exposure and lack of protection or insufficient protection;

- the evolution of the system toward a new state and as such, the threat of destruction of some of its own infrastructure (fiber introduction leads automatically to the fast degradation of traditional telephone lines and other signal carriers);

- the occurrence of sudden disruptions in the system (unexpected or accidental destruction of components or structures, etc..)

- results of the evolution of other systems, of the pressure exerted by them or because of failure in them, intentionally or unintentionally so.

b) *hazards and threats specific to physical and social processes* are the most complex and have the biggest effects. They usually manifest unexpectedly and may have damaging effects hard to combat. Among the main hazards and threats of trial might be the following situations:

- changes in the conduct of activities due to the action of many disturbing factors;

- economic activities, financial and of other nature to destroy competition;

- battles for resources and markets;

- resistance to the technology and information offensive and asymmetric response;

- arming;

- development of unconventional weapons systems that can be used against critical infrastructures;

- actions of underworld traffickers and organized crime networks;

- terrorism⁹.

4. Hazards and threats to critical infrastructure in cyberspace

*Hazards and threats in cyberspace*¹⁰ aim, generally, at networks, network nodes and vital centers, namely, their physical equipment and systems (computers, providers, connections and network nodes, etc.), as well as other infrastructure housing such means (buildings,

electricity networks, cables, fiber optics and other components). Equally, they also target data and programs warehouses, storage systems, information storage and distribution systems, material support of databases and more¹¹.

But, above all, such hazards and threats aim at IT systems (business, product lines, strategic material supply systems, infrastructure and resources markets, research institutes, communication systems) and develop the actions of management, command and coordination of units engaged in military actions, structures acting on the counterterrorism front, as well as those involved in emergency situations management, which in recent years depend more and more, also in Romania, of computing and communications techniques.

Within the category, in permanent extension, of the hazards and threats against critical infrastructure of cyberspace are the following: the hazards and threats resulted from the battle of big companies for IT supremacy, for resources and markets, asymmetric hazards and threats, developing of subversive and unconventional IT networks; the increasing activity of hackers; cyber-terrorism¹².

Conclusions

The total commitment in the global war against terrorism, in the new era of globalization, and the experience gained during recent or ongoing military operations have resulted in a tendency to reorient the armed forces to super-technologized war and dependent on industrial facilities, as well as on those offered by the modern critical infrastructures.

Critical infrastructures have always represented the most sensitive, the most vulnerable of any system and any process. Critical infrastructures will always have a high degree of vulnerability, because, as a rule, are the first target when aiming to destabilize and even destroy a system or process. Identification, optimization and security of critical infrastructure represent an undisputed priority for the structures it manages or, where appropriate, coordinate, as well as for those who seek to attack, to destabilize and destroy¹³.

In the event of significant disruptions of essential services and facilities in the daily work of the individual or company to which it belongs, it is easy to understand, without additional details, that



critical infrastructures are found or are themselves as a whole, those production capacities, emergency or community services and other administrative facilities designed to provide the services required by modern society, that by the interruption of their normal daily life can affect the daily life of human society and especially can generate damage or destruction of human life.

Infrastructures operating at national, continental or global level are increasingly dependent on other infrastructure and services, of energy sources and resources, of high-tech systems and distribution of information, both vertically and horizontally, to other critical infrastructure and services vital to human communities located globally.

According to specialists, critical infrastructure protection is the landscape of human knowledge, a field whose scientific and operational content is relatively well-defined, having specific research methods at the crossroads of many specialties, such as: national defence and security, civil emergencies management, risk management, protection against disaster, crime prevention and terrorism and ensuring security and public order.

BIBLIOGRAPHY:

1. The National Strategy to Secure Cyberspace, February 2003, p. VII.

2. COUNCIL DIRECTIVE 2008/114/EC of 8 December 2008 on the identification and designation of European critical infrastructures and the assessment of the need to improve their protection

3. Ordinul nr. 660 din 22 noiembrie 2005 al ministrului Economiei și Comerțului privind aprobarea *Ghidului de identificarea elementelor de infrastructură critică din economie*.

4. Ordonanța de Urgență a Guvernului nr. 98 din 03.11.2010 privind identificarea, desemnarea și protecția infrastructurilor critice-art.3, in Monitorul Oficial nr. 757/12.XI.2010.

5. Adrian VÂLCIU, Ion N.CHIUȚĂ , Elena ANGHEL, *Managementul infrastructurii critice a sistemelor electroenergetice*, Editura Electra, București, 2009.

6. Adrian V. Gheorghe, *Analiza de risc și de vulnerabilitate pentru infrastructurilor critice ale societății informatice-societate a cunoașterii*, Universitatea Politehnică București, România, Swiss Federal Institute of Technology (ETH) Zürich,

Switzerland, e-mail: adrian.gheorghe@switzerland.org.

7. Dr.ing. Andriciuc RADU, *Pericole si amenințări la adresa infrastructurii critice naționale*, available at <http://andreivocila.wordpress.com/2010/08/28/pericole-si-amenintari-la-adresa-infrastructurii-critice-nationale/>.

8. Francisc TOBĂ, *Protecția infrastructurilor critice din perspectiva securității naționale*, București, 03 noiembrie 2006.

9. Dr. Grigore Alexandrescu, dr. Gheorghe Văduva - *Infrastructuri critice. Pericole, amenințări la adresa acestora. Sisteme de protecție*, Editura Universității Naționale de Apărare „Carol I”, București, 2006.

10. Mihaela ULIERU, Paul WORTHINGTON, *Adaptive risk management system (arms) for critical infrastructure protection*, Emergent Information Systems Laboratory, The University of Calgary; <http://www.cs.unb.ca/~ulieru/Publications/PubWeb/Ulieru-Worthington-Autonomic-corrected.doc>.

11. Executive Order Critical Infrastructure Protection, <http://www.fas.org/irp/offdocs/eol301htm>.

12. http://en.wikipedia.org/wiki/Critical_Infrastructure_Protection.

13. <http://www.whitehouse.gov/news/releases/2001/10/20011016-12.html>.

14. http://www.cert-ro.eu/securitate_date/riscuri.html.

NOTES:

1 <http://www.scribd.com/doc/49696541/3-Amenințari-La-Adresa-Infrastructurii-Critice>, accessed on 15.04.2011.

2 Adrian V. GHEORGHE, *Analiza de risc si de vulnerabilitate pentru infrastructurilor critice ale societatii informatice-societate a cunoașterii*, Universitatea Politehnică București, România, Swiss Federal Institute of Technology (ETH) Zürich, Switzerland.

3 <http://www.scribd.com/doc/49696541/3-Amenințari-La-Adresa-Infrastructurii-Critice>, accessed on 05.05.2011.

4 *Ibidem*.

5 Ordinul nr. 660 din 22 noiembrie 2005 al ministrului Economiei și Comerțului privind aprobarea *Ghidului de identificarea elementelor de infrastructură critică din economie* (Order nr. 660 of 22 November 2005 of the ministry of Economy and trade regarding the approval of the *Guide to identifying critical infrastructure elements in the economy*).

6 *Ibidem*.



7 Adrian VÂLCIU, Ion N.CHIUȚĂ , Elena ANGHEL, *Managementul infrastructurii critice a sistemelor electroenergetice*, Editura Electra, Bucharest, 2009, p. 23.

8 Dr. Grigore ALEXANDRESCU, Dr. Gheorghe VĂDUVA - *Infrastructuri critice. Pericole, amenințări la adresa acestora. Sisteme de protecție*, Editura Universității Naționale de Apărare „Carol I”, Bucharest, 2006, p.20.

9 *Ibidem*, p.32.

10 *Ibidem*, p.30.

11 *Ibidem*. p.35.

12 Dr.ing. Andriciuc RADU, *Pericole si amenintari la adresa infrastructurii critice nationale*; <http://andreivocila.wordpress.com/2010/08/28/pericole-si-amenintari-la-adresa-infrastructurii-critice-nationale/>

13 *Ibidem*.



MULTIDIMENSIONALITY OF THE MODERN BATTLEFIELD AND A NEW STRATEGIC DIMENSION OF CONFRONTATION

*Iulian ALISTAR**

In the general context of globalization, liberalization of informational flows and quasi-instant access to means of communication, within a society where production and consumption of information represent the most important type of activity, there is the risk that, from subject of information, a populace becomes object of manipulation.

In the contemporary society, which is informational and knowledge based, modern fight transcends from its classic dimensions - namely land, air, sea and, to a lesser extent, spatial - to information dimension, where it aims to counter hostile flows of information and to project correctly, pro-actively and in due time military actions and operations in front of local, regional or international audiences. The modern fight is especially "a fight of ideas" and is produced nowadays in one new dimension where the virtual space, the informational space is the battlefield.

Key-words: informational space; strategic communication; social influence; social media; public opinion; manipulation; hostile information; cyber war.

From the contemporary military phenomenon perspective, new and spectacular evolutions within technical-scientific environment and the

increased pressure coming from social space (referring to the public opinion) have accentuated the tendency of military actions to expand in one new dimension. The high degree of affordability of the modern technology of getting, producing and sending information, universalization of means of communication, the Internet and new socialization media increase today the risks and asymmetric threats to peace, security and stability, which get a hybrid character, associated and generated inclusively by actions within *information environment*.¹

The Internet has been used to promote Bin Laden's ideas of jihad², it made possible the Wiki Leaks' revelations and together with mobile phones networks, it facilitated and contributed to the organization of popular movements and protests that characterized recent revolutions in North Africa and Middle East (2011).

One new and volatile reality created by the high-tech revolution in information and communication stands today in the attention of military professionals, in which context action within information space prevails as a new dimension of the modern military battlefield creating the need for action and reaction and involvement of different military structures.

** Lieutenant colonel Vasile Iulian ALISTAR (iulianalistar@yahoo.com) is a PhD candidate at National Defence University "Carol I" and works within the Ministry of National Defence, Bucharest, Romania.*



Social influence through new socialization media

In the general context of globalization, liberalization of informational flows and quasi-instant access to means of communication, within a society where production and consumption of information is the most important type of activity, there is a major risk that from subject of information, a populace become object of manipulation.

Via SMS messages, e-mails and modern web social networks, repeated calls had been made in Tunisia, Egypt, Libya, Syria, Yemen or Bahrain to foment a rebellion, to go in the streets and protest against local governments and regimes. Meetings had been organized in Tahrir market in Egypt, in Tripoli, Holms and Damask and events like *Friday of rage* (29 April 2011) or *Martyrs' day* (06 May 2011) had been prepared and coordinated by e-mails and Internet.³ New socialization media have been substituted the obedient, subordinate and censored classic information channels within autocratic states and became an efficient tool to change regimes, to oust dictatorships and dictators.

If this could be considered by many as a positive fact, at the same time we should be aware of the risk raised by various structures and criminal organizations exploiting over the increase need for knowledge/information and natural propulsion for socialization of the human beings which by actions within information space can affect the degree of understanding and perceptions of an individual, group or community with regard to a certain reality, can affect and obstruct the conscience and citizens' freedom of choice. Enjoying the anonymity provided by virtual networks, operating through diverse techniques in web applications as Facebook, Twitter, private blogs, chat rooms, You Tube ...etc, criminal elements can coordinate their actions, can group and regroup in there, orchestrating actions conceived to enlist new members, to gain new proselytes by attractive and false stories, merging and transforming reality, facts and figures, by sending hostile and subjective information out of context, appeal of propaganda, conspiracy theories, incitements, rumors and disinformation. For them, e-mail communities and electronic sites managed to provide the needed and desired protection of anonymity when organizing and coordinating anti-social activities, as piracy or terrorism, and become efficient instruments

supporting propaganda and ideological fight of terrorism, separatism, insurgency or separatism.

Augusta Valeriani, professor of Media, Conflicts and International Politics at Bologna University, New Media researcher specialized in Middle East region, in his work, „*Al Qaida and communication strategies*”⁴ draws attention over „*collaborative terrorism*” facilitated by extended and anonymous interaction through Internet. As an example to this, information on jihadist forum *Shumouk Al-Islam*, in Morocco, posting a list with officials who should become terrorist targets shows in an illustrative manner a practical form of criminal cooperation using new socialization media channels.⁵

In the contemporary globalised society, which is informational and knowledge based, general populace can be abundantly informed, but at the same time influenced and manipulated. As some military analysts observed, “*without excluding the war, the future conflicts specific to the post-industrial era will be gradually replaced by those specific to the informatisation period. This will be rather asymmetric in nature, including the action against irregular forces. Military confrontations will be generally technologically disproportionate, characterized by classic actions combined with those within information domain*”.⁶

In reconstruction, stabilization and post-conflict support operations, in the newly created social space, we saw how residual hostile elements continue to conduct a guerilla fight, covert actions, a war of ideas, opposing one superior military force with the force of public opinion. The fight “to inform” the public opinion and get support from population is fiercely conducted through all means and channels, engaging different structures and techniques. From actions and messages like “*night flyers*” in Afghanistan, to opening one newspaper in Iraq⁷, from Al Qaida messages posted on Internet to recorded anti-occidental propaganda videotapes that circulates free in the Muslim world, from imams' rhetoric to the Taliban's press releases, information space accommodates and became a predilection medium through which actions aiming to influence are conducted. Here, nowadays, values, basic truths and realities can be perverted and loyalties shifted by malicious ideas and forged information that shapes and manipulates public opinion and individuals.

Following this idea but in a slightly different manner, related to the malevolent usage of Internet



applications, the insurgent fighters in Afghanistan and Iraq (2004), terrorists, Al Qaida network or similar groups, including modern pirates, get advantage on quasi-general and instant access to modern means of communication, technology and real time possibility of information and exploit the possibility to compile data from many sources and domains (*political, social, economic, religious, events or of other kinds*) to assess opportunities and best conditions in order to plot a criminal act (under a criminal interest). A recent study publicized by US Joint Irregular Warfare Centre emphasized Internet information and programs – Google map is one example – that had been used by the insurgents in Iraq to plan their action on the ground and to better emplace their explosive devices.⁸ This application in Afghanistan can serve the Talibans in order to organize their ambushes against the international coalition forces and can be useful for Somali pirates as well.

Modern confrontation within information space

In the pressing and sometime confusing nowadays reality, too much under the mass-media lens, before, during and after military campaigns/operations at the political and military level of command, there is growing more and more the need to inform the civil society on the aim, purpose and the scope of military actions and their impact on their environment and social life. *“Today, military confrontation involves a very consistent and influent civilian dimension, especially related to mass-media, protection of people and goods, infrastructures and values”*.⁹ If the population is not correctly and in due time informed, protected against rumors, disinformation and manipulations that appears within information environment, if military forces in operations do not act proactively and consistently in the same way in the social space and mass-media, the neutral populace may unfortunately tolerate or even take part in hostile actions.

In the battle within the information space, with an aim to get the support of the population, in the so called *“imagological war”*, victory is no longer achieved by physical annihilation, but by *“occupying the adversary mind”*, his mindset and his ideological space with those representations and perceptions that transform one enemy into a friend.

As military experts recognized, *“usually in the new type of confrontation, the space should not be conquered but controlled, achieving so the strategic supremacy”*.¹⁰ In this philosophy, the modern fight becomes a “battle of ideas” to persuade as many as someone can and is produced in contemporary under the new dimension of combat in which the virtual space, “the information space is the battlefield”.¹¹ Here, by virtue of unclear identity of an aggressor and even of the form of aggression, when effects aim at psychological changes, not physical destructions, there are major challenges that impose training and preparation of military specialists who will understand the social value of communication and the intent of information and messages that have been disseminated by others, in order to “counterattack”.

In the fight against terrorism, United Kingdom has set up, in 2007, the governmental structure *Research Information and Communication Unit (RICU)*, a specialized unit whose mission is „specifically to counter Al Qaida’s efforts to manipulate individual and groups ...to ensue the Government of the United Kingdom communicates efficiently to reduce the risks associated to terrorism...”¹² In this context RICU functionally acts to disseminate messages to various target audiences, exploit information which may condemn terrorism in the eyes of public opinion, develop long term influence campaigns by projecting messages and ideas towards those groups sympathetic with or which generate terrorism, continuously assess technological progress implication and especially of communications means to identify the way it can be used against terrorism, develop analysis, data bases and monitor the information flow.¹³

As information space represents the main vector to inform, influence and “win” audiences support, monitoring and dominating the informational flows become a strategic objective and equally preoccupy political and military leaders nowadays.

In the complexity of military operations at the beginning of XXIst century, the important role of dialogue, information and communication is underlined by NATO under the practical concept of strategic communication (StratCom). Developed in the light of the *effects based operations* concept¹⁴, StratCom represents a relatively new research and action domain¹⁵ that coordinates multiple functions and military specialties designated to act within *information environment*.



In a multidisciplinary and multisectoral approach, StratCom reaffirms the importance of cultural factor and the strategic value of communication within social space, aiming to adapt the decisions of politico-military factors from the perspective of mentality, creeds, values, social norms and socio-economic conditions relevant to a population in a specific area of operations. The novelty and value of this concept resides in the evaluation and assessment of the strategic significance of social space and, as a consequence, the imperative need to exploit communication at all three levels of military action: strategic, operational and tactic.¹⁶

In its practical and actional dimension, StratCom is a process to counter hostile informational flows, serving as well to correctly, pro-actively and in due time project military actions and operations in front of different audiences, local, regional or international, as an analysis and planning instrument within comprehensive approach of security.¹⁷

Through actions within information environment, strategic military communication is striving to counter new risks and threats, and is offering a management of public perception accomplished by the synergic actions of all military instruments of communication (*military public diplomacy, information operations, psychological operations, public affairs operations*). In Afghanistan, Kosovo or Libya, under the principle of transparency and the need to get population support, StratCom becomes part of military plans and strategies seeking to promote and make understood the aim and operations objectives unfolded in front of population by local or regional information circuit. Following such actions, promoting and developing many communication/media channels like www.natochanneltv.com, www.nato.int, www.facebook.com/NATO, www.twitter.com/nato, www.youtube.com/NATO and others, in Libya, NATO received from the population valuable data with regard to Ghaddafi's forces position, military command posts, military systems movement and dispositions.¹⁸

Viewed as a political strategy and an operational instrument, military strategic communication, as this concept was introduced by NATO, represents the specific answer of the Alliance to the envisioned characteristics of conflict in the informational era where the modern fight transcends from its classic

dimensions - namely land, air, sea and, to a lesser extent, spatial - to a new dimension - that of information.

Information environment and cyberwar

In a slightly different perspective but remaining within the information environment, we bring into discussion the concept of *cyberwar*, presented in military literature under the denomination of CNA - *computer network attack*.¹⁹

On the occasion of the *Cyber Security Conference*, held in SUA, in 18 -19 March 2010, a statistic presented that over 120 states have the capacity of initiating cyber attacks, and there were underlined judicial restrictions, namely that "the critical infrastructures of a state should not be affected in such a manner, inconsistent with the *law of the armed conflict* (LOAC) and the provisions of other international treaties and conventions by such actions".²⁰ Cyber attacks can be oriented against the points of critical infrastructure and can provoke indirectly significant physical destructions, possible disproportionately in regard with military objectives and anticipated success and infringe the principle of necessity, discrimination and proportionality described in LOAC.

In respect to this new form of violence, there is a clear tendency of states to use it both in the context of a military operation but also outside of this scope, to intimidate and deter, to affect the good governance of other states or to spy. Using the cyber space under this circumstances raises concerns and questions in front of less explicit international law regulations, where, in general, because of the fact that web attack does not produce directly human lives losses or physical destructions, implicitly is not viewed as "*using force*" or "*armed attack*", under the definition of *aggression*²¹ given by the UN General Assembly and sanctioned accordingly by the provisions of article 2 (4) from the UN Charter.²²

At the same time, if international community will look to an aggression from the effects' perspective and less from the means that are going to be used, the cyber attack may be defined as a form of interference or threat attempt against State's juridical personality or its political, economical or cultural elements²³ that will justify penalty action under the provision of article 51 from the UN Charter.²⁴



Having in mind the aggressions of this type launched against Estonia (2007), Georgia (2008), South Korea (2009) or against international corporations (2009 and 2010)²⁵ we agree these should not be tolerated, and from this point of view we argue against any intention that cyber activities/attacks may become legal forms of coercion during peacetime. This tendency exists in regard with the above mentioned events and, because of the lack of any international prosecuting initiative, proliferation risk of such attacks is getting today more and more real. Even the identity of perpetrators of such attacks usually remain unknown and is covered by the practice of different actors, possible governmental agents, criminal elements, hackers...etc, and nobody appears in front of a criminal court, cyber attacks are condemned from the perspective of *friendly relations and cooperation among states*,²⁶ UN Charter and the basic provisions of human rights.

Russia officially incorporates at the level of its military doctrine the necessity of using the equipment and information systems to evaluate and make prognosis in regard to global and regional politico-military evolutions, and also regarding international politico-military relationships.²⁷ This may suggest the analysis, with the use of information systems, of international media but at the same time, corroborating accusations brought to Russia by Georgia, regarding the cyber attack of its command systems during the war in 2008, and the international community suspicions on Russia, related to the cyber attack committed against Estonia, in 2007, with Russia intentions „of neutralizing possible military threats using political, diplomatically *and other means*”²⁸, this semantic may include, using the information systems for cyber attacks, the more dangerous as they may be oriented against civilian infrastructure.

The information dimension of the modern battlefield refers as well to this form of violence/aggression, against which USA and NATO have recently (2011) promoted their own strategies and policies.

NATO and its Member States have been adopted, in June 2011, a common policy on cyber defence, aiming to protect their own information systems and network, both at the level of the Alliance's command and control structure and national networks, looking to increase their resilience against such a threat.²⁹

USA have issued an international strategy for cyberspace (*May 2011*)³⁰ which put at its basis the need to create international laws to pursue those that will exploit on line systems with criminal intentions. United States looks to encourage international cooperation in this field and to develop states' responsibility, bi-lateral and multi-lateral agreements to promote efficiently the policies on punishment criminal acts within cyber space³¹ saying that “the digital world is no longer a lawless frontier... It is a place where the norms of responsible, just and peaceful conduct among states and peoples have begun to work”.³²

The general idea on international regulation for cyberspace has at its basis the Budapest Convention, an European Union initiative, which defines criminal acts in relation with illegal access and illegal interception, data and systems interferences, computer - related forgery and fraud, racist publications, xenophobia and propaganda promoted through networks ...etc.³³ This, and others international preventive policies and actions against cyber attacks may produce in the future a coherent international legal framework to deter globally such type of aggression.

Conclusions

The actions within information environment are complex and pose new threat to peace and stability and as such, it is necessary to adapt and develop adequate capacity to react and counter efficiently these vulnerabilities and new security challenges.

On the background described by this study, actions related to the information environment should be conceived pro-actively and in a continuous spectrum, focusing on protection and security of information systems but, maybe more important, forcing through the international law a responsible behaviour for everybody using the cyberspace and identifying in due time false rhetoric, hostile messages and criminal propaganda, by accepting good critiques and observations that may counsel decision making factors to adjust accordingly their policies and behavior.

In the contemporary fight of nation states for development and influence, the general geopolitics are known but their geo-strategies become more and more sophisticated, context in which actions in information environment represent a modern approach, with profound implications at



psychological level and communities mindset, susceptible and constructed based on external and heterogeneous influences.

NOTES:

1 "The Information Environment is defined as the virtual and physical space in which information is received, processed and conveyed. It consists of the information itself and information systems." (MC 422/3 – NATO Military Policy on Information Operations).

2 In reference to the ideological propaganda from 1996 and 1988 Fatwa issued by Bin Laden and posted on internet, see www.fas.org/irp/world/para/docs/980223-fatwa.htm.

3 See in this respect on Facebook and Twitter the unrest messages launched to the population during the so called "Arab Spring" events. See www.facebook.com/Syrian.Revolution and www.facebook.com/Liibyan.Revolution, www.youtube.com/watch?v=4EUxhCWD_8s.

4 See medmonitor.blogspot.com/ (25 June 2011) and www.equilibri.net (27 June 2011).

5 See *Global Jihad New* (from 27.06.2011) available at www.memrijttm.org.

6 *Romanian Military Transformation Strategy*, Bucharest, 2007, p.1.

7 *Al-Hawza newspaper*, sponsored by radical Shiite leader Muqtada Al Sadr, was closed down by Coalition Provisional Authority under the accusation to incite on violence against military coalition forces (Iraq, 2004).

8 See *Irregular Adversaries and Hybrid Threats. An Assessment – 2011*, U.S. Joint Forces Command Joint Irregular Warfare Center, p.10. On <http://publicintelligence.net/u-s-joint-irregular-warfare-center-irregular-adversaries-and-hybrid-threats-2011-assessment/>.

9 Eugen, Bădălan; Valentin, Arsenie; Gheorghe Văduva, *Contemporary Military Strategy*, CTEA Edition, Bucharest, 2006, p. 35.

10 *Ibidem*, p.32.

11 Stanley, A, McChrystal (General, US Army), *COMISAF'S INITIAL ASSESSMENT*, International Security Assistance Force Headquarters, Kabul, Afghanistan, 2009, 30 August, pp.1-2, 2-3, Annex D, p.D-1. See http://media.washingtonpost.com/wp-srv/politics/documents/Assessment_Redacted_092109.pdf?hpid=topnews.

12 See <http://cannoneerno4.wordpress.com/2008/01/17/research-information-and-communication-unit/>.

13 See <http://security.homeoffice.gov.uk/about-us/about-the-directorat/RICU/index.html>.

14 "Effect based operations, at strategic level, means using military capabilities in accordance with

all instruments of national power. At operational and tactical level, it implies selective combination of lethal and non-lethal means, to create those effects that support the achievement of military objectives." in *Romanian Military Transformation Strategy*, Bucharest, 2007, chapter.4, point 4.3.

15 See, *NATO Strategic Communication Policy*, 29 September 2009, PO (2009) 0141.

16 At strategic level, StratCom is put into practice, in NATO, by Public Diplomacy Division, SecGen and other high level NATO officials. At operational and tactical level, StratCom is implemented by coordination of information operations, psychological operations and public affairs structures. See Iulian Alistar, *The Sense and Significance of Strategic Communication*, in *Romanian Military Thinking*, Published by RO General Staff, Bucharest, No 2, 2011, p.119.

17 "A means to ensure a coordinated and coherent response to crisis by all relevant actors".,in, *NATO Comprehensive Operations Planning Directive - COPD*, March, 2010, p.7-1. This approach proposes an extended international cooperation among states and organizations, civilians and military, working to provide a climate of peace and stability. Concept issued by NATO on the occasion of Bucharest summit in 2008 and put into practice in Afghanistan.

18 See <http://storify.com/antireb/list-of-tweets-sent-to-and-used-by-nato-to-bomb-tod>.

19 *Allied Joint Doctrine for Information Operations*, AJP – 3.10, 2009, chapter 1, pp. 1 – 11.

20 Jody, R, Westby, *Cyber warfare v. Cyber stability*, Cyber Security Conference, St. Mary's University School of Law, San Antonio, Texas, SUA, 18 - 19 March 2010. (See, <https://www.stmarytx.edu/ctl/pdf/Westby.pdf>)

21 In the UN General Assembly Resolution 2131 (1965) / UN Doc. A/6014.

22 "All Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations."

23 In the UN General Assembly Resolution 2131 (1965) / UN Doc. A/6014.

24 In reference with "the inherent right of individual or collective self-defence..."

25 On 27 April 2007, the Estonian Administration websites have been targeted by a cyber attack that paralyzed central administration for more than a week with large economic implications; in July-August 2008, the presidential and public television website of Georgia has been under cyber attack; in July 2009, the web network of South Korea Ministry of Defence has been targeted; in 2009 Google was under such an attack, and in 2010 the Amazon site as well.

26 See, G.A. 2625 (1970) - Declaration on Principles



SECURITY AND MILITARY STRATEGY

of International Law Concerning Friendly Relations and Cooperation Among States in Accordance with the Charter of the United Nations.

27 See *Russian Military Doctrine*, approved by Russian president, Dimitri Medvedev, on 05 February 2010, art.19, pct.a. See www.carnegieendowment.org/files/2010russia_military_doctrine.pdf.

28 *Ibidem* 7, (point b).

29 See *NATO Policy on Cyber defence* (08 June 2011) and http://www.nato.int/cps/en/natolive/news_

75195.htm.

30 See *International Strategy for Cyberspace*, USA, May, 2011.

31 *Ibidem*, p.19.

32 Barack Obama, *International Strategy for Cyberspace*, USA, May, 2011.

33 See *Convention on Cybercrime*, Budapest, 2001 and *Additional Protocol*, Strasbourg, 2003.



POSSIBLE METHODOLOGIES OF INTERVENTION (PREVENTION) ASSESSMENT UNDER CONDITIONS OF EXTREME RISK

Gheorghe VĂDUVA, PhD*

Intervention, under the conditions of extreme risks, is very difficult. Therefore, it is needed a very exact assessment of the set of challenges, dangers, threats and vulnerabilities of systems and processes that presume the assumption of an extreme risk. The most effective methods of risk and intervention assessment under extreme risk conditions are: the effects' assessment method and interactions' assessment method.

Key-words: intervention; risk; extreme; method; assessment; effects.

The effects' assessment method

One of the most effective methods of assessing the intervention in emergency situations consists in *the effects' assessment method*. Such method begins from the effects' impact on causes and actions. The quality and, obviously, the efficiency of the interventions in emergency situations is generally depending on the following coordinates:

- a) The characteristics of the respective emergency situation;
- b) The level of the danger brought about the phenomenon or phenomena generating the emergency situation;
- c) Level of the acuity of identified and evaluated threats, the sense and direction of these threats;

d) Level of the vulnerabilities of systems, processes and critical infrastructures;

e) Level of intervention's risk and its repartition on the components of structure or structures taking part in the intervention;

f) Systems of priorities defined by laws, legal acts and requested by emergency situation characteristics;

g) Planned and expected results;

h) Generated effects.

All these elements are important and count very much in the quality and efficiency of the intervention. But such intervention assessment method must, firstly, regard *effects*, in their complexity. Under these circumstances, effects precede causes (intervention causes) and generate reconfigurations of intervention depending on the chain of consequences.

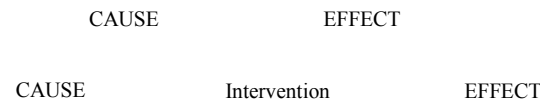
In figure no. 1, it is shown the difference between various types of interventions (linear, complex or effect-based).

Even if linear (direct) intervention seems to be simpler and, consequently, more efficient, the real situation isn't the same. Interventions in emergency situations (calamities, disasters, technologic accidents, sinister etc.) are always difficult, imply a high risk and if effects aren't considered in all their complexity (main, secondary, collateral,

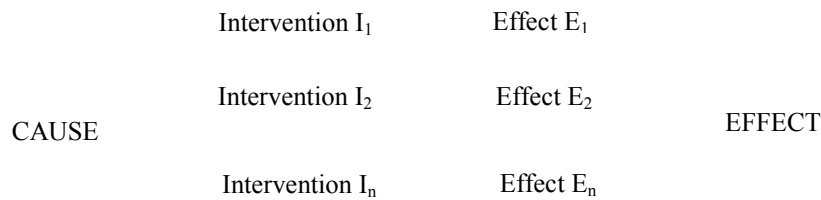
* *Brigadier-General (ret.) Gheorghe VĂDUVA (vaduvageorge@yahoo.fr) is scientific researcher 1st degree at the Institute of Security Studies from "Dimitrie Cantemir" Christian University in Bucharest, Romania.*



LINEAR INTERVENTION



COMPLEX INTERVENTION



INTERVENTIONS BASED ON EFFECTS

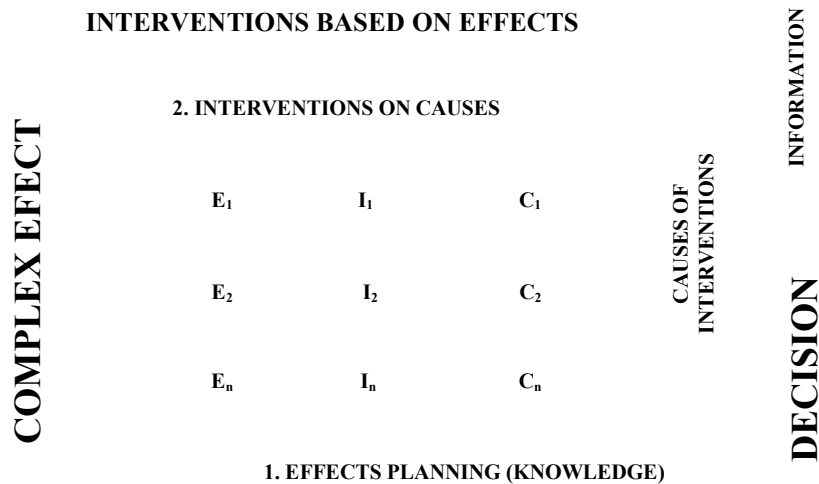


Figure no. 1 – Differences between different types of interventions

wanted, unwanted, planned, spontaneous etc.) intervention’s efficiency will be disputable. Due to the fact that, in all its phases – from the regulation and engagement rules to its effective undergoing –, intervention must equally regard the wanted result and the generated effect (chain of effects).

A possible assessment algorithm of an intervention emergency situation (ES) and, implicitly, of elaborating some assessment grill (on components, actions, results and effects) is presented in figure no. 2.

In planning and carrying out an intervention in emergency situation, effects must be considered.

But the effects aren’t and can’t be obvious, neither in the planning phase, nor in the intervention one. They must be forecasted taking into account the existent databases, precedents and, obviously, the experience of the planner and manager.

Interactions’ assessment method

For example, we have the A, B and C risk events. As regards some precedents, a set of indicators, and also the forecasted or already produced effects there can be identified and assessed the chains of interactions.



Figure no. 2 – Assessment algorithm of intervention in an emergency situation

These chains of connections and interactions are very important not only in assessing the associated risk and the imposed one in extremely dangerous situations but also in other events presuming a level of interventional risk. Usually, events requesting intervention into risk conditions gather the same causes and effects; therefore, risk always tends to climb up to its maximum limit. Still, this gathering is many times hazardous and, as a consequence, unpredictable. Therefore, risk calculation under

the conditions when events (earthquakes, floods, storms, avalanches, landslides, bursting of dykes etc., industrial accidents provoked or amplified by those) are very difficult but very necessary because it provides a risk pre-assessment.

On the contrary, risk increases significantly because the intervention is made without knowing all the necessary data, under unsafe conditions able to generate very serious effects. All the emergency intervention structures take into account such



ANALYSIS, SYNTHESIS, EVALUATIONS

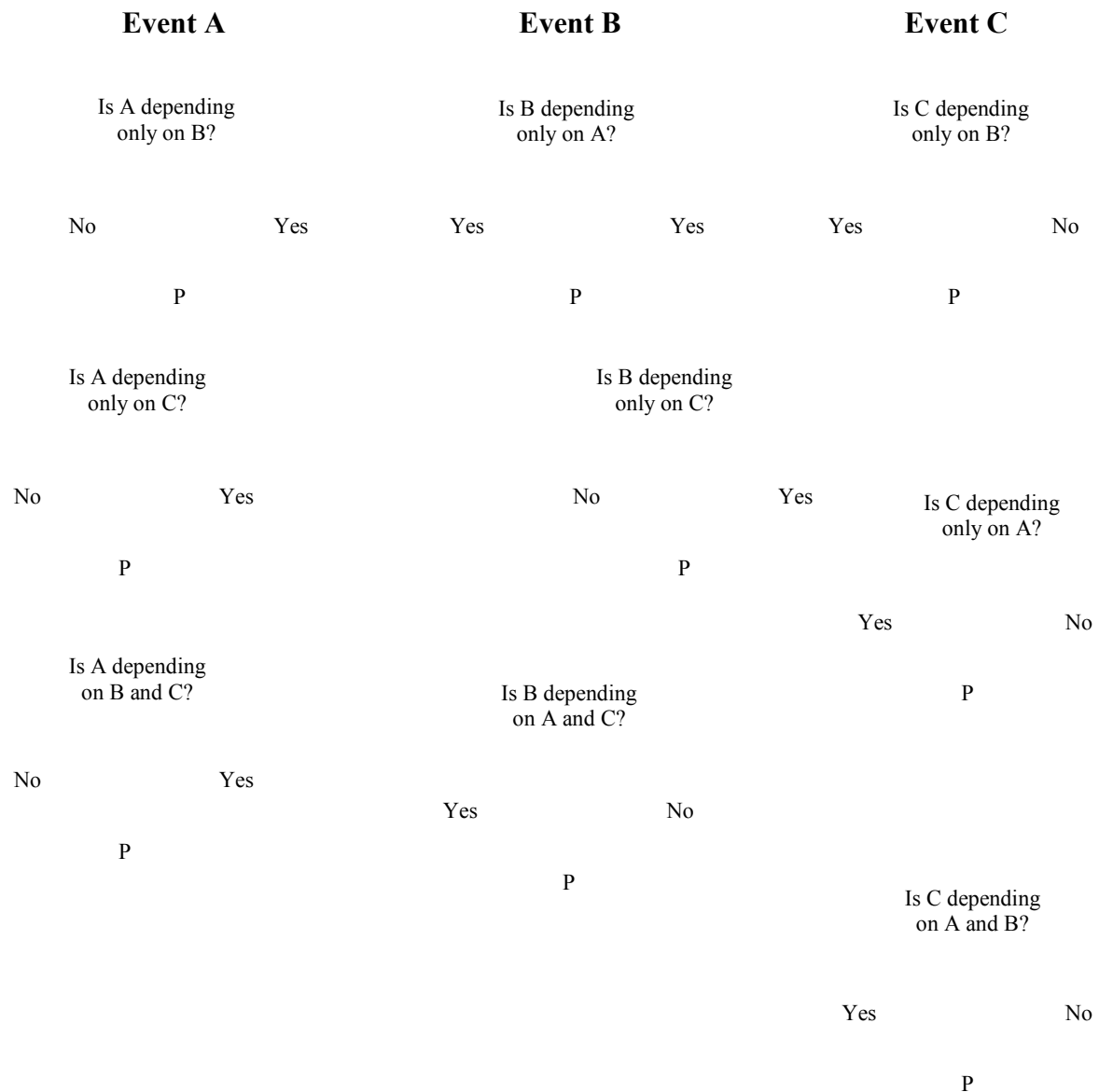


Figure no. 3 – Chain of interactions in extreme risk situations

situations wherein the cumulus of causes and effects generate extremely severe risks. Their acknowledgement and prompt assessment can lead to the reduction of risk level or at least to the capacity to control the risk and this is very important for intervention's quality and efficacy as well as for the security of personnel which is part in the intervention teams.

Methods of elaborating emergency plans

In order to elaborate plans for intervention in emergency situations adequate methodologies are needed.

1. The first set of methods and methodologies is meant to *identify and analyze dangers, threats, vulnerabilities and risks in emergency situations*. Here there are five phases:

- *Inventory*: creating a list of possible dangers, threats, vulnerabilities and risks (DTVR), of risk, inclusively of extreme risk, objectives and objects, on at least three levels – causes of emergency situations (for example: enterprises from chemical industry with the capacity to generate technological dangers and threats); incentive or amplifying factors (for example: unsafe infrastructures, dams, accumulations, lack of effective security systems in



Figure no. 4 – Assessment algorithm for emergency plans elaboration

hydrological field); victims (determined by floods, earthquakes, industrial accidents, blackouts etc.);

- *Analysis*: analyzing dangers, threats, vulnerabilities and their associated risks (for example: the frequency and intensity of some natural hazards – earthquakes, floods, avalanches,

torrents, storms, frost, drought etc.; selecting from the real or potential dangers the ones representing direct menaces; vulnerabilities (for example, the analysis of the characteristics of some infrastructures as viaducts on a transport corridor – length, capacity, supported weight, vibrations,

number of vehicles per hour/day/year, number of accidents etc.);

- *Assessment*: the examination of every potential danger taking into account the precedents of every threat, vulnerability and of imposed, assumed or just foretold risk compounds (the analysis is made separately, but with taking into account the identification and assessment of its impact on human beings and communities, of the favorable and unfavorable factors etc.);

- *Diagnosis* on the basis of the analysis and assessment on an adequate (but unique) scale, it is settled the risk level (for example: absence of risk, low risk, average risk, major risk, extreme risk), for every category of dangers and threats taking into account their intensity, vulnerability level and their favorable and unfavorable factors;

- *Prognosis*: on the basis of the analysis, assessment, diagnosis and the correlation of results, there are elaborated prognoses on the possibility for some extreme risk events to happen in different areas as well as the effects they might generate (as example: torrents forecasted for the next three days in the eastern part of our country can lead to floods in Suceava, Iași, Bacău, Vrancea and Galați counties peculiarly on Prut, Jijia, Siret rivers and the latter's tributary streams).

2. The second set of methods refers to *action and reaction planning in predictable extreme risk events* taking into account the level of danger and threat and, obviously, calculated (forecasted) risk level. Here, three main components are distinguished:

- *Planning of preventive actions*: depending on the level of danger and threat presented by the prognoses as regards predictable or expected meteorological or different nature events, on the actual conditions, forces and means and on the allotted resources, it's elaborated a set of measures permanently updated (as example, in order to limit the effects of an earthquake, in our country, it was conceived an alert system through-in all the maximum risk components in such situation – laboratories, nuclear reactors, trains, energetic systems, natural gas networks etc. –; they are not only warned whereupon the seismic wave was perceived in the epicenter, but also shut down or turned off from networks in order to prevent a disaster);

- *Intervention planning* is done before the crisis, for different variables and level of danger,

threat and, consequently, of risk taking into account policies, strategies, forces, means and resources;

- *Reaction planning*. Reaction is strictly conditioned by the risk's structure, wideness and way of development and, therefore, both the intervention and the reaction must be organized and planned; intervention is an action meant to solve a situation created by a challenge, danger, threat or to cope with (compensate for) a vulnerability, while the reaction is an intervention determined by the oncoming or ongoing event.

3. The third set of methods refers to *the planning the manner to deal with the effects*. Usually, here, are taken into account the following issues:

- *planning of the humanitarian aid*: intervention teams; locations for displaced people; water, food, medicines provision; transport; communications; social problems; etc.;

- *planning of the sanitary assistance*: first aid centers, ambulatory medical assistance, campaign hospitals intervention, means of action in emergency medicine system (emergency hospitals network), water and food sources decontamination, epidemics prevention etc.;

- *rebuilding of strategic critical infrastructures*: the identification, inventory and assessment of damaged structures, early settlement teams of intervention (in compliance to infrastructures specific, allotment of the necessary resources);

- *planning of ecological actions*: the identification and assessment of the effects generated on the environment, early settlement teams of intervention, establishment of the means and resources, early settlement of means of actions.

All these methods of arranging and framing emergency plans under the circumstances of extreme risk are based on a thorough know of the situation, on the existence of specialized structures and of some elements of adequate infrastructures, on the capacity of emergency situations' system management and of extreme risk situations' system management when other extreme risk elements interfere in the dynamics of emergency intervention also needing an extended analysis and a more complex assessment of provocations, dangers and threats, and vulnerabilities generating the extreme risk. Extreme risk, as any other risk, is defined by the cross-cutting between dangers (threats) and vulnerabilities. Usually, the bigger vulnerabilities are, the bigger the risk is.



Figure no. 5 – Scheme of plan in case of catastrophe

Every entity has and must have its action plan for extreme risk situations. In enterprises, firms and institutions there are action plans for fires, earthquakes, floods, technological and ecological accidents but the methods and algorithms to settle and apply these plans don't essentially differ from an unit to another, from a level to another.

A plan of intervention isn't a scenario, but an algorithm, an organized method of intervention on types of situations, emergencies, risk, inclusively of extreme risk. Plans must be coordinated.

They must be interoperable because forces, means, actions and resources are and must be interoperable.



In the world, there is a very large experience as concerns the methodology for the elaboration of plans on the intervention in extreme risk situations because human beings have always needed to intervene in order to protect themselves against effects of some threatening natural phenomena and even against its own activities' effects. The activity to protect human, community and infrastructures against disasters and catastrophes effects is still very complex and needs intelligent, rigorous and sufficiently flexible planning to allow the adaptation of forces, means, resources and actions to the events' concrete conditions. These plans aren't only general, at the whole country's level (although there are such plans), but also plans for every category of risk, field, for every institution and even for every entity where there are humans and values, particularly where patrimony values are involved. In Switzerland, as example, there is a **Consortium for saving the documentary patrimony in case of catastrophe (CosaDoca)**. It elaborates an *Emergency Plan* (to save the documentary patrimony in case of catastrophe – fires, floods etc.) aiming at helping the professionals to act and react efficiently in case of catastrophes that might damage documentary patrimony, the Archive, Collections and Central Library of Polytechnic School from Lausanne².

An emergency plan, in Swiss conception, must comprise:

- Proposals of solutions for catastrophe situations which can be produced especially by fires and floods;
- The definition (settlement) of responsibilities assumed by the involved intervention factors;
- The configuration of intervention in alert and the coordination of rescue operations;
- Presentations of interventions which will be made on documents in order to stabilize or to start some corrective measures;
- The designation of criteria to be respected to establish the priorities to locate, transport, deepfreeze and save the documents affected by calamities (fire, floods);
- The description of interventions after the sinister (deep-freezing, lyophilizing, restoration etc.);
- The indication of process for the re-settlement of the situation.

The emergency plan comprises the following main items:

- First actions at the calamities' (disaster, catastrophe, fire, flood, etc.) place;
- Collections' rescue;
- Post-catastrophe actions;
- The assessment of the experience.

This plan, as many others, has a general component, an algorithm of action at sinister (fires, floods) and a specific component where are prescribed the forces, means and resources needed for every phase of intervention's preparation and effectuation. It is very important for the forces, means and resources to be previously known and prepared because intervention's process implies rapidity and courage and also discipline, rigor and high capacity of action and reaction. As an example, one may consider the general scheme of *Collections' Rescue Plan in Catastrophe Situation (fires or floods) of Cantonal and University Library from Lausanne*.

The priority order is: personnel, collections, materials and equipments.

The Scheme of the plan for catastrophe situation is illustrated in figure no. 5.

Canadians created a Team for Emergency Intervention (TEI) not only for Atlantic Region, but also for other regions. They took as a starting point the dangers implied by the discharge of some tankers charges into the sea, as example. In 1970, Arrow tanker discharged its entire charge into the sea. From all the similar case analyses, it was concluded that it is necessary the information came in due time and some specialists' guidance in environment matters came from a single source.

In 1973, the structure for Environment protection from Canada created *the national and regional committees of guidance on the means of prevention in case of environmental emergencies (ecological accidents) and of preparation the intervention means*. These committees or "teams" are formed by representatives of federal and provincial agencies from Environment Protection and Industry's representatives.

Every regional Committee is named Regional Team of Intervention for Emergency (RTIE).

The Canadian RTIE intervenes in the following types of emergencies:

- Major discharges of oil products;
- Discharges of dangerous substances for human beings and environment;
- Fires or chemical explosions;
- Severe discharges of chemical products or other polluters;



- Every discharge which the local authorities can't solve because of the lack of equipments;
- Every danger for natural resources or for property;
- Every type of discharge threatening to pass over the Canadian frontier.

RTIE has two fundamental mandates: *planning and intervention*.

Planning. The intervention team united yearly for scientific and technical information exchange on some main issues such as planning and emergency and technical measures of intervention in case of discharges. Also, here and now, there are settled very concrete measures concerning their roles for types of emergency intervention.

Intervention. As far as the intervention mandate is concerned, RTIE acts as a specialists' team which counsels the local commandment (CLC) for emergency situations. If the pollution is identified, CLC usually comes from the private sector and, if the pollution is unknown or local, and CLC can't solve the problem, the command is taken by a CLC of a governmental agency.

RTIE plenty proved its utility by intervening in many emergency situations such as, for example, *Kurdistan* tanker shipwreck from 1979 and Vinland forage platform's eruption in 1984. RTIE also helped the provincial agencies when the chemical fire occurred at Canning, in 1984, with the occasion of the fire from BPC at Sydney in 1994 and the fire from the pesticides repository at Sussex, in the next year.

In other words, this team – with attributions concerning the specialty guidance of the persons to intervene – turned out to be very efficient in emergency intervention.

The paper is elaborated within the framework of „Interdisciplinary researches for the projection of economic-financial strategies of action for extreme risk events. Natural hazard and technological accidents” (Cercetări interdisciplinare pentru proiectarea strategiilor economico-financiare de acțiune în evenimentele de risc extrem. Hazarde naturale și accidente tehnologice – PROSTRACT).

BIBLIOGRAPHY:

1. *Climate Changes in Romania, remarked in the 20th century*, <http://www.meteoromania.ro/>

[index.php?id=405](http://www.meteoromania.ro/index.php?id=405), accessed on 19.02.2009.

2. National Agency for Environmental Protection, *Annual Report on the environment state in Romania in 2007, 2008*, http://www.anpm.ro/Files/coperta%202007_200811253710181.pdf.

3. *ESPON HyperAtlas*, http://www.espon.eu/mmp/online/website/content/tools/912/index_EN.html.

4. XXX, *The history of drought in Romania*, 20.06.2007, http://www.realitatea.net/istoria-secetei-in-romania_239557.html.

5. Ministry of Agriculture and Rural Development, *National Strategy on the mitigation of the draught's effects, the prevention and combating land degradation and desertification on short-term*, 2008

6. BARBU, Ion and Ionel POPA, *Monitorizarea riscului de apariție a secetei în pădurile din România*, in *Bucovina Forestieră*, year IX, no. 1-2/2003

7. Press conference with the theme „*The evolution of the drought phenomena in 2009 and its effects in agriculture*”, National Administration of Meteorology, 2009.

8. BĂLTEANU, Dan, *GIS Landslide Hazard Map of Romania. Tool for Disaster Management and Spatial Planning*, in *GIM International*, Vol. 23, Issue 4, April 2009, <http://www.gim-international.com>.

9. RADOANE, Maria, *Analiza hazardului alunecărilor de teren*, Note de curs, http://atlas.usv.ro/www/pagini_profesori/radoane/articole_rad/GA_PPT/Curs%203%20%20Analiza%20hazardului%20alunecarilor.ppt.

10. SCHMIDT-THOME, Philip (ed.), *The Spatial Effects and Management of Natural and Technological Hazards in Europe ESPON 1.3.1*, ESPON, 2006.

11. MARA, Septimiu, *The Forest Fires in Romania*, in Alessandro G. Colomboși Ana Lisa VETERE ARELLANO (eds.), *Lessons Learnt from Forest Fire Disasters*, NEDIES Project, European Commission Joint Research Center, 2003.

12. United Nations, 2009 UNISDR Terminology on Disaster Risk Reduction, Published by the United Nations International Strategy for Disaster Reduction (UNISDR), Geneva, Switzerland, May 2009.

13. J-M. SCHEUREN, O. le POLAIN de WAROUX, R. BELOW, D. GUHA-SAPIR, S. PONSERRE, *Annual Disaster Statistical Review*:



The Numbers and Trends 2007, Center for Research on the Epidemiology of Disasters (CRED), May 2008.

14. Joint UNEP/OCHA Environment Unit, *UN assessment mission - Cyanide Spill at Baia Mare*, March 2000, www.reliefweb.int/ocha_ol/programs/response/unep/rombaimare.html.

15. *Report of the International Task Force for Assessing the Baia Mare Accident*, 15 December 2000, p. 30, www.reliefweb.int/library/documents/eubaiamare.pdf.

16. *Consortium de sauvetage du patrimoine documentaire en cas de catastrophe (CosaDoca)*, www.cosadoca.ch.

17. FAO Corporate Document Repository, *The Role of Local Institutions in Reducing Vulnerability to Recurrent Natural Disasters and in Sustainable Livelihoods Development in High Risk Areas*, 2003, <http://www.fao.org/wairdocs/ad695e/ad695e04.htm>.

18. Disaster Management Training Program, *Model for a National Disaster Management Structure, Preparedness Plan, and Supporting Legislation*, InnerWorks, 1998.

19. *FEMA Strategic Plan. Fiscal Years 2008-2013. The Nation's Preeminent Emergency Management and Preparedness Agency*, 2008.

20. United Nations, *Global Survey of Early Warning Systems*, 2006.

21. United Nations, *International Strategy for Disaster Reduction*, <http://www.unisdr.org/index.php>.

22. US Department of Homeland Security, *National Response Framework*, January 2008

23. European Commission, European Civil Protection, *The Community mechanism for civil protection*, <http://ec.europa.eu/environment/civil/>

prote/mechanism.htm.

24. HM Government, *Emergency Response and Recovery*, Second edition (Last updated 31.07.2009), November 2005.

25. UK Government, *Central government arrangements for responding to an emergency*, 31 March 2005, www.cabinetoffice.gov.uk/media/132685/conops.pdf.

26. Michael NIEMEIER, *Strengthening Disaster Preparedness: a German approach*, Conference of the Konrad-Adenauer-Stiftung and the Cabinet Information and Decision Support Center (CIDS), Cairo, 22 April 2009.

27. Ministère de l'Intérieur, de l'Outre-mer et des Collectivités Territoriales, *La Direction de la Sécurité civile, au cœur des situations d'urgence*, 14 Octobre 2009, www.interieur.gouv.fr/sections/a_1_interieur/defense_et_securite_civiles/presentation.

28. Daniela VALEA, *Contractul de parteneriat public-privat*, http://www.revcurentjur.ro/arhiva/attachments_200412/recjuridi041_23.pdf.

29. *Le contrat de partenariat public-privé*, http://entreprises.pwc.fr/Le-contrat-de-partenariat-public-privé_249.html.

30. *The public-private partnership as a solution for a better management of local communities in Romania, Applied guide for County Councils*, <http://www.ipp.ro/daltematerialeParteneriatul%20public%20privat%20ghid%20practic%20pt%20CJ.pdf>.

NOTES:

1 *Consortium de sauvetage du patrimoine documentaire en cas de catastrophe (CosaDoca)*, www.cosadoca.ch.



INDUSTRIAL ACCIDENT RISK ASSESSMENT

*Cristian BĂHNĂREANU, PhD**

Industrial accidents are a concern for all governments around the world, because it generates every year significant damages and numerous fatalities. They usually occur when the control on technology is lost, affecting directly and indirectly the processes of economic and social development and environmental protection, and thus national security.

The issue of this type of accident is becoming more complicated as, on the one hand, existing infrastructures and plants wear out and accentuate vulnerabilities and, on the other hand, technology progresses while security measures do not always keep pace with new risks, dangers and threats. Although we can not fully avoid industrial accidents, analyzing and assessing risk levels can be an effective method to prevent and minimize their impact.

Key-words: industrial accident; security; industrial risk; industrial danger and threat; industrial risk assessment

Industrial risk

Industrial risk can not be conceptualized as an objective, measurable and independent phenomenon. It is more than a number, a probability. It is a consequence of human action in various fields such as: nuclear power generation, chemical complex activity, air travel or even smoking in prohibited places. The transition from hazard to accident takes place only when the risk of a industrial danger or threat to affect a vulnerable area is materialized.

The issue of risk may fundamentally vary depending on: the extent of the risk in time and space; the uncertainty about its extent, nature and magnitude; and the societal relevance of inducing risk action. For example, industrial risks that are considered at national level for the classification of administrative units, public institutions and economic operators in terms of civil protection are grouped as follows:

- chemical accidents;
- nuclear accidents;
- wildfires;
- serious accidents on transport routes;
- failure of public utilities¹.

Industrial risk assessment is a laborious action which estimates the probability and severity of an industrial accident and establishes the necessary measures to prevent and reduce such events. Industrial risk assessment phase is the latest in a series of actions: industrial dangers/threats identification, industrial dangers/threats assessment, industrial risk analysis, industrial risk assessment.

Industrial dangers/threats and the vulnerabilities to them

Technological systems are vulnerable and, therefore, in modern societies that work with extensive, complex and interdependent systems such accidents have become something „normal”². Hence, the multitude of elements involved in the conduct and management of an industrial accident, as social segments, local forces and groups, military and civil-military structures, national and

** Cristian BĂHNĂREANU, PhD (cristibahnareanu@gmail.com) is Scientific Researcher at the Centre for Defence and Security Strategic Studies from “Carol I” National Defence University, Bucharest, Romania.*



multinational organizations, economic operators, media, civil society, people, etc., leads inherently to the emergence or amplification of diverse dangers, threats, risks and vulnerabilities and it is almost impossible to adopt common positions in the course of action.

The identification and management of industrial dangers and threats and vulnerabilities to them allow, on the one hand, the clarification of failures occurred at some point in the system and, on the other, taking measures to eliminate them and to generalize the positive issues. The fact that new dangers, threats and risks occur during the management actions require from decision makers and structures involved a permanent adaptation not only of typology and assessment methodologies, but also of strategies, tasks and procedures of action.

In general, the industrial danger or threat is associated with a circumstance, event or person that has the potential to affect a system through destruction, modification, blocking, disclosure, mistakes, errors, omissions etc. Industrial dangers and threats that may emerge at a time are mainly the result of changes in some parameters, states and behaviors considered normal, such as:

- the increase of the level of air pollution;
- the increase of the level of water and soil contamination;
- the increase of the level of radiation;
- the increase of the number of poisonings;
- leaks of gas and other dangerous substances;
- mismanagement of waste;
- weakening of the structural integrity of some categories of critical infrastructures;
- other dangers and threats less „visible” by the usual methods of detection.

Industrial dangers/threats have the potential to cause the same disasters only when interfering with vulnerable populations, affecting life and human activities, property and environment. In our opinion, the best approach to prevent and reduce the effects of an industrial accident consists in:

- identifying all dangers and threats to that system;
- establishing the possible consequences of each identified danger/threat;
- setting the possible responses/actions to prevent or mitigate the effects of each consequence.

The vulnerability can not be analyzed without taking into account the type of technology involved.

For example, chemical plants are vulnerable to failure, nuclear plants to core meltdown, terrorist and military attacks, computer systems to different types of errors etc. Also, it is needed to consider the scale of disaster that can occur: failure of medical device may only affect a patient or a small number of patients, plane crash can lead to death of crew and of fewer or more passengers, the depletion of the ozone layer affect global population by increasing the occurrence of skin cancer. However, a vulnerability analysis on these criteria is not very accurate, because a road accident can kill some people, but such accidents taken globally lead to death of tens of thousands of people every year.

The most effective way to reduce the risk of such accidents is the classification of vulnerabilities by the type of problem by which they are caused, such as: human mistakes, omissions and errors; mechanical failures; errors and defects in design; excessive complexity. However, protection and security measures can not cover some unexpected reactions, possible hidden defects/deficiencies, human errors or collective mistakes.

The impact of industrial risk and accident

According to Belgian Center for Research on the Epidemiology of Disasters (CRED) experts³, industrial accident describes technological accidents of an industrial nature – chemical spill, collapse, explosion, fire, oil spill, gas leak, poisoning, radiation, other – involving industrial buildings (e.g. factories). An event of this type is considered a disaster if it meets the following criteria: at least 10 people reported killed, at least 100 people affected, declaration of a state of emergency, call for international assistance.

Industrial accidents, dangerous procedures, infrastructure failures/defects or certain human activities and their associated risks often produce dramatic effects such as loss or injury of life, destruction of public and/or private property, serious economic and social problems, and environmental degradation. At international level, industrial accident risk increased from year to year. Romania is no exception, accident rates increasing especially after the '90s, when were re-technologised and upgraded a number of enterprises and industrial companies.

Romania faced between 1900 and 2010 about 23 technological disasters, from which 6 were industrial accidents, 15 transport accidents and 2

Type of asymmetric event		Period	<i>Last 111 years</i> (1900-2010)	<i>Last 100 years</i> (1911-2010)	<i>Last 50 years</i> (1961-2010)	<i>Last 10 years</i> (2001-2010)	<i>Last 2 years</i> (2009-2010)	<i>Last year</i> (2010)
Industrial accident	<i>Chemical spill</i>		2	2	2	0	0	0
	<i>Collapse</i>		1	1	1	0	0	0
	<i>Explosion</i>		2	2	2	1	0	0
	<i>Fire</i>		0	0	0	0	0	0
	<i>Oil spill</i>		0	0	0	0	0	0
	<i>Gas leak</i>		0	0	0	0	0	0
	<i>Poisoning</i>		1	1	1	1	0	0
	<i>Radiation</i>		0	0	0	0	0	0
<i>Other</i>		0	0	0	0	0	0	

Table no. 1: The number of industrial accidents on Romanian territory (1900-2010)

Source: Centre for Research on the Epidemiology of Disasters (CRED), EM-DAT: The International Disaster Database, 2011, Université catholique de Louvain, Brussels, Belgium, www.emdat.be/disaster-list

other accidents. A detailed picture of the industrial events that occurred in our country is represented in table no. 1.

On the basis of the analysis of these data using frequency tables method⁴, we can say that Romania is exposed in the coming years to technological asymmetric events as follows:

- explosion and poisoning – likely in the next 10 years;
- collapse and poisoning – possible in the next 50 years;
- chemical spill and explosion – possible in the next 50-100 years.

Industrial accidents affect more or less: human beings, flora and fauna; soil, water, air and landscape; the interaction between the factors from first two categories; material assets and cultural heritage, including historical monuments⁵. Therefore, the impact of such accidents is concentrated mainly in the sphere of economic and financial, social, ecological, but also of critical infrastructures.

The economic and financial impact consists in the damages resulting effectively from an accident and they can be either direct damages – destruction and damage to buildings, constructions, communication networks, technological equipment and other infrastructures of industrial facility; national economy losses due to the interruption of the activity of the economic operators directly

affected by the accident; the costs of intervention, evacuation and assistance actions, etc. – either indirect damages – national economy losses due to activity disruption of economic operators unaffected by the accident, but dependent on those directly affected by the accident; the potential damage from differences between the results of activities that would run on a land unaffected by an industrial accident and the results of activities that effectively run on a land affected by the accident etc. The social impact of an industrial accident is more difficult to be identified/ quantified and has a much greater severity, with direct implications on the overall living standard of employees and their families and the population affected. Also, such type of accident could affect the environment for a long period of time, whose recovery will require significant material and financial costs.

In our opinion, the most important effects of an industrial accident and its associated risks on economic at financial, social, environmental and infrastructure level, with serious impact on national security might be:

- *economic and financial*: interruption/reduction in the industrial facility activity and production; lower productivity and competitiveness; disruption of the activity of other economic operators that are dependent on the functioning of the affected industrial facility; application of penalties for



incapacity to carry out contracts and commends committed; reducing the income of some economic operators and their employees, involved directly or indirectly; increasing unemployment and poverty in the affected area; lower investment; increasing costs for the intervention actions, rescue/evacuation and healthcare measures for employees, people and animals from the affected area; increasing losses related to the disused agricultural land, pastures and forests, closure of some agricultural and industrial facilities and increased costs with fertilizers, additives or special processes of sowing;

- *social*: health degradation of the industrial facility's personnel and of the vulnerable population living in the proximity of the location, which can be quantified by the number of casualties, injuries etc.; increased stress, demoralization and mental illness caused by psychological shock; increased risk of production and propagation of endemic diseases; multiplying the number of job resignations and retirements caused by illness or disability; increasing health insurance and safety costs; increasing training costs of new employees; increasing costs of population displacement, construction of new housing and infrastructures; increasing prevention and training costs of vulnerable populations;

- *environment*: modification or destruction of zonal terrestrial and aquatic flora and fauna; changes in the quality of air, surface water and groundwater; changes in the physical and chemical qualities of soil; increasing the number of killed or harmed birds and animals; multiplying the number of destroyed or damaged plant species; increasing of the affected surfaces of plantations/crops, pastures and forests;

- *infrastructure*: destruction of a number of machines, equipment, buildings, constructions, communication and transport networks and other industrial infrastructure; disruption of the functioning of other interconnected infrastructures; increasing repair/replacement costs of damaged infrastructures; increasing relocation costs of industrial infrastructures; increasing design/construction costs of more safer industrial infrastructures.

Once these effects have occurred and activated emergency plans and intervention actions, there follows a transitional period in which a set of technical and administrative measures are implemented in order to control any residual risks

to the population, reduce if necessary the physical and health damages or restore the environment and reorganize social activities. During this period, the affected sector/area gradually recovers and returns to normal.

The implementation of the relatively simple measures related to the working environment, daily activities and tasks, safety systems and employees behavior could significantly decrease, in a relatively short period of time, the rate of accidents in high risk industries. However, we believe that the problem of reducing the number of industrial accidents should be addressed systematically and therefore requires the development of a genuine culture of prevention at the levels of society and workplaces.

The industrial risk analysis and assessment

In international practice, there are three general methods of risk assessment: qualitative, semi-quantitative and quantitative. The qualitative assessment methods use ratings to describe the extent of possible consequences and their likelihood. The semi-quantitative methods use qualitative scales. Quantitative methods use numerical values for both the consequences and their likelihood⁶.

An industrial risk analysis and assessment simple algorithm is presented in „Convention on the Trans-boundary Effects of Industrial Accidents”⁷, as follows:

A. Emergency planning:

01. The quantities and properties of hazardous substances on the site;

02. Brief descriptive scenarios of a representative sample of industrial accidents possibly arising from the hazardous activity, including an indication of their likelihood;

03. For each scenario:

a. The approximate quantity of a release;

b. The extent and severity of the resulting consequences both for people and for non-human environment under favorable and unfavorable conditions, including the extent of the affected zones;

c. The time-scale within the industrial accident could develop from the initiating event;

01. The size and distribution of the population in the vicinity, including any large concentrations of people which may be in the hazard zone;

02. The age, mobility and susceptibility of that population;



B. Decision-making on sitting:

03. The severity of the harm inflicted on people and the environment, depending on the nature and circumstances of the release;

04. The distance from the location of the hazardous activity at which harmful effects on people and environment may reasonably occur in the event of an industrial accident;

05. The same information not only for the present situation but also for planned or reasonably foreseeable future developments;

C. Information to the public:

06. The people who may be affected by an industrial accident;

D. Preventive measures:

07. The conditions and quantities in which hazardous materials are handled;

08. A list of the scenarios for the types of industrial accidents with serious effects, to include examples covering the full range of incidents and the possibility of effects from adjacent activities;

09. For each scenario, a description of the events which could initiate an industrial accident and the steps which could determine its escalation;

10. An assessment, at least in general terms, of the likelihood of each step occurring, taking into account the arrangements in 14;

11. A description of the preventive measures in terms of equipment and procedures designed to minimize the likelihood of each step to occur;

12. An assessment of the effects triggered by the deviations from the normal operating conditions, and the consequent arrangements for the safe shut-down of the hazardous activity or any part thereof in an emergency, and of the need for staff training to ensure that potentially serious deviations are recognized at an early stage and the appropriate action is taken;

13. An assessment of the extent to which modifications, repair work and maintenance work on the hazardous activity could place the control measures at risk, and the consequent arrangements to ensure that control is maintained.

At first glance, it is difficult to determine what methodology and procedures of industrial risk assessment are the most effective. In our opinion, the best approach should be based on the idea that there must be/should be taken the proper measures to protect the human beings, flora, fauna, soil, water, air, landscape, material assets and cultural heritage in case of an industrial accident considered

to be the worst. This is done by evaluating the consequences of the worst industrial accident scenario, as follows:

• *Before the industrial accident:*

– development of some methodologies in order to quantify the danger/threat impact in relation to possible accident scenarios, using risk analysis of industrial facilities based on probability;

– assessment and reducing the vulnerability to external threats of industrial activities (natural or manmade);

– standardization of methodologies for identifying, ranking and mapping human and structural assets that are exposed to an industrial accident consequences, using vulnerability assessment methods;

– development of territorial planning regulations in order to reduce population exposure to industrial dangers/threats;

– setting a state-industry-society dialogue and some government protocols in order to increase public acceptance of industrial risks, using modeling and support decision-making process;

• *During the industrial accident:*

– enabling management plans and procedures for industrial accidents and other emergencies;

• *After the industrial accident:*

– setting and organizing emergency planning for further operation of industrial activity;

– assimilation of the lessons resulted from accidents, crises or major disaster management process;

– updating territorial planning regulations in accordance with the learned lessons.

The ultimate goal of the risk analysis and assessment is to operate without imposing any possible risk to the personnel of the industrial facility or population in the vicinity of the site. To achieve this objective, it is required the implementation of the latest technologies and additional safety measures at industrial facility in order to reduce the consequences of a possible accident within the site.

The results of risk levels assessment, along with an appropriate legislative framework, should encourage local authorities and economic operators to make every effort to improve working and environment conditions and take all the necessary measures to move from high levels of risk to lower, acceptable levels of risk.



Conclusions

The importance of industrial accidents increased as a result of the development of economic and social activities, as new advances in science and technology are assimilated and lead to materials and industrial processes changes and more vulnerabilities. They seriously disrupt the functioning of society by generating a growing number of casualties, property and environmental damages. These effects often exceed the community's ability to respond effectively by using local resources, requiring the intervention and support at national, regional and international levels.

Although we can not entirely avoid industrial accidents, we have sufficient means to prevent and minimize their impact. After all, industrial risks are materialized in accidents if the potentially affected communities are not prepared to face them. Assessing the risk levels, industrial dangers, threats and vulnerabilities contributes to better decision-making process related to the training of the population, reducing damages and rehabilitation of areas affected by such events.

Given the impact of such accidents on life, public and/or private property, material assets and cultural heritage and the environment, we believe that it is required, on the one hand, an integrated approach of that sensitive and complex field and, on the other, a process of development, adoption and implementation of specific regulations on the prevention, protection and intervention in emergencies caused by industrial accidents. At the national level, more consistent efforts are needed for the collaboration and cooperation of national authorities in order to increase the effectiveness of intervention actions and civil protection. At the international level, more active involvement of world states and specialized organizations is needed in the common effort to coordinate a strategy to prevent and reduce the negative effects of industrial accidents.

BIBLIOGRAPHY:

1. José DURÁN, *Introduction to Industrial Risk Management*, 2008.
2. Charles PERROW, *Normal Accidents: Living with High Risk Technologies*, Princeton University Press, 1999.
3. Ionica PERSU, Ioana PREDESCU, *Major risks management in industry*, The 9th Regional Energy Forum – FOREN 2008, Neptun, 15-19 June 2008.
4. Anandita SENGUPTA, *Industrial Hazard, Vulnerability and Risk Assessment for Land-use Planning: A Case Study of Haldia Town, West Bengal, India*, Doctoral Thesis, January 2007.
5. Jean-Michel SCHEUREN, Olivier le POLAIN, Regina BELOW, Debarati GUHA-SAPIR, Sylvain PONSERRE, *Annual Disaster Statistical Review: The Numbers and Trends 2007*, Center for Research on the Epidemiology of Disasters (CRED), May 2008.
6. Bernard SINCLAIR-DESGAGNÉ, Carel VACHON, *Dealing with Major Technological Risks*, „Série Scientifique”, Centre interuniversitaire de recherche en analyse des organisations (CIRANO), Montréal, Septembre 1999.
7. Torok ZOLTAN, *Quantitative and Qualitative Risk Analysis in the Chemical Industry*, PhD Paper Summary, Faculty of Environmental Sciences and Engineering, Babeş-Bolyai University, Cluj-Napoca, 2010.
8. BHP Billiton, *Chapter 26: Hazard and Risk*, „Olympic Dam Expansion: Draft Environmental Impact Statement 2009”, Main Report Volume 2.
9. Centre for Research on the Epidemiology of Disasters (CRED), *EM-DAT: The International Disaster Database*, 2011, Université catholique de Louvain, Brussels, Belgium, www.emdat.be/disaster-list.
10. Commission of the European Communities, *EU Strategy for supporting disaster risk reduction in developing countries*, Communication from the Commission to the Council and the European Parliament, Brussels, 23 February 2009.
11. Romanian Government, *Decision no. 642 of June 29, 2005 for approval the classification criteria of administrative units, public institutions and economic operators in terms of civil protection, depending on the specific risk types*, „Official Journal of Romania” no. 603, 13 July 2005.
12. Praxiom Research Group Limited, *A Brief Explanation of Our Human Safety and Security Management Plan*, 2010.
13. United Nations, *International Strategy for Disaster Reduction*, www.unisdr.org/index.php.
14. United Nations Economic Commission for Europe, *Convention on the Trans-boundary Effects of Industrial Accidents*, Helsinki, 17 March 1992.



15. United Nations Environment Programme, Industry and Environment, *Management of Industrial Accident Prevention and Preparedness*, First Edition, June 1996.

NOTES:

1 Romanian Government, *Decision no. 642 of June 29, 2005 for the approval of the classification criteria of administrative units, public institutions and economic operators in terms of civil protection, depending on the specific risk types*, „Official Journal of Romania” no. 603, 13 July 2005.

2 Charles PERROW, *Normal Accidents: Living with High Risk Technologies*, Princeton University Press, 1999.

3 Jean-Michel SCHEUREN, Olivier le POLAIN, Regina BELOW, Debarati GUHA-SAPIR, Sylvain PONSERRE, *Annual Disaster Statistical Review: The Numbers and Trends 2007*, Center for Research on the Epidemiology of Disasters (CRED), May 2008, p. 41.

4 BHP Billiton, *Chapter 26: Hazard and Risk*, „Olympic Dam Expansion: Draft Environmental Impact Statement 2009”, Main Report Volume 2, p. 739.

5 United Nations Economic Commission for Europe, *Convention on the Transboundary Effects of Industrial Accidents*, Helsinki, 17 March 1992.

6 Ionica PERSU, Ioana PREDESCU, *Major risks management in industry*, The 9th Regional Energy Forum – FOREN 2008, Neptun, 15-19 June 2008.

7 United Nations Economic Commission for Europe, *op. cit.*, 17 March 1992.



“NUCLEAR SPRING” OF PRAGUE: A UTOPIA?

*Iulia MOISE**

It's nearly three years since President Barack Obama delivered his Prague speech (5 April 2009), generating an extraordinary international reaction. In this important speech, the President made specific commitments to achieve the goals of this agenda. This paper analyzes Obama Administration's vision on a "nuclear-free world". Indeed, since Obama's April 5, 2009 speech, significant progress has been made, but there is much more that can and must be done to reduce global nuclear weapons threats. There have been significant victories: New START entered into force; in April 2010, the Administration completed a new Nuclear Posture Review that narrows the role of US nuclear weapons in the overall US defence posture "by declaring that the fundamental role of US nuclear forces is to deter nuclear attacks against the US and our allies and partners", UN Security Council Resolution 1887.

But there is still work to do (achievement of a Fissile Material Cutoff Treaty, ratification of the Comprehensive Nuclear Test Ban Treaty).

Key-words: nuclear weapons; non-proliferation; Nuclear Posture Review; Prague Speech; Obama Administration; START Treaty.

Following the suggestions of former Secretaries of State, George Shultz and Henry Kissinger¹, the Obama Administration has made nuclear arms control and disarmament one of the main priorities of his foreign policy agenda – as part of a strategy of reviving the US leadership status at international level.

The beginning of Obama's mandate has succeeded in reintroducing to the international agenda the question regarding the role and, especially, the threat coming from the existence of nuclear weapons, arousing great expectations and enthusiasm, reviving the debates regarding the opportunity and necessity of implementing the nonproliferation and global nuclear disarmament principles.

In a rousing speech delivered almost three years ago in Prague's Hradčany Square, President Barack Obama conveyed his vision for achieving "the peace and security of a world without nuclear weapons" and called for international efforts in order to "put an end to Cold War thinking" and strengthen the global endeavor to control the spread of nuclear weapons, and make progress on disarmament measures.

In this push for nuclear disarmament, Obama argued that a leadership role for the United States was needed not only as a function of power or the size of the US nuclear arsenal, but as a matter of "moral responsibility."

"So today, I state clearly and with conviction America's commitment to seek the peace and security of a world without nuclear weapons. I'm not naive. This goal will not be reached quickly – perhaps not in my lifetime. It will take patience and persistence. But now we, too, must ignore the voices who tell us that the world cannot change. We have to insist – yes, we can" (President Barack Obama, Prague, 2009)².

In order to achieve these goals, Obama enumerated, in the framework of the 2010 Review

** Iulia MOISE (iulia_badaluta@yahoo.com) has a master degree in International Relations and works within the National Defence System in Bucharest, Romania.*



Conference of the Nuclear Nonproliferation Treaty (NPT), a series of steps his Administration would implement to put this vision into practice, pledging for a series of projects towards the intensification of the disarmament and nuclear arms control process:

- concluding a verifiable New Strategic Arms Reduction Treaty (New START);
- immediate and “aggressive” US pursuing of the Comprehensive Test Ban Treaty ratification³;
- strengthening the Nuclear Non-Proliferation Treaty as a basis for cooperation;
- achievement of a Fissile Material Cutoff Treaty⁴;
- reviewing the Nuclear Posture of the United States for the next five to ten years;
- convening a Nuclear Security Summit to lock down vulnerable nuclear materials over a four-year period.

1. 2010 „Nuclear spring”: Opportunities and failures

The change in US nuclear policy as announced by President Obama in his Prague speech finds reflection in the Nuclear Posture Review 2010, the New START Treaty, and the Nuclear Security Summit held in Washington.

1.1. Nuclear posture Review (2010)

As a confirmation of the new US policy, the Obama Administration has released, on April 6, 2010, the Nuclear Posture Review which sets the direction for US nuclear weapons policy for the next five to ten years. The 2010 Nuclear Posture Review (NPR) outlines the Administration’s approach to promoting the President’s agenda for reducing nuclear dangers and pursuing the goal of a world without nuclear weapons, while simultaneously advancing broader US security interests. According to the new NPR⁵:

- The United States will not produce new nuclear warheads, nor modify existing warheads to provide new military capabilities;
- Currently, the “fundamental” role of US nuclear weapons is to deter a nuclear attack on the United States or its allies, but the goal is to have deterrence be the “sole” purpose;
- The use of nuclear weapons will be limited only to “extreme circumstances to defend the vital interests of the United States or its allies and partners”;

- The United States will not use or threaten to use nuclear weapons against non-nuclear weapons states that are parties to the NPT and in compliance with their nuclear nonproliferation obligations.

Later on the same day, the President underlined – in an interview for New York Times⁶ –, that he was carving out an exception for “outliers like Iran and North Korea” that have violated or renounced the main treaty to halt nuclear proliferation.

The NPR focuses on five key objectives⁷:

1. Preventing nuclear proliferation and nuclear terrorism;
2. Reducing the role of US nuclear weapons in US national security strategy (according to the document, the fundamental role of US nuclear weapons, which will continue as long as nuclear weapons exist, is to deter nuclear attack on the United States, our allies, and partners);
3. Maintaining strategic deterrence and stability at reduced nuclear force levels;
4. Strengthening regional deterrence and reassuring US allies and partners;
5. Sustaining a safe, secure, and effective nuclear arsenal.

The Nuclear Posture Review Report shows a marked improvement in tone and direction over reviews completed by the George W. Bush Administration in 2001 and the Clinton Administration in 1994.

The 1994 NPR, the first of its kind in 15 years, reaffirmed the centrality and legitimacy of strategic deterrence, which is based on the threat of retaliation with nuclear weapons in the event that the United States is attacked by another state with nuclear weapons. It also confirmed the importance of maintaining the existing nuclear triad comprised of bombers, submarines, and land-based ballistic missiles. However, the review also recognized that the role of nuclear weapons in the post-Cold War world had largely diminished and additionally that the United States did not require such large numbers within its arsenal.

The new security environment of 2001 has caused significant consequences in the security strategy of the US 2001 Nuclear Posture Review. The 2001 NPR, released soon after 9/11, stated that nuclear weapons were “necessary to provide credible military options to deter a wide range of threats, including weapons of mass destruction (WMD) and large-scale conventional military force”⁸.



Most importantly, the 2001 NPR underscored the importance of nuclear weapons in war fighting. The new nuclear doctrine makes it clear that the United States will not necessarily wait for the attack but pre-empt with nuclear weapons if necessary. It identifies four conditions where preemptive use might occur:

- An adversary intending to use weapons of mass destruction against US, multinational or allies' forces or civilian populations;
- Imminent attack from an adversary's biological weapons that only effects from nuclear weapons can safely destroy;
- Attacks on adversary installations including weapons of mass destruction; deep, hardened bunkers containing chemical or biological weapons; or the command and control infrastructure required for the adversary to execute a WMD attack against the United States or its friends and allies;
- Demonstration of US intent and capability to use nuclear weapons to deter adversary WMD use.

The previous doctrine from 1995 did not describe specific scenarios where the United States might use nuclear weapons preemptively, but the new doctrine enshrines the Bush Administration's pre-emption policy into official US nuclear doctrine.

1.2. Signing of the New START Treaty on the reduction of strategic offensive arms (April 8, 2010)⁹

Only two days later after the releasing the Nuclear Posture Review (NPR), Obama and Russian President Dmitry Medvedev signed the New START Treaty on the reduction of strategic offensive arms. The United States and The Russian Federation have agreed to mutual limits under the New START:

- a limit of 1,550 accountable strategic warheads;
- a separate limit of 700 deployed Intercontinental Ballistic Missiles (ICBMs), deployed Submarine-Launched Ballistic Missiles (SLBMs), and deployed nuclear-capable heavy bombers;
- a combined limit of 800 deployed and non-deployed ICBM launchers, SLBM launchers, and nuclear capable heavy bombers.

The significance of the so-called New START treaty is mainly political. It represents an essential foundation for the improvement of bilateral

relations between the US and Russia. At the same time, unlike the Strategic Offensive Reduction Treaty concluded by the Bush administration in Moscow in 2002, the new treaty contains verification mechanisms.

From a strategic perspective, New START is very modest on substance. While the new ceiling of 1,550 deployed strategic warheads is 74 per cent less than the specifications in START I, and 30 per cent less than those of the Moscow Treaty, the US and Russia will hardly have to reduce the actual number of their respective warheads relative to current levels, due to a new counting methodology. Although bombers can carry up to 20 warheads, the new equation is "1 bomber = 1 warhead".

Secondly (and this is the issue that has arisen sharp criticism), the treaty prescribes only the limitation of warheads, but not also their destruction – this disposition allowing a large freedom of decision regarding their destination. The high costs for the maintenance of such obsolete arsenal will probably force The Russian Federation to destroy the surplus. The US, on the other hand, will be able to choose the alternative of storing them, namely „preserving them” in special highly secure warehouses, so that, in case of need, the weapons become operational, in a relatively short period.

Last, but not least, the new START does not cover two important issues for the US-Russian dialogue: Missile Defence and tactical nuclear weapons¹⁰.

In conclusion, deterrence remains intact in the relation between the two major actors of the Cold War, even at a lower level of armament. That is why we venture to say that a non-nuclear order does not figure yet on the Russian-American agendas.

1.3. The Washington Nuclear Security Summit (12-13 April 2010)

In April of 2010, President Barack Obama hosted the largest gathering of foreign leaders an American president has assembled since the founding of the United Nations, for a historic summit on nuclear security in Washington D.C. that produced a timetable for the implementation of Obama's call for securing all nuclear materials around the globe within four years to keep them out of the grasp of terrorists.

The Washington Nuclear Security Summit succeeded in establishing a consensus that nuclear terrorism is a serious threat to all nations, and that

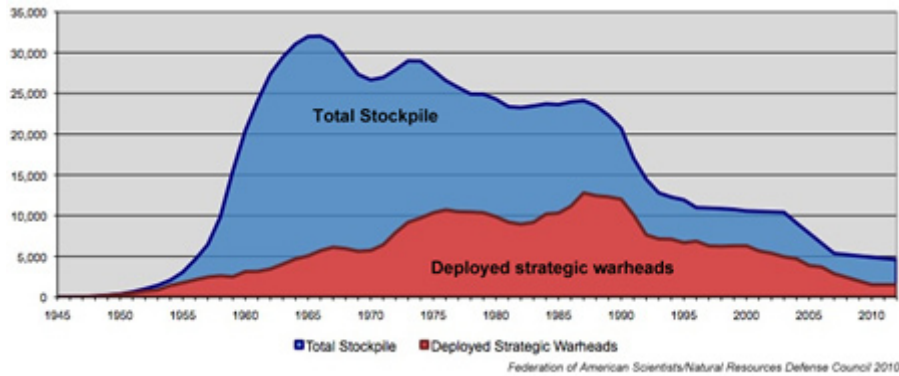


Figure 1 - US nuclear stockpile from 1945 to September 30, 2009

all vulnerable material should be locked down within four years. Under this broad consensus, the summit had several specific, signal effects.

Even before the nuclear summit began, the White House was touting Obama's success in getting Ukraine to agree to dispose of its entire stock of highly-enriched uranium, said to be enough for several nuclear weapons. Mexico and Canada also declared their intention to give up highly enriched uranium as a step toward making it harder for terrorist groups or criminal gangs to steal or acquire a key ingredient in the making of atomic weapons.

As regards to Romania, on June 30, 2009 the last shipment of highly enriched uranium (HEU) of Russian origin was repatriated. The material was repatriated to the Russian Federation by air, for storage in two secure facilities for nuclear fuel¹¹. Thus, Romania became the first country from which the highly enriched uranium was repatriated by air. Romania became the fourteenth country from which highly enriched uranium was returned to the origin country after Brazil, Bulgaria, Colombia, Denmark, Greece, Latvia, Philippines, Portugal, Slovenia, South Korea, Spain, Sweden and Thailand¹².

1.4. The Eighth Review Conference (RevCon) of the Nuclear Nonproliferation Treaty (3-28 May 2010, New York)

In order to head off critics who regard the non-compliance of nuclear NPT states with their disarmament obligations as the main cause of increasing proliferation tendencies among non-nuclear NPT states, The Obama Administration took a larger step toward transparency with the declassification of stockpile numbers from 1962

to 2009¹³. The increased transparency of the US nuclear arsenal (as announced at the NPT Review Conference in May 2010) should be seen in this context.

According to the document¹⁴, as of September 30, 2009, the US stockpile of nuclear weapons consisted of 5,113 warheads. This number represents an 84 percent reduction from the stockpile's maximum (31,255) at the end of fiscal year 1967, and over a 75 percent reduction from its level (22,217) when the Berlin Wall fell in late 1989.

1.5. US Ratification of the Comprehensive Test Ban Treaty

President Obama has made US ratification of the Comprehensive Test Ban Treaty (CTBT)¹⁵ a key element of his nonproliferation agenda. As the President declared in Prague, "My administration will immediately and aggressively pursue US ratification of the Comprehensive Test Ban Treaty. After more than five decades of talks, it is time for the testing of nuclear weapons to finally be banned." Successfully securing Senate ratification of the CTBT would represent a major achievement and significantly strengthen prospects for bringing the historic treaty into force. Moreover, Senate ratification of the CTBT is perhaps the most powerful way President Obama can demonstrate the US commitment to Article VI¹⁶ of the NPT that states in full: "Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a Treaty on general and complete disarmament under strict and effective international control"¹⁷.



1.6. Pursuing a Verifiable Fissile Material Cutoff Treaty

Halting the further production of fissile material is an essential part of curtailing nuclear arms competition, curbing the spread of nuclear weapons to additional states, and reducing the risk that some nuclear weapons-usable material may be lost, stolen, or sold to terrorists.

Fissile Material Cutoff Treaty (FMCT) would strengthen the nonproliferation regime and help lay a basis for nuclear disarmament by: extending to the nine nuclear weapon states the legal ban on production of fissile material for weapons that currently applies only to non-nuclear weapon states; extending into the nuclear weapon states institutions and practices necessary for the eventual achievement of a nuclear weapons free world; and helping to make nuclear weapons reductions irreversible.

In Prague, President Barack Obama has pledged to “lead a global effort to negotiate a verifiable treaty ending the production of fissile materials for weapons purposes”. The treaty thus negotiated should require not only non-nuclear-weapons States or States currently outside the NPT but also the five UN Security Council members, all of which possessing nuclear weapons, to forswear the production of fissile material for weapons and to dismantle all their established fissile material production facilities for such weapons.

2. Expectations versus Reality

President Obama’s vision in Prague towards a “world without nuclear weapons” has aroused great expectations among the international community regarding nuclear disarmament, building a significant bridge between the world of aspiration and the world of power. With his Prague speech, the American President evocatively called for a new era of disarmament

But, almost three years after Prague, nuclear-weapons policy has become yet another area where the heady optimism of the administration's early days has largely evaporated. The exuberance of “nuclear spring” is taken place by skepticism: the Obama administration’s record to date in translating words into deeds on the nuclear nonproliferation and disarmament front has been modest. It has become clear that there is a great need for gaining

international cooperation from non-nuclear weapons states on nuclear proliferation matters. Without strong cooperation between the nuclear actors on international stage, Obama’s vision is nothing but a fairy-tale.

This emphasis on idealism has left President Obama vulnerable to critics that raise a stink about the blank check regarding the Nobel Peace Prize awarded by Norwegian Nobel Committee.

President Barack Obama, despite the penchant for soaring rhetoric in describing his vision, has so far produced a nuclear reality that is far more realist than idealist and sometimes might be seen even in contradiction with the promises made in Prague. In fact, State of Union 2011 Address¹⁸ – in which the US President makes no reference to a non-nuclear world – offers a closer image to reality regarding Obama’s policy.

Moreover, according to the 2010 Stockpile Stewardship and Management Plan (SSMP) released by the National Nuclear Security Administration (NNSA) of the US Department of Energy, the US:

- reaffirms the necessity for the nuclear deterrent to be sustained without underground nuclear testing, without the production of new fissile materials, and without development of new nuclear military capabilities and, at the same time,
- will evolve its stockpile life extension plans to reflect the NPR requirements. Simultaneously, the existing stockpile will be continually assessed and sustained and retired weapons will be dismantled.

While during the Prague speech the President was bringing into discussion the maintaining of the strategic deterrence and stability at reduced nuclear force levels, the priorities of NNSA are “sustain and refurbish the nuclear stockpile” and “right-size and modernize the infrastructure of the nuclear weapons complex”.

The good news is that the Obama administration is planning to cut the US nuclear arsenal by as much as 40 percent by 2022, but the bad news is that, over the next decade, the Department of Defence (DOD) “will invest well over \$100 billion in nuclear delivery systems to sustain existing capabilities and modernize some strategic systems”.

Likewise, the administration increased its funding request for the nuclear weapon activities of the NNSA in financial year (FY) 2011 by nearly 10 per cent and another 8.4 per cent for FY 2012.



ANALYSIS, SYNTHESIS, EVALUATIONS

Country	Deployed warheads	Other warheads	Total 2011	Total 2010
US	2150	6350	8500	9600
Russia	2427	8570	11000	12000
UK	160	65	225	225
France	290	10	300	300
China		200	240	240
India		80–100	80–110	60–80
Pakistan		90–110	90–110	70–90
Israel		80	80	80
Total	5027	15,500	20,530	22,600

Figure 2 – World Nuclear Forces (2011)

Source: www.sipri.org

All existing warheads will undergo life-extension programs and be equipped with new, improved or significantly modified components. Three nuclear weapon production facilities will be constructed with a capacity to produce 80 warheads per year, including the Uranium Processing Facility in Oak Ridge, Tennessee; the Chemistry and Metallurgy Research Replacement (CMRR) in Los Alamos, New Mexico; and the Kansas City Plant in Kansas City, Missouri. The estimated cost of these construction projects up to 2030 is \$180 billion¹⁹.

Conclusions

Nuclear arms still represent a major threat to the international security, because the nuclear disarmament at international level is compensated by a continuous modernization of this type of weapons.

According to SIPRI Yearbook 2011: Armaments, Disarmament and International Security²⁰:

- In January 2011, eight states – the United States, Russia, the United Kingdom, France, China, India, Pakistan and Israel – possessed more than 20,500 nuclear weapons, including operational weapons, spares, those in both active and inactive storage and intact weapons scheduled for dismantlement. Of this total figure, more than 5,000 nuclear weapons are deployed and ready for use, including nearly 2,000 that are kept in a state of high operational alert.

- The five legally recognized nuclear weapon states, as defined by the 1968 Non-Proliferation Treaty – China, France, Russia, the UK and the USA – are either deploying new nuclear weapon systems or have announced their intention to do so; none appears to be prepared to give up its nuclear arsenals in the foreseeable future.

In conclusion, none of the nuclear states appears to be prepared to give up its nuclear arsenals in the foreseeable future. The Nuclear Posture Review Report 2010 states clearly that “*The conditions that would ultimately permit the United States and others to give up their nuclear weapons without risking greater international instability and insecurity are very demanding. Clearly, such conditions do not exist today*”²¹.

Despite some successes – most notably the New START treaty with Russia – many of those following weapons policy say Obama’s effort to begin reshaping the US’s own massive nuclear arsenal in light of the Zero Goal has proceeded far more slowly than expected. Beyond the landmark of UN Security Council Resolution 1887²² and successful lobbying for a nominal increase in the International Atomic Energy Agency (IAEA) regular budget, the administration thus far has been unable to turn lofty rhetoric into actual legislative victories.

Signing and ratification of the New START Treaty represents a major success, but achieving the other ambitious goals enumerated in the Prague Speech — immediate and “aggressive” US



pursuing of the Comprehensive Test Ban Treaty ratification and achievement of a Fissile Material Cutoff Treaty — remain a difficult process.

The US President commitment to take nuclear disarmament forward and his vision of a world without nuclear weapons risks losing its credibility if, by the end of its term, the Obama Administration won't take concrete steps in this direction and this fact will also make the process of nuclear arms control more difficult.

NOTES:

1 http://www.nti.org/c_press/TOWARD_A_NUCLEAR_FREE_WORLD_OPED_011508.pdf/.

2 Barack Obama, *Remarks by President Barack Obama in Prague*, The Press Office of the White House, 5 April 2009, http://www.whitehouse.gov/the_press_office/Remarks-By-President-Barack-Obama-In-Prague-As-Delivered/, accessed on 28 August 2010.

3 The treaty has been in limbo for more than a decade. Negotiations on it were concluded at the United Nations General Assembly in 1996, with the treaty calling for the ban of nuclear test explosions for any purpose. It has been signed and ratified by 154 member countries, including Russia, Japan, South Korea and all of America's NATO allies. The United States is one of just nine key nations that haven't ratified it.

4 A fissile material cutoff treaty would ban the production of fissile material for nuclear weapons purposes. It would also allow states which already have stocks of un-safeguarded fissile material to maintain them outside of international safeguards, but would allow the future production of fissile material only if the material is safeguarded to ensure that it is not used in weapons.

5 <http://www.defence.gov/npr/docs/2010%20nuclear%20posture%20review%20report.pdf>.

6 <http://www.nytimes.com/2010/04/06/world/06arms.html>.

7 <http://www.defence.gov/npr/docs/2010%20nuclear%20posture%20review%20report.pdf>.

8 http://www.dod.gov/execsec/adr2002/html_files/chap7.htm.

9 <http://www.state.gov/documents/organization/140035.pdf>.

10 The tactical nuclear weapons – those that, today, are most likely to be used – remain under no limitation disposition.

11 <http://www.mae.ro/en/node/2868?page=5>.

12 This activity helps in seriously reducing the

terrorist threat because the material was permanently removed from civilian areas and therefore cannot be used to manufacture nuclear devices. Each kilogram of HEU stored safely reduces the risk of terrorist access to essential material in the manufacture of nuclear weapons.

13 <http://www.defence.gov/news/newsarticle.aspx?id=59004>.

14 http://www.defence.gov/npr/docs/10-05-03_Fact_Sheet_US_Nuclear_Transparency_FINAL_w_Date.pdf.

15 The Comprehensive Nuclear Test-Ban Treaty was negotiated over a three years period (1993-1996) and was adopted by the United Nations General Assembly on September 10, 1996 and opened for signature on September 24, 1996. In essence, the Treaty stipulates the following requirements: a) States Parties will not test nuclear weapons and will take all necessary steps to prevent or prohibit such activities on their territory; b) States Parties shall refrain from participating in or encouraging the testing of nuclear weapons. CTBT will enter into force 180 days after its ratification by all States that have significant nuclear facilities, which are listed in Annex 2 of the Treaty. Romania signed the CTBT on September 24, 1996 and ratified it on October 5, 1999. Currently, the Treaty is not in force given that nine states under the Annex 2 have neither signed (North Korea, India, Pakistan) nor ratified it (USA, China, Egypt, Indonesia, Iran, Israel). CTBT was signed by 181 countries and ratified by 151 (including 35 countries in Annex 2 of the Treaty).

16 <http://www.un.org/disarmament/WMD/Nuclear/NPTtext.shtml>.

17 http://www.onuinfo.ro/documente_fundamentale/instrumente_internationale/tratat_neproliferarea_armelor_nucleare.

18 <http://www.whitehouse.gov/state-of-the-union-2011>.

19 <http://www.fas.org/blog/ssp/2010/07/stockpile-plan.php>.

20 <http://www.sipri.org/yearbook/2011/files/SIPRI-YB11summary.pdf>.

21 <http://www.defence.gov/npr/docs/2010%20nuclear%20posture%20review%20report.pdf>.

22 On September 24, 2009, the Summit of the Security Council devoted to nuclear non-proliferation and disarmament issues, convened by the United States and led by President Barack Obama, was held in New York. The meeting concluded with the adoption of the UNSC Resolution 1887. The resolution expresses the concern over the danger of nuclear proliferation and affirms its commitment to working towards the common goal of „creating a world free of nuclear weapons”.



THE SECURITY OF NATIONAL STRATEGIC SUPPLY

*Petre DUȚU, PhD**

Various security risks and threats from natural disasters to armed conflicts that humanity is facing require adequate, timely and flexible measures to prevent and/or limit their effects. Strategic supply is one of the measures to counter security challenges that all countries are currently facing. Hence, the need to ensure strategic supply security locally and nationally.

Key-words: threats; risks; natural disasters; strategic supply; energy resources; raw materials; drinking water; food; national security.

1. Strategic supply - process and activity

Strategic supply, also called strategic sourcing, is a concept with multiple meanings and uses. Thus, it is used in enterprises, at human community level and at national level. In this article we will cover national strategic supply, analyzing both the internal and the external dimension. Also, you can talk about a *broad* and a *narrow* definition of the term *strategic supply*. Thus, in a *broad* manner, strategic supply means the process that ensures the products – natural raw materials, energy, water, food – needed for proper functioning of the whole society, including defence and national security. In other words, strategic supply ensures the material conditions necessary and sufficient for organizing the social, economic, political, military life and so on. In a *narrow* manner, strategic supply refers to the process that ensures natural materials, including

rare metals, energy, food and water necessary and sufficient for defence and national security.

Given the place of the main sources that ensure strategic supply, there are two dimensions of this process, namely: the *internal dimension* and the *external dimension*. The *first dimension* means that internal sources have the largest share in national strategic supply. Typically, the *external dimension* is the one that has the largest share in national strategic supply, as there are few states that have full resources for the optimum functioning of society and effective and efficient organization of national defence and security. To remove and limit the undesirable effects of instability and uncertainty generated by external sources of strategic supply, some countries develop strategies to ensure necessary and sufficient materials for the optimal functioning of the society and effective organization of defence and national security¹.

In our view, strategic supply can be analyzed in at least two perspectives, namely, as process and as activity. In the first sense, strategic supply "... is a process of identification and selection of supply sources that constitute a network ensuring a stable supply at the lowest total cost"². Nationally, it is the purchase of various goods – strategic raw materials, petroleum products, food, drinking water etc. – contributing to the normal functioning of the social, economic, political, military and environmental components of a country. It is about the development of the life of a country and its

** Petre DUȚU, PhD (dutupetre63@gmail.com) is a senior researcher of the Centre for Defence and Security Strategic Studies (CDSSS) within "Carol I" National Defence University in Bucharest, Romania; he authored numerous specialised works, articles and communications in the field of security.*



citizens in ordinary situations as well as in crisis, emergency, curfew, mobilization or war.

In the specialized literature, several variants are seen to address strategic supply, but in general they all converge to four main stages: **current situation analysis, list of products to be purchased, choice of supply strategy, implementation and continuation of the process.**

Analysis of the current situation, as a first step, allows identifying the need for goods to be supplied that can provide strategic value. These are rare raw materials, petroleum products, food, stable and safe sources of drinking water. This phase is essential and crucial. It is the diagnosis that will put the needs of goods purchased by national and world market. In doing so, at the end of this stage, the number of suppliers, the number and characteristics of families of products, costs and volume for each product purchased will be known.

The list of products to be purchased is the second stage of strategic supply. Once that the current situation is well-known, this list must establish the real needs of each product. For each product to be purchased, the lower and upper limits of quality requirements will have to be known. Quality limits may mean, for example: time required for goods supply, products' accepted physical tolerances, and the volume of products that can be provided rhythmically, the cost of the goods that are included in the supply. This information will be required during the selection of suppliers and supply strategies. They will allow obtaining the required quality products in the field in which the strategic supply is made.

This stage will involve various services in order to value the standardization of products purchased. The exercise aims to maximize the volume of purchased goods in order to be in the best position for when the time for negotiations with the chosen suppliers comes.

The choice of supply strategy is the stage which will select and potentially will accredit the best suppliers for each product, according to previously defined objectives for supply. At the same time, it will set the expectations with the quality and quantity of products and target products to be purchased. Expectations to be established will be grouped on two levels: negotiation of prices with suppliers, supply strategies.

Implementation of new supply strategies is very important, because it may require large changes

in the supply and larger flexibility in choosing suppliers.

Implementation and continuation of the supply process is the fourth phase of the strategic procurement process. The complexity of implementation will vary from case to case, but the essential point is the measure of the obtained results. These will allow for adjustment to the success of the strategic supply project. On the other hand, the implementation also requires the continuation of supply as determined by the price, volume, quality, rhythm.

As a business, strategic supply means all actions and measures adopted and carried out at national level, the competent state institutions and private companies specializing in the manufacture or import of goods subject to purchase from the domestic or external market.

2. The need for and content of strategic supply

Strategic supply is necessary not only at enterprise and local community level, but also nationally. This is because of the nature of several different reasons and with different roles in a time period or another. Next, we are going to briefly review the main reasons for organizing the supply needed for national policy.

Globalization and regional integration phenomena often produce unwanted effects. In this sense, we can mention: the fierce competition on the markets of energy products, strategic raw materials and food supply, the "conquest" and domination of the sources of goods involved in national strategic supply by some states and transnational companies; national interests of the states possessing energy resources, natural raw materials or agricultural products; the membership of the countries possessing energy resources, natural raw materials or agricultural products in some regional economic organizations.

The possibility for natural disasters and disasters generated intentionally/unintentionally by human beings to appear and manifest in various countries possessing strategic goods which are the object of supply in any country in the world. For example, the earthquake in Japan (June 2011) destroyed the nuclear plant in Fukushima, causing casualties and significant material damage. Overcoming the consequences of this disaster implied the fact that Japan already had



a strategic supply of goods which would reduce the human and economic losses, on the one hand, and, on the other, continuing life and work of the country and its citizens without major disturbances and disruptions. Another natural phenomenon with economic consequences is represented by the hurricane (e.g. Hurricane Irene).

The global financial and economic crisis has been affecting the whole world since 2008 and hasn't been yet overcome by most of the states³. The effects of this crisis may be observed in the area of national strategic supplies which have been affected both by the lack of financial resources and by the frequent fluctuation of prices of products making the object of strategic supply. Thus, oil prices went up in the first quarter of 2011 with 16.79%, while for the full year 2010, the increase was of 15.15%, but has not yet reached the 2008 peak of 145\$ for a barrel⁴.

Global food crisis. The causes of food prices' running up are numerous. Among them, we shall mention the following⁵: the fact that the purchasing power in emergent states (Brazil, Russia, India, China) has increased in the last decades; the changes occurred in the alimentary habits in many countries, but especially in the emergent ones; urbanization; the decrease of the agricultural production because of the drought or of other reasons; conjectural effects.

Crises and social, political and/or military conflicts. The revolts from the Arab world, also known as the "Arab spring", had a negative impact on the oil price's running up⁶. The consequences of any civil war are unpredictable and the concerns on security will persist for a certain period of time. Moreover, the various "wars" between oil products' exporter countries and the importer ones make the national strategic supply necessary. In this regard, one may recall the "war of natural gas" between Russia and Ukraine in the winter of 2005-2006. A new war of gas is on the verge of breaking out, according to the Russian newspaper *Kommersant* which writes that the "honeymoon" between the two countries has reached its end after a meeting between the presidents Medvedev and Yanukovich. "We have already begun to prepare morally for a relapse of the gas war", declared for *Kommersant* a Ukrainian governmental source⁷.

The emergence and manifestation of contingent social, political, economic and military events unforeseen by the analysts and

experts in related fields of activity. In this respect, one can mention: the revolutions which took place in the European communist countries in the '90s; the dissolution of the USSR; the fall of Berlin Wall; the disappearance of the Warsaw Pact; the civil and inter-ethnic war from Yugoslavia; the revolts from the Arab world. All these events which took place at a national level have impacted both on the international community and on the respective states. Also, these events put to the proof the institutions of the states in which they occurred because they generated deep changes on all the levels of social, economic and political life. Obviously, society must function in such situations too, within acceptable and bearable limits so as to avoid producing disturbances which might endanger the territorial unity and integrity and the respective states' sovereignty.

The proper functioning of society. The lack of the necessary and sufficient products for the normal functioning of a state, as a social, economic and political ensemble, generates popular riots of a greater or smaller extent and creates the premises for the development of organized crime and of urban violence's augmentation. In this sense, one may mention the causes of the Arab world revolts: economic dullness, population's impoverishment, corruption, unemployment⁸. At the same time, in our opinion, the proper functioning of a society also includes national security and defence. This is the reason for which the fact of ensuring the material resources necessary and sufficient for national defence and security is also subsumed to each country's strategic supply. However, the regulations on this matter refer to the existence of two types of stocks – crisis stocks and strategic stocks.

As far as the content of the strategic supply is concerned, at national level, it consists in the assets/products contributing to the proper functioning of that society. In this category, there are included: agro-alimentary products; oil and natural gas; potable water; strategic raw materials; weapons (armament, fight technology, various ammunition), information processing devices (stocking, processing, transmission) and communication.

Some raw materials may be considered essential for the economy when supply shortage risks and their impact on economy are great by comparison with other raw materials. Raw materials represent an essential component not only for high-tech products, but also for common consumer goods,

but their availability has begun to be endangered. The increasing demand of raw materials is generated by the development of the emergent economies and by the new technologies. Even more, numerous developing countries adopt strategies of industrial development focused on trade, taxation and instruments on investments which are meant to reserve the basic resources for their exclusive use. This trend has become evident in a great number of governmental measures such as taxation in export, interest and subventions. In some cases, the situation is aggravated by the increased concentration of production in just some countries.

3. Strategic supply security

Due to the major role played by national strategic supply, states are constantly concerned about its security. Mainly, two different areas are concerned: ensuring the necessary and sufficient assets for society's normal functioning, on the one hand, and, on the other, ensuring an effective and efficient national defence and security.

Regarding the insurance of the entire society's functioning without disturbances, strategic supply security refers at:

- Establishing the necessary goods the society needs to function under normal conditions or in state of emergency or under the martial law. To this end, the competent national institutions create:
a) stocks for conducting daily activities under normal conditions; b) stocks for crisis situations; c) strategic stocks.

- Identifying the sources of strategic supply with the necessary and sufficient assets for society's functioning under the three aforementioned situations. Here, there may be identified two variants: from internal sources or from external sources. The first variant implies the necessity for the national strategic companies to not be given to foreign groups by privatization. Naturally, it would be necessary for each state to minister to keeping under its citizens' property the companies producing strategic assets (rare metals useful in producing electronic devices, oil products etc.) in order to be able to dispose anytime and without limits of their production. In the case when supply is made from foreign sources, it is necessary to take into consideration the risks which any importer must assume, especially when strategic raw materials are involved.

Among the challenges which every country must cope with when importing products such as raw materials, oil, natural gas, agro-alimentary products etc, there are:

- **Geopolitical risks.** Some countries may be tempted to use, for example, mineral raw materials as a key element which, when controlled, determines the development of their industry, especially when it is about the innovative domains of high technology;

- **Technological risk.** Thus, development of new technologies, especially in environment protection (electric cars, photovoltaic energy), can lead to a rapid growth of the demand for resources previously little used. However, mining is a heavy industry, with slow response time (10-20 years);

- **High volatility of raw materials' course.** World economy globalization determines its financing to be translated in significant price fluctuations;

- **The sale of mines, refineries, oil or natural gas wells to foreign private firms.** They follow their policy of developing and marketing their own products. Their economic interests are the principal ones. In all cases, any agreement on strategic supply must be made on the long term and with rigorous clauses in case it is broken by any reason excepting those of act of God;

- **Defining the conditions** under which the goods which make the object of strategic supply are purchased. It is about the quality and quantity of goods, the price at which they are purchased, the frequency of ensuring the requested quantity, the transport to destination;

- Ensuring the security of the purchased goods from the producer, may it be internal or external, to the storage and custody place.

In conclusion, it can be said that the security of strategic supply refers, first of all, at two main aspects: the reliable insurance of the products which make the object of strategic supply; the protection of intern sources of goods – raw materials, oil, natural gas etc. –, of the locations in which these goods are stocked, of the critical infrastructures afferent to the analysed domain.

Conclusions

Strategic supply is an essential process in the reliable insurance of all that is necessary for society's normal functioning and organization and

of an efficient and effective functioning of national security and defence.

There are two main dimensions (previously mentioned) of strategic supply sources as far as the origin of the goods which make the object of this complex and multidimensional process is concerned.

National strategic supply is a necessity imposed by a range of key determinant factors: globalization and regional integration; the current economic and financial crisis; global food crisis; the emergence and manifestation of contingent and unforeseen social, political, economic and military events; ensuring good functioning of society as a whole. These are the reasons for which each state has to elaborate national strategic supply strategies.

In order to achieve its objectives, national strategic supply, as activity, has to have an adequate security.

BIBLIOGRAPHY:

1. L'approvisionnement stratégique, <http://www.cliffsnaturalresources.com/FRE/Sustainability/Words inAction/Pages/StrategicSupply.aspx>.

2. Crise économique et financière: les perspectives d'après G 20, http://www.banque-france.fr/fr/instit/telechar/discours/2009/CN_HKG.pdf.

3. La crise alimentaire mondiale, <http://www.science.gouv.fr/fr/dossiers/bdd/res/2864/la-crise-alimentaire-mondiale>.

4. Efectul Libia asupra pretului petrolului, http://www.bloombiz.ro/international/efectul-libia-asupra-pretului-petrolului_1495018.

5. NOËL, Pierre; MEIDAN, Michel, L'approvisionnement énergétique de la Chine, http://www.ifri.org/files/CFE/PN_Chine_Energie_MarchesPolitiques.pdf.

6. Prețul petrolului ar putea crește, în urma uraganului Irene, http://www.bloombiz.ro/international/pretul-petrolului-ar-putea-creste-in-urma-uraganului-irene_1494976.

7. Prețul petrolului a explodat în T1 2011, http://www.bloombiz.ro/international/pretul-petrolului-a-explodat-in-t1-2011_1489061.

8. La révolte arabe, http://www.lexpress.fr/actualite/monde/la-revolte-arabe_963043.html.

9. Repositionnement stratégique, http://www.ccc.ca/fre/images/content/abo/CCCAnnRep05-06_F.pdf

10. RIOUX, David, L'approvisionnement stratégique, Une façon pour votre entreprise d'atteindre ses objectifs en matière de réduction de coûts et d'augmentation de revenus, <http://www.thecreatechgroup.com/articles/the-supply-chain/351-lapprovisionnement-strategique-une-facon-pour-votre-entreprise-datteindre-ses-objectifs-en-matiere-de-reduction-de-couts-et-daugmentation-de-revenus.html>.

11. Rusia și Ucraina, în pragul unui nou război al gazelor, <http://www.zf.ro/business-international/rusia-si-ucraina-in-pragul-unui-nou-razboi-al-gazelor-8609861>.

12. Sécurité de l'approvisionnement, dimension extérieure et élargissement, http://europa.eu/legislation_summaries/energy/external_dimension_enlargement/index_fr.htm.

NOTES:

1 See: La sécurité des approvisionnements stratégiques de la France, http://www.senat.fr/rap/r10-349/r10-349_mono.html, Pierre NOËL, Michal MEIDAN, L'approvisionnement énergétique de la Chine, http://www.ifri.org/files/CFE/PN_Chine_Energie_MarchesPolitiques.pdf.

2 David RIOUX, L'approvisionnement stratégique – Une façon pour votre entreprise d'atteindre ses objectifs en matière de réduction de coûts et d'augmentation de revenus, <http://www.thecreatechgroup.com/articles/the-supply-chain/351-lapprovisionnement-strategique-une-facon-pour-votre-entreprise-datteindre-ses-objectifs-en-matiere-de-reduction-de-couts-et-daugmentation-de-revenus.html>.

3 Crise économique et financière: les perspectives d'après G 20, http://www.banque-france.fr/fr/instit/telechar/discours/2009/CN_HKG.pdf.

4 Prețul petrolului a explodat în T1 2011, http://www.bloombiz.ro/international/pretul-petrolului-a-explodat-in-t1-2011_1489061.

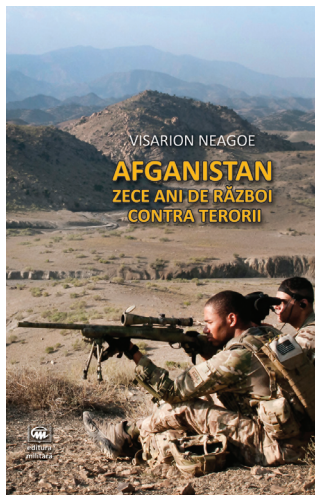
5 La crise alimentaire mondiale, <http://www.science.gouv.fr/fr/dossiers/bdd/res/2864/la-crise-alimentaire-mondiale>.

6 Efectul Libia asupra pretului petrolului, http://www.bloombiz.ro/international/efectul-libia-asupra-pretului-petrolului_1495018.

7 Rusia și Ucraina, în pragul unui nou război al gazelor, <http://www.zf.ro/business-international/rusia-si-ucraina-in-pragul-unui-nou-razboi-al-gazelor-8609861>.

8 La révolte arabe, http://www.lexpress.fr/actualite/monde/la-revolte-arabe_963043.html.

AFGHANISTAN – TEN YEARS OF WAR AGAINST TERROR



On the current war in Afghanistan several interesting books have been written. Among these, there is the work of Major General (ret.) professor Visarion NEAGOE, PhD, published, in Romanian language, by Editura Militară (the Military publishing house) within „Security and Defence” collection and launched at this year’s edition of Polemios book fair which took place in Bucharest between 26th and 29th October.

This book, counting 256 pages, appeared as a natural and necessary continuation, as the author has approached in previous works the international missions of the Romanian Army in the Iraq war: *185 de zile în Irak. Jurnal de front, (185 days in Iraq. Battlefield Journal)* published at the same publishing house, first in Romanian - 2009 and one year later in English; *IRAK Calvarul păcii (IRAQ The Hard Way to Peace)*, published in Romanian and English in 2008 and *Armata României în misiuni internaționale. 1991-2009 (Romanian Army in international missions. 1991-2009)*, published in 2010 by Centrul Tehnic Editorial al Armatei, also a very prestigious publishing house mainly dedicated to specialized books on security and defence.

Afghanistan – Ten Years of War against Terror is a book that emphasizes and analyzes

the Romanian contribution – a contribution very highly appreciated by commandants and military of the international Coalition – to this war “that seems to never stop”. The author explains the necessity of this endeavour, stating that unfortunately, the Afghanistan – as a country, as a culture and civilization – is known only to a less extent in Romania, although the country has been and is politically and military engaged there. In a world that is in full process of globalization, not possessing minimum knowledge on areas in which you are engaged is almost ignoring your own interests. Our army has been engaged for almost ten years in this war against terrorism and our co-nationals do not know unfortunately the danger in which their military operate.

The author, a fine connoisseur of the phenomenon in his double quality, of decision-maker commissioned by the Ministry of National Defence, as well as of officer who was in the theatre of operations, speaks as former commandant of Comandamentul Operațional Întrunit „Mareșal Alexandru Averescu” („Marshall Alexandru Averescu” Joint Operational Commandment) in Buzău.

The book is structured in a harmonious and coherent manner in six chapters, as follows: 1. *Cultural-historic Reference-points*; 2. *Factors and Conditions in the Afghanistan War Evolution*; 3. *Main Events and Operations of the War in Afghanistan in Chronological Order*; 4. *The International Security Assistance Force*; 5. *The Afghan Security Forces*; 6. *Romanian Army’s Missions in Afghanistan* and a chapter dedicated to conclusions, entitled „*Instead of Conclusions*”.

In the first chapter, **Cultural-historic reference-points**, Mr. Visarion Neagoe makes a short incursion in the basic concepts of the Afghan culture, offering a small practical guide – very useful to those interested by Afghan civilization and culture, but especially to those who are going to participate in missions in this theatre of operations – of what to



do and not to do in the Islamic world. Then, the author guides us toward the Afghan phenomenon, navigating chronologically through the significant stages of the history and civilization of the country, from the past to the present day.

The second chapter, *Factors and conditions in the Afghanistan war evolution*, presents the geopolitical and geostrategic context – an absolutely necessary endeavour in order to better understand the evolution of events in this area. Further on, there are mentioned the final provisions resulted from the eight conferences on Afghanistan problematics and future that have been organized throughout the world since 2001.

The third chapter, *Main events and operations of the war in Afghanistan in chronological order*, is a true history lesson, in which it is shown how this war started, with the launching by the American and British military forces, on October 7, 2001, of the Operation “Enduring Freedom”, as a response to the terrorist attacks in September 11, 2001 and how its character evolved continuously, “from violent combats against Al-Qaeda and Talibans to a complex, multinational effort of counter-insurgency”. The sub-chapters are eloquent reference-points: *The premises of the war in Afghanistan; Campaigns in October-December 2001; “Anaconda” Operation (2002); The Regrouping of the Taliban insurgency (2003-2005); NATO in Southern Afghanistan (2006); The coalition’s offensive (2007); Reassessment and renewal of commitments in Afghanistan (2008); U.S. in Southern Afghanistan (2009); Northern Distribution Network (NDN); The American offensive (2010). Peace initiatives.*

The fourth chapter presents *The International Security Assistance Force*, to be more specific, *ISAF Command Structure and Extending the ISAF Presence in Afghanistan*. It shows the origins of this entity, its organization, role and evolution, as well as contributions of armies, by states, be they NATO Member States, partners or not.

In Chapter V, there are dealt, in a competent manner, *Afghan security forces*, bringing to the fore *the Afghan National Army and Afghan National Police*, explaining their developments in the given historical context.

The sixth chapter, *Romanian Army Missions in Afghanistan*, reveals in full the Romanian presence in the ISAF mission within “Enduring Freedom” Operation, stressing that “the political decision to

military engage Romania, together with the U.S. forces, on the antiterrorist front in Afghanistan in the spring of 2002, was a major motivation to support Romania’s candidature for integration into NATO structures”. The author also presents, in a professional manner, the decision-making mechanism and detailed records of the Romanian Army participation in the theatre of operations. There are brought forward contributions of the military units that have sent troops to Afghanistan, among which we mention: Infantry Battalions “Red Scorpions”, “Carpathian Hawks”, “Black Wolves”, “Bold Eagles”, “St. Andrew”, “White Sharks”, “Călugăreni”, Romanian contingent participation in support of parliamentary elections in Afghanistan (ISAF strategic reserve), Maneuver Battalion’s participation in the ISAF mission, participation of Mountain Battalions “Dragoslavele”, “General Leonard Mociulschi” are pertinently analyzed. This central part of the book highlights the Romanian Army’s contribution to the international community action in Afghanistan. In this respect, we believe that the titles of the subchapters are eloquent: *The Continuation of the Romanian Military Presence in Zabul Province; Participation in the concept of “Provincial Reconstruction Teams” in Afghanistan in “ANA Training” mission; Special Forces Participation in Missions in Afghanistan; Romanian Military Offer within the Mobile Observation Team; Acting Element of Command and Control; Participation of the Operational Advisory and Liaison Team within ISAF and KAlA Mission.*

The author concludes that “at least for now, the peace in Afghanistan is far from installing and there is still a long way up to the establishment of Western democracy and freedom in this land so tried by war, famine and poverty”.

It should be noted that the work includes events that occurred this year – the capturing and killing of Osama bin Laden in May and the current Romanian participation in Afghanistan.

In addition to recording the facts, the author provides a pertinent analysis of the events, phenomena and processes occurring in a decade of war, “which does not belong only to the Afghan people for a long time now.”

Overall, despite the avalanche of data, names, specialized terms and condensed information, the paper has an elevated style, elegant and accessible at the same time. The book is appreciated by



REVIEWS

the publisher as “interesting and valuable from multiple points of view - military, socio-cultural, geopolitical”.

In conclusion, the book **“Afghanistan - ten years of war against terror”** of Mr. Major General (ret.) prof. Visarion Neagoe, PhD is a very useful tool for all those interested in the war phenomenon

in Afghanistan, but especially for the Romanian military who are to go there on mission. Overall, this book is a true history lesson came from a person who has had a double status - that of military and university professor. The author himself says that “the book’s reading will bring about reminders, as well as conclusions and lessons for the future”.

Daniela RĂPAN



THE ACTIVITIES OF THE CENTRE FOR DEFENCE AND SECURITY STRATEGIC STUDIES

OCTOBER - DECEMBER 2011

This year, the **Centre for Defence and Security Strategic Studies (CDSSS)**, an institutionalized scientific research structure of “Carol I” National Defence University **celebrated 11 years of activity** in the scientific research of the military, political, social and economic phenomena and processes which impact on national, regional and international security, of national and collective defence, of the relations between the military and the civil society, of the active, responsible and legitimate participation of Romania in international peace-keeping, peace-maintenance, peace-enforcement and peace-building missions within NATO and/or EU or under UN mandate.

As every year, CDSSS organized at its headquarters **the Annual international scientific session** on the topic of “*The balance of power and the Security Environment*”, on 17th and 18th of November 2011.

Within the Annual scientific session, there were presented papers by representatives of the Ministry of National Defence, the Parliament of Romania, “Carol I” National Defence University, the Ministry of Education, Research, Youth and Sport, the Ministry of Administration and Interior, the Romanian Intelligence Service, the Special Telecommunications Service, professors and researchers from civil and military institutions of education and research and of non-governmental organizations.

The main issues approached within the papers presented in the scientific session’s panels were: *the trends in the protection of the security environment; the evolution of International Relations and the balance of power; the current challenges for the security environment; regional and international centers of power and their influence on the security environment; the status and role of international organizations in maintaining security.*

A special interest was arisen by the paper presented by the commandant and rector of “Carol I” National Defence University, General-lieutenant professor Teodor FRUNZETI, PhD, which was entitled “*The balance of threat and the balance of power*”. In essence, the author laid an emphasis on the fact that “*to the «victory» of the balance of threat theory on the one of the balance of power also contributed the emergence of non-state actors on the international scene, actors which may become real threats to other actors’ national security or even to their alliances’ security which are obviously oriented to countering them*”.

A special attention was also paid to the paper entitled “*Unipolarism and multipolarism in the 21st century. Trends in international system*”, by General-lieutenant associate professor engineer Gheorghe SAVU, PhD, as well as to “*National alimentary security and the balance of power*”, presented by Academician professor Alexandru BOGDAN, PhD.

The debates which succeeded every presentation were intense, efficacious and resulted in numerous suggestions for the improvement of the security environment through the concerted action of all state and non-state actors on the international arena.



The most recent research studies published within CDSSS are *“Priorities in Romania’s security and defence architecture in the new climate of globalization and of its participation in zonal and regional treaties”* and *“The Russian Federation – key-elements of its participation in SCO (Shanghai Cooperation Organization), NATO-Russia Council, BRIC (Brazil, Russia, India, China) and possible influences in Central Asia with repercussions on Romania”*.

CDSSS researchers ended their activity within two research projects to which they contributed as partners: *“Systems of integrated management for the economic and financial protection of critical infrastructure and of personnel against all the types of terrorism”* and *“Interdisciplinary research for projecting economic and financial strategies of action in extreme risk events. Natural hazards and technological accidents”*.

The most important scientific activities of CDSSS for 2012 are **the international seminar** which will be organized on the **18th of May** and **the 12th Annual international scientific session** which will take place between **22nd and 23rd of November**. More information on the conditions of participation to these scientific events will be published in due time on our web page <http://cssas.unap.ro>.

Irina TĂTARU



INSTRUCTIONS FOR FOREIGN AUTHORS

On selecting articles, the following aspects are taken into consideration: the theme of the article must be in line with the subjects dealt by the magazine (up-to-date topics related to security, defence, geopolitics and geostrategies, political and military aspects), originality of the paper, scientific content and adequacy to the editorial standards adopted by the magazine, as well as its novelty character (it should not have been priorly published), a relevant bibliography.

*Foreign authors shall send their article in English, for the scientific evaluation process, which is developed according to the principle **double blind peer review**.*

Consequently to the evaluation, the article:

- a) is accepted for publication as such;*
- b) may be published if the author makes completions/modifications;*
- c) is rejected.*

*The **article's length** may vary between 5-15 pages (including bibliography and notes, tables and figures – if any), it shall be written with Times New Roman font, size 11, one line spacing. Translation into Romanian for the Romanian edition of the magazine will be provided by the editor.*

*The text has to present a logic **structure**. It is recommended to organize it in chapters and to have an introduction and conclusions. The title shall be written in capital bold letters,*

*The text has to be preceded by: **a short presentation of the author** (given name and last name, e-mail address, institutional affiliation, military rank, academic title, PhD candidate status etc) and an **abstract** which is not to exceed 150 words, and 5-8 **key-words**.*

Quoting shall be done according to academic regulations, in the form of endnotes, as follows: last name of the author(s), in capital letters, name, title of the work, place and publishing house, year of publication, quoted page(s). Internet links shall be given in full. For the tables and figures, which are to be sent in JPEG format, the source shall be mentioned at the bottom of the image. Bibliographic sources shall be alphabetically arranged.

*The document shall be **saved** as Word Document (*.doc).*

Articles shall be sent electronically to our e-mail cssas@unap.ro, in accordance with the following time framework: for no. 1 – 01 December – 15 January; for no. 2 – 01 March - 15 April; for no. 3 - 01 June 15 July; for no. 4 - 01 September - 15 October.

The article should not contain any party political connotations. Authors assume full responsibility for the content of their articles. Authors can publish only one article by issue. The articles will not use classified information.

Published articles are in accordance with the Law of Copyright. All rights are reserved to “Carol I” National Defence University, no matter if the whole material is taken into consideration or just a part of it, especially the rights regarding translation, re-printing, re-use of illustrations, quotes, dissemination by mass-media, reproduction on microfilms or in any other way and stocking in data bases. There are authorized any reproductions without any afferent fee only if the source is mentioned.

Our address is: National Defence University “Carol I”, the Centre for Defence and Security Strategic Studies, 68-72 Panduri Street, sector 5, Bucharest, Romania, telephone: (021) 319.56.49; Fax: (021) 319.55.93, e-mail: cssas@unap.ro, web address: <http://cssas.unap.ro>, <http://impactstrategic.unap.ro>



STRATEGIC IMPACT quarterly scientific magazine has been edited by the Centre for Defence and Security Strategic Studies within “Carol I” National Defence University for ten years in Romanian and seven years in English. The magazine is acknowledged locally and internationally for its wide area of topics - political-military topicality, security and military strategy, NATO and EU actions, informational society, peace and future’s war. Our readers will find in it strategic analysis, synthesis and evaluations, points of view on the strategic impact of the dynamics of the actions undertaken nationally, regionally and globally.

STRATEGIC IMPACT collaborates with renowned experts, both national and international, from the scientific research environment and from civilian and military academia. National collaborations involve the Ministry of National Defence, General Staff, services’ staffs, the Ministry of Administration and Interior, Ministry of Foreign Affairs, military units and other state’s organizations, NGOs, companies, etc.

The international acknowledgement of the magazine’s quality is confirmed by its presence on sites belonging to prestigious foreign institutions such as Defence Guide, in collaboration with the Hellenic Institute of Strategic Studies – HEL.I.S.S., The Institute for Development and Social Initiatives – IDIS from the Republic of Moldova – the virtual library for political and security studies. Also, the magazine is included in international databases: CEEOL - Central and Eastern European Online Library (Germany), Index Copernicus International (Poland).

The magazine is accredited by the National University Research Council and acknowledged as a B+ magazine, proving the potential to become an international acknowledged magazine.

STRATEGIC IMPACT is a representative forum for reflection and debates on topics related to strategy and security for the scientific, academic, national and international community.

STRATEGIC IMPACT magazine is issued in two separate editions in Romanian and in English and disseminated in the national and international scientific environment and in institutions involved in security and defence.



Issue organizer: Daniela RĂPAN
Designer: George RĂDUICĂ
Masterproof: Cristina BOGZEANU, Daniela RĂPAN
The National Defence University "Carol I" Printing House
