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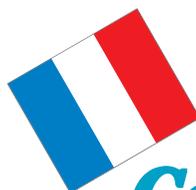
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Solidarity, Trust, Hope

Our world is changing from day to day, but it is indisputably bound to go forward. Many of the conventional boundaries of knowledge have been overcome and the progress of science and technology has opened up new dimensions and perspectives for the human being, increasingly fascinated by these new horizons and more and more concerned with the existence of other forms of life and civilisation in the universe.

But what about life on Earth? What is its value? How do we strive to preserve and enjoy it? How do we leave it for future generations? Because the civilised world is shaken and shocked by violent, isolated or concerted, actions in the name of dogmatic precepts glorifying violence and barbarity, which, unfortunately, continue to find new converts.

Following the recent terrorist attacks in Paris and San Bernardino, the USA, which cannot be described otherwise than attacks against the human condition, the civilised world mourns martyrs in exemplary solidarity in the face of suffering and strengthens its determination to fight back. Tolerance, however much it may be invoked as a human virtue, does not justify ignoring or minimising danger.

At the same time, solidarity requires accountability and dialogue to ease tensions and rebuild trust between the different actors on the current geopolitical scene, engaged – having own formulas, accepted or challenged by other players – in settling (or complicating!?) certain regional conflicts. Cooperation is a sine qua non condition in the joint action against terrorism and only the concerted effort of all the forces, of the entire civilised world, will lead to a fair resolution of this so complicated equation.

Romania, a member country of the Euro-Atlantic security structures, stands by its allies in the actions meant to respond to and counter this scourge. The intensification of domestic security measures is the first step required in this process, in which the strength of the whole is conditioned by the response capability of each and every constituent.

Experiencing itself a tragedy of proportions – the fire in a concert hall in București, in which dozens of people tragically perished, many others being seriously injured and probably irreversibly mutilated –, Romania proved to be part of a system in which the spirit of sacrifice and fraternisation with those who suffer are defining values. The collective emotion shock had to be quickly overcome and the action to rescue the victims became a major national imperative. However, the consternation regarding this disaster generated by ignorance and recklessness persists. Mistakes cause suffering and they should not be repeated.

The commitment and dedication of the military to help those in great need were again exemplary. The offensive for life, launched in the entire system of intervention in case of emergencies, had the professionals at “*Dr Carol Davila*” Central Military Emergency University Hospital in the front line too. The humanitarian emergency flights, executed by the Romanian Armed Forces transport aircraft as well as by the one provided by NATO, were also examples of commitment and connection to the pulse of the nation, which was very fast in those days. In one of the largest medical operations in recent years, the Romanian Armed Forces contributed not only the technical capabilities but also the professionalism and direct effort of their specialists.

The solidarity in the face of suffering was not just declarative. The tricolour flag was lowered to half-staff in the theatres of operation, a sign of respect and fraternisation with the bereaved families, and the blood donated by the Romanian troops as well as by thousands of fellow countrymen contributed to saving lives in danger.

Under the hot ashes of the fires and explosions in Europe and America, the flame of hope and trust has revived.

May the coming year bring light and peace into hearts, homes, in the country, in the world!

Happy New Year!

 *Colonel Dr Mircea TĂNASE*

English version by
Diana Cristiana LUPU

Solidarité, confiance, espoir

Notre monde change de jour en jour, mais il est obligé à aller indubitablement en avant. Plusieurs des limites conventionnelles de la connaissance ont été surmontés et les progrès de la science et de la technologie ont ouvert de nouvelles dimensions et perspectives de l'affirmation de l'Être humain, de plus en plus fasciné par ces nouveaux horizons et de plus en plus préoccupé par l'existence d'autres formes de vie et de la civilisation dans l'univers.

Mais ce que nous faisons avec la vie sur la Terre? Quel est son prix? Comment nous résistons pour préserver et d'en jouir d'elle? Comment nous le transmettons aux générations futures? Parce que, voici, le monde civilisé est ébranlé et choqué par des actions violentes, isolés ou conjugués, au nom de préceptes dogmatiques qui exaltent la barbarie et la violence et que, malheureusement, continuent à trouver de nouveaux convertis.

Après les récents attentats terroristes à Paris et à San Bernardino, États-Unis, qui ne peuvent être décrits autrement que les attaques contre la condition humaine, c'est le monde civilisé qui pleure ses martyrs dans une solidarité exemplaire face à face de la souffrance et renforce sa détermination d'en répliquer. La tolérance, bien qu'elle puisse être invoquée comme une vertu humaine, ne justifie pas à ignorer ou à minimiser le danger.

Dans le même temps, la solidarité exige la responsabilité et le dialogue pour atténuer les tensions et de rétablir la confiance entre les différents acteurs de la scène géopolitique actuelle, impliqués – avec leurs propres formules, soutenues ou contestées par d'autres protagonistes – dans la résolution (ou complication!?) de conflits régionaux. La coopération est une condition sine qua non pour l'action commune contre le terrorisme et seulement l'effort combiné de toutes les forces, du tout monde civilisé conduira à une décision correcte de cette équation si compliquée.

La Roumanie, ce pays membre de structures de sécurité euro atlantique, est aux côtés de ses alliés dans les actions de riposte et de combattre ce fléau.

L'intensification des mesures de sécurité interne est la première étape nécessaire dans ce processus, dans lequel le pouvoir de l'ensemble est conditionné par la capacité de réaction du chaque élément.

La Roumanie, à son tour, a vécu une expérience néfaste, une tragédie catastrophique – l'incendie d'une salle de concert à Bucarest, où ont péri tragiquement quelques dizaines de personnes, beaucoup d'autres ont été grièvement blessés et, probablement, mutilés irréversibles. Mais notre pays a prouvé qu'elle fait partie d'un système dans lequel l'esprit de sacrifice et la fraternisation avec ceux qui souffrent sont des valeurs définitives. Le choke de l'émotion collective a du rapidement surmonter et l'action de sauver les victimes est devenu un impératif majeur national, bien que la consternation devant cette catastrophe engendrée par l'ignorance et l'inconscience persiste. Les erreurs ont blessé des gens et elles ne doivent pas être répétées.

L'engagement et le dévouement des militaires pour aider les personnes en grande souffrance ont été, de nouveau, exemplaires. L'offensive pour la vie, déclenchée à l'ensemble du système d'intervention en situation d'urgence, a été conduite, à l'avant-garde, par les spécialistes d'Hôpital Militaire Centrale Universitaire d'Urgence „*Dr. Carol Davila*”. Les vols humanitaires d'urgence, exécutés par des avions militaires de transport de l'armée roumaine, mais aussi celui fourni par l'OTAN – ont été, à leur tour, un exemple de connexion et d'engagement au pouls de la nation, qui a été très rapide ces jours-ci. Dans l'une de plus grandes opérations médicales au cours de dernières années, c'est l'armée roumaine qui a mis à la disposition non seulement ses capacités techniques, mais aussi le professionnalisme et l'effort direct de ses spécialistes.

La solidarité devant la douleur non était exclusivement déclarative. Le drapeau tricolore a été abaissé en berne dans les théâtres d'opérations, comme un signe de respect et de la fraternité avec les familles endeuillées, et le sang donné par des soldats roumains, à côté des milliers des compatriotes, a contribué à sauver des vies en détresse.

La flamme de l'espoir et de la confiance a ravivé sous les cendres chaudes des incendies et des explosions en Europe et en Amérique.

Soit que l'année qui vient à apporter la lumière et la paix dans les cœurs, les foyers, dans le pays, dans le monde!

Bonne année!

*Version française par
Alina PAPOI*

SOCIETAL DIMENSION OF SECURITY IN THE EURO-ATLANTIC CONTEXT

*Major General Dr Ioan MANCI
Lieutenant Colonel Dan MAGALIUC
Major Adrian DIMCEA*

The authors discuss the concept of societal security in the Euro-Atlantic context, emphasising its importance in relation to hybrid threats. Thus, it is shown that the current period is one in which aggressors are seeking unexpected ways to profit from their strengths and opportunities and not to provide any to the enemy. In the context of hybrid threats, military weaknesses are not the only ones essential, unconventional threats to societal security being even more important, as they seek to exploit ethnic tensions, weak and corrupt institutions or economic and energy dependence. Therefore, weak states, namely those without strong institutions, with citizens who are uncommitted or even hostile to the state, dependent economically on potential enemies, corroded by corruption, are more vulnerable to hybrid threats.

***Keywords:** hybrid warfare; societal security; social security; identity; risk*

Introduction

Crises and social conflicts have always been considered a constant in the history of Europe and therefore their *observation and description*, with all contingent components, represent a *necessity* especially in the current security and stability environment characterised by the intensification of migration of persons coming from areas of conflict in the Middle East, North Africa or South-East Asia to European states. The relative balance enjoyed by the international community after the collapse of the Soviet bloc and Yugoslavia has enabled Europe to be free from military conflicts for a significant period of time. This relative “*calmness*” has lately been disrupted by the actions generated by a complex of factors including: *the actions of ethnic minorities* wishing to obtain additional rights, including secessionist ones, *the prolonged economic crisis* which revealed numerous social

Major General Dr Ioan Manci – Commander, 4th Infantry Division “*Gemina*”, Cluj-Napoca.
Lieutenant Colonel Dan Magaliuc, Major Adrian Dimcea – 4th Infantry Division “*Gemina*”, Cluj-Napoca.

discrepancies, *the struggle for assuring energy resources and redefining geostrategic areas of influence, which contributed substantially to destabilising eastern Ukraine and to increasing the migration phenomenon.*

The prospect of extending some recent military conflicts, such as the crisis in the east of Ukraine or the possible trigger of similar actions in the Baltic States, allowed reconsidering the causes behind the extension of these areas of conflict, some of which very close to the Romanian borders.

Among the relevant factors there have been identified characteristics of contemporary societies which, subject to significant pressure, *may generate security risks, if not at state level on the whole, at least at individual level, that of the citizens.*

As expected, the area of crisis manifestation has changed with the switch of political, economic and social realities. Although Europe, through its characteristic institutions, intends to be a coagulant of the system of values, the developments entailed by the economic and social policies within the process of European integration or globalisation have led to the dilution of national values, enabling a clear visualisation of the effects of the factors socially connected to the individual, the nation or the society in general. In the context of some economic imbalances in the Eastern European states, mostly related to reshaping the society after the recent global economic crisis, *the new elements acquire an increasing relevance in assuring security.*

The complexity of the crises, having not only common factors and assumptions but also distinct features, requires analysing them from multiple perspectives. However, the elements that characterise the *social identity and uniqueness of a population* are particularly relevant. Through the process of adapting the new states to the new security context, there can be configured new systems of security architecture (based on border control, monitoring the online activity etc.) which will try to respect the values of freedom and human rights, but whose effect is precisely that of *attenuating the social identity of some populations.* These elements, seen in the context of the confluence on the Romanian territory of some tension zones (from latent ones of ethnic origin to more violent ones, which may have political and social connotations), between the sphere of Russian influence and NATO border, make it necessary to focus attention on the forces and actions that plan to exploit societal dysfunctions, even in relation to all sorts of minorities (religious, ethnic etc.).

The Concept of Societal Security

It can be considered that **society** is a human entity resulting from a process of coexistence and partnership between people and groups bearing a number of common attributes (race, ethnicity, language, history, geography) that give expression to some common feelings (identity, symbols, values)¹.

The most relevant component of the societal security agenda is **identity**, which is defined as a series of ideas and actions which allow an individual to consider and identify himself/herself as a member of a particular social group.

The literature often includes the terms of *national identity* and *nationality*. In an attempt to clarify these terms, we start from the fact that the term *national identity* is the sentiment felt by a person that he/she belongs to a certain nation (with common political elements and institutions, with rights and obligations and possibly a territorial coverage), and *nationality* is a political, legal or ethnic affiliation.

The *sense of national identity* is acknowledged and belongs to each individual and it represents the manifestation of the process of internalisation of some identity components such as language, traditional music, culture, cuisine, clothing, economy, social practices, local and state symbols and others.

The idea of “**social security**” was promoted in the international environment as a fundamental human right in 1948, by adopting the *Universal Declaration of Human Rights*, where, under Article 22, “*everyone, as a member of society, has the right to social security*”.

The term *societal security* was introduced in the '70s, being thoroughly analysed and studied for the first time by European schools of security studies such as the Research Institute in Copenhagen and the International Research Institute in Stockholm. The concept spread in the mid '90s in academia, through studies and research conducted by the Copenhagen School whose appreciations were that the security analysis areas were: political, military, economic, environmental and societal.

Thus, we believe that a comprehensive definition of the term *societal security* refers to *the ability of society to preserve essential characteristics (defining, traditional) of language, culture, association, national identity, religion and customs whenever it faces different threats or transformations*.

¹ Ioan Mancu, Corneliu Preja, *Introducere în studii de securitate și strategice*, C.A. Publishing, Cluj-Napoca, 2015, p. 166.

Societal security, although a component of national security, still maintains its independence from it because, by weakening the society or by identity crises, states can be separated from their own societies.

Thus, *societal security* includes situations where societies perceive a threat to their identity. Therefore, states can be undermined or destabilised by their own societies through threatening or weakening the societal cohesion or identity.

The multitude of interconnected elements and the complexity of their union disclose the exceptional versatility of national identity and, consequently, the versatility of possible threats to this identity.

Social Security – Societal Security

The concept of *national security*, according to the national Romanian authorities, is a normal state of the nation, assured by protecting and promoting constitutional principles, social, economic and political stability, the rule of law, as well as by exercising the fundamental rights, freedoms and duties of citizens².

In this context, it should also be understood that social security is not similar to societal security.

Social security refers to individuals being especially associated with the economic field whereas *societal security* is the *security of the collective identity*³ referring to communities and their identity. The social dimension refers to the population, with all that it entails⁴.

In fact, *social security* can be synthesised in combination with a number of definitions of the security of the individual. They target both the lack of threats and danger to the individual and the community and the concern for all the factors responsible for individual welfare. Thus, in the narrow sense, social and individual security refers to *assuring the protection of the individual and the community against any form of violence*, and, broadly, it refers to *assuring their welfare* (through access to education, healthcare, housing and social assistance, providing jobs and environmental conditions, cultural activities, supporting the youth etc.). When analysing the social security component it is required to take into consideration the quantitative (population number, density etc.) and qualitative aspects (levels of schooling, education etc.), as well as those referring to the standard of living and social policy legislation.

² *Ghidul Strategiei naționale de apărare a țării pentru perioada 2015-2019*, Presidential Administration, 2015.

³ Ionel Nicu Sava, *Teoria și practica securității*, Course, București, 2007, p. 25.

⁴ Ioan Mancî, Corneliu Preja, *op. cit.*, p. 183.



Social – Societal Duality

Societal security refers to threats to the identity of a community. It should draw attention to the devastating effect the loss of identity can have for the society. To protect societal security, it is necessary *to strengthen social cohesion* and enhance the role of certain structures within civil society (cultural, professional, intellectual, and religious). In these situations, the majority populations usually adopt defensive positions, unlike minorities, which occupy offensive positions, as a result of social and national dislocation processes. Therefore, the majority populations seek ways to strengthen their identity, unlike minorities, which can sometimes opt for extremist positions (which can lead to the formation of new states, terrorist acts or secessionist actions).

Overcoming a limitative definition of security, by exclusive reference to the concepts of territorial integrity or national interest, generally associated to the term *defence*⁵, allows viewing new types of threats (hybrid, asymmetric etc.) and exploring other dimensions of the new security agenda (strategic opportunities, benchmarks for macroeconomic policies, influences of political, societal, cultural, ethnic, religious and environmental factors etc.)

Migration – Societal Security Risk

Societal security perceives the migration issue as a main interest, an element that contributes to the implementation of *horizontal competition between communities*. Over time, it has been recognised that any intensification of the flow of immigrants triggers a series of negative reactions within the society, because there are influenced

⁵ Ghidul Strategiei naționale de apărare a țării pentru perioada 2015-2019, op. cit., p. 13.

and affected the state of comfort, the safety, the cultural and educational level achieved (increased street violence, crime, unemployment, housing needs), whose principal exponents are, of course, immigrants, attracting in this way the contempt of the locals.

Later, it has also emerged the problem of identity, of belonging to the group, because it is not enough to be born in a state in order to belong to a nation, it also requires strong connections with the community through religion, culture, language, ethnic identity, habits etc.

The combination between the very permissive EU policies, an individual and collective security provided by a legal system that works poorly, a standard of living higher than in the countries of origin, in conjunction with the need for states to complete their labour deficit, security situations hard to manage in certain regions, all enabled the development of tensions in Europe in 2015. Cultural differences may be exacerbated by the large number of immigrants.

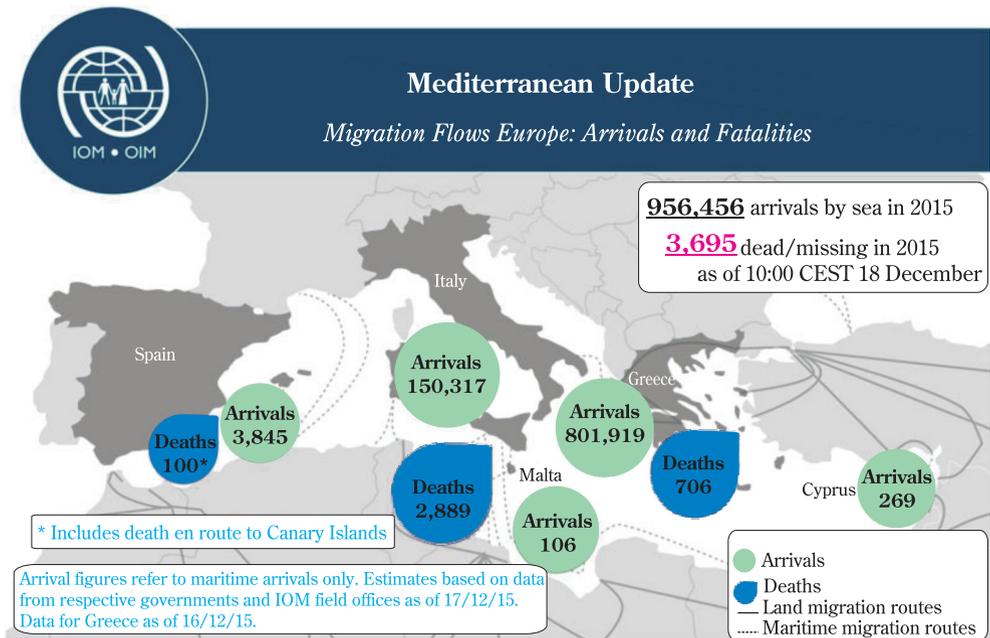


Chart showing migration in Europe in 2015

According to the International Organisation for Migration, over 956,000 people⁶ arrived by sea in Europe in 2015, seeking shelter or employment. Most fled from conflicts in countries such as Syria and Iraq. According to EU estimates, over 3 million people could arrive in Europe by the beginning of 2017.

⁶ See <https://www.iom.int/news/eu-migrant-refugee-arrivals-land-and-sea-approach-one-million-2015>, retrieved on 27 December 2015.

Secessionist Actions – Societal Risks

A conclusive example for changing national identity in terms of societal security is the case of Kosovo, whose unilateral declaration of independence was followed by a series of efforts for international recognition of sovereignty. Such steps were perceived by the Serbian elites as the most significant threat to the identity of the Serbian state.

A good example in the field of societal security is the identity of the Serbian community. In the message delivered by the Serbian President in the emergency session of the United Nations Security Council immediately after the self declaration of independence of the southern Serbian province, he stressed that the Serbian state was based in Kosovo, which, incidentally, is the focus of the Serbian identity. The unilateral act of declaration of independence was seen in this context as a violent risk for the Serbian identity, traditions and history. Thus, not only the sovereignty and territorial integrity of Serbia, as a state, are jeopardised, but also the identity of the Serbian community as a whole.

Analysing the issue of the Balkans in general and of the former Yugoslavia in particular, we can say with full conviction that the situation is more complicated when the *boundary between human rights and the principle of self-determination is very narrow* or simply cannot be differentiated, when minorities claim that their rights are constantly violated and the international community, *for various reasons and interests, recognises these requests*.

In the same context, at the end of 2015, secessionist feelings continued to cause problems in the relationship Madrid and Catalonia. Anti-system parties in the region constitute a challenge to the Spanish political apparatus in the electoral process. The frictions within pro-independence Catalan parties, together with the actions of the government in Madrid, do not allow an accelerated evolution in the local Catalan secessionist process. The identity of this community, if there is such a thing, may be affected in the context of absorption by the national Spanish majority.

Religion – an Element of European Identity

In Europe, everyone has the right to freedom of thought, conscience and religion. This right includes freedom to change one's religion or belief and freedom to manifest religion or belief individually or collectively, in public or in private, by means of denomination, education, practice and observance⁷. This is one of the reasons why, in the EU Constitution draft in 2004, no chapter on Christian

⁷ *Charter of Fundamental Rights of the European Union*, adopted in Strasbourg on 12 December 2007 by the European Parliament, the Council and the Commission, Article 10, Freedom of Thought, Conscience and Religion.

traditions of Europe was included, although there are many voices asserting that at the foundation of the European community there lie Christian values that represent a defining element of the current European identity⁸.

First of all, Europe is a cultural, moral, and historical concept and, only then, a territory or a continent discernible in geographical, economic and political terms. Therefore, we can say that today's Europe is a product generated by Christianity. Nowadays, in Europe, the respect for the elements that facilitated the establishment of the European community is absent or neglected. Paradoxically, from a religious perspective, respect is shown to other forms of belief which contributed less to defining the European culture – for example, Eastern religions, Islam, Judaism etc. – and, when Christian values come into question, arguments against are brought into discussion, based on freedom of expression, tolerance and multiculturalism.

Just as the *linguistic element* is the binder for ethnic identity at national level in Romania, *orthodoxy* is the element of conservation of the Romanian culture and spirituality⁹. These two elements are most often considered *the relevant dimensions of Romanian identity*. In this respect, the Romanian state recognises the important role of the Romanian Orthodox Church and of other churches and accepted denominations in the national history of Romania and in the Romanian society¹⁰, although there is no state religion in Romania and the state is neutral in relation to any religion.

As a defining characteristic of the Romanian space, the need for people to express themselves “*in a group and as a group*”¹¹ (the main feature of the Romanian people is gregarism) facilitated, on the one hand, maintaining the unity of the church and language in this space over time, but, on the other hand, limiting differentiation of personalities and attenuating the differences in the constituent elements of society.

To preserve national identity over time history recorded the efforts of Prince Constantin Brâncoveanu, who wanted to defend the Orthodox world in the Balkans and to preserve the integrity of Orthodoxy in Transylvania against the trends of Catholicism that the Catholic Church manifested at that time, threatening the unity of the Romanian people. The church is also one of the central elements of the Romanian identity in Moldova and the places of worship (44 churches and monasteries) built by Ștefan cel Mare help to keep spirituality, strengthen the Christian identity, as well as to enhance national identity.

⁸ Wilhelm Dancă, *Dumnezeu, Europa și religiile. Identitatea creștină și pluralismul religios*, see http://www.dialogteologic.ro/Portals/0/docs/DT1912_Wilhelm%20DANC%C4%82%20.pdf, retrieved on 27.12.2015.

⁹ Constantin Schifirneț, *Identitatea românească în contextul modernității tendențiale*, in *Revista Română de Sociologie*, year XX, no. 5-6, p. 472, București, 2009.

¹⁰ *Law 489/2006 on Religious Freedom and the General Regime of Denominations*, Article 7.

¹¹ C. Rădulescu-Motru, *Psihologia poporului român*, Anthology by Constantin Schifirneț, Editura Albatros, București, 1999, p. 10.

The Hybrid Conflict Includes a Societal Component

We are currently in *an era of hybrid conflict*, which evolved from conventional war assimilating asymmetrical actions and irregular and not assumed military actions. This is the period in which aggressors are seeking unexpected ways to profit from their strengths and opportunities and not to provide any to the enemy.

In the *hybrid war*, military weaknesses are not the only ones essential; even more important are those unconventional threats to societal security that those generating aggression seek to exploit: *ethnic tensions, weak and corrupt institutions or economic and energy dependence*. A weak state means a state without strong institutions, with citizens who are uncommitted or even hostile to the state, dependent economically on potential enemies, corroded by corruption, so easy to be infiltrated in strategic decisions¹².

These vulnerabilities can complement with *diminishing identity unity of a people* in terms of cultural or spiritual belonging to the same ethnic community or of other nature, which will ensure its unity of action based on a *common set of values*.

When an item impacting societal security, such as migration or refugee crisis, overlaps or coincides with an extremely difficult economic or financial period or with the prospect of economic bankruptcy, such as the situation in Greece today, implications can seriously affect the very identity of the state and of the community.

Given that Athens tries to manage both the flow of immigrants and the financial problems, there can occur at any time extremist protests intensification of the left groups known for violent actions and discourse. The convergence of these three elements together with the identification of some corrupt government elements may represent a threat to the cultural and national identity of Greece, contributing particularly to changing local, regional or even international security environment.

Nowadays, it is obvious that the *movement of population*, migrants and refugees, in the context of globalisation and of the exponential multiplication of the *online* communication possibilities, of social networks, cannot be prevented by fences, walls or other security barriers! Moreover, if refugees flee from war and a community isolates itself by such means to avoid contact with them, it is possible that some members of this community revolt against inhuman treatment, while others fear of the contact with the newcomers, seeing them *in the light of altered identity*, regardless of its nature (beginning with the national, ethnic or religious implications including lifestyle, traditional cuisine and habits).

¹² Dan Dungaciu, Director of Institute of Political Science and International Relations of the Romanian Academy (ISPRI), see <http://www.ziare.com/europa/ungaria/este-romania-in-razboi-hibrid-ungaria-destabilizatorul-nato-interviu-cu-dan-dungaciu-1349463>, retrieved on 27 December 2015.

Amid the ongoing refugee crisis at European level, when most European countries do not provide them protection and rights under international law¹³, an increase in erosion of solidarity in societies that provide support to these refugees is possible.

Conclusions

In the current security context in which international relations change constantly, prospects of military confrontations between states, even if not insignificant, are however unlikely. Globalisation brings, in turn, a series of risks to international stability. As a result of these realities, *increased attention to the elements of unconventional nature, starting with asymmetric threats* is required, continuing with such actions undertaken within *hybrid conflicts* and culminating in *military conflicts*, which may affect the security of both individuals and communities and that of nations and states.

Present realities show the multiplication of threats from a state or non-state enemy (individuals, groups) that use concertedly and in an adaptive manner (fast, dynamic) conventional and unconventional methods and means (political, military, diplomatic, economic, cyber, information etc.) in order to achieve the set objectives. These *hybrid threats*, which can be initiated by different entities and may be carried out through intermediaries so as not to identify the aggressor, can take the form of actions that affect both the identity of a community and that of a nation.

Observing and emphasising the societal dimension of security, there can be identified *risk elements with significant impact on the safety of communities* that have as a starting point the very desire to conserve and preserve the identity elements and the issues that define and customise them in an extended group, whether it is identified in terms of national unity, religion, ethnicity or of any other nature.

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¹³The 1951 UN Convention on Refugees, see <http://www.unhcr.org/pages/49da0e466.html>, retrieved on 27 December 2015.

MILITARY EXPLOITATION OF GEOSPATIAL INNOVATIONS

Colonel BEng Dan POMÎRLEANU

The technological breakthroughs of the past decades have shaped the people attitudes to all types of information. Particularly, the wide spread of the Internet and mobile communications has led to an increase in the popularity of geospatial services and to the evolution of geospatial technology. The article discusses the way the technological advances in the field of geospatial information are used in the defence environment. First, the main ways the geospatial information is employed for planning and executing military operations are presented. Then, the advances in the fields of geospatial data collection, processing, management and distribution are separately identified and discussed. Finally, main conclusions and possible further military applications based on emerging novelties are presented.

Keywords: *geospatial information; common operational picture; Web GIS*

Military Use of Geospatial Information

The requirements for the national defence bodies responsible for geospatial information support are specified in national military regulations and in coalition documents. Geospatial information is used to support intelligence processes, planning and execution of operations. The range of products is specified by the geospatial information matrix, spanning from tactical to strategic level and from digital to analogical maps covering land and maritime areas. The provision of geospatial support can be as information or as service capable to support geospatial information fusion, analysis and display. These products are presented as classic maps, geospatial databases, virtual flythrough, interactive maps, imagery or other formats. Also, as stated in *Geospatial Intelligence for Joint Operations*, geospatial intelligence can create a *common operational picture* of a certain area of interest using multiple sensors, types of data and information provided by other intelligence disciplines in order to achieve a comprehensive visual depiction of the ground situation¹. In order to extract the necessary information, geospatial defence organisations need to use data coming from a variety of sensors and other sources.

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¹ US Department of Defense, 2012, *Joint Publication 2-03. Geospatial Intelligence Support to Joint Operations*, see http://www.dtic.mil/doctrine/new_pubs/jp2_03.pdf, retrieved on 7 February 2016.

Data Collection

Airborne sensors have advanced significantly in the past decades employing cutting edge technologies in fields like microelectronics, laser or inertial navigation. The traditional analogical photogrammetric camera has been replaced by the digital equivalent. For instance, using the pushbroom principle proved by some satellite sensors, there are productive solutions based on 5 μm CCDs (*charge-coupled devices*) and 20,000 pixels line width². A photogrammetric camera working on this principle is also owned by the “*Divisional General Constantin Barozzi*” Military Topographic Directorate. The competing frame camera offers the same width and the possibility to interchange the lens between 80 mm and 210 mm³ leaving space for much flexibility in image acquisition according to the intended applications. Operated in conjunction with inertial navigation systems (INS), direct georeferencing with accuracy better than 1 m is possible, without the need to collect ground control points. Such digital camera could be used to collect imagery as a source to generate products like geospatial databases or photomaps. The possibility to use it during military operations is limited because of the insecurity of the airspace and because of the requirements for the photogrammetric flights. Another drawback is the sensitivity of the system. Thus, it has to be calibrated regularly and it can be installed only on specially modified airplanes. However, in operations like disaster relief or in any situations when the airspace is secured, the digital camera could be a fast and high quality imagery collection asset.

LIDAR (Light Detection and Ranging) technology that measures distance by illuminating a target with a laser and analysing the reflected light has evolved at a high rate in the past years. Delivering point clouds with a high density and penetrating the vegetation, it is of a special interest for military applications. The high-end equipment is capable to perform approximately 500,000 measurements/second and it can operate at altitudes of around 5000 m⁴. The point clouds could be used for battlefield visualisation, line of sight analysis, urban warfare planning or target detection⁵. For example, a military *LIDAR* called *Buckeye* was used intensively in Afghanistan and Iraq. The same combination

² Leica-Geosystems – *The Leica ADS Airborne Digital Sensor*, 2016, see <http://leica-geosystems.com/products/airborne-systems/cameras-large-format/leica-ads100-airborne-digital-sensor>, retrieved on 7 February 2016.

³ Microsoft, *Ultra Cam Eagle Prime*, 2016, see <http://www.microsoft.com/en-us/ultracam/ultracameagle.aspx>, retrieved on 7 February 2016.

⁴ *Riegl LMS-Q1560*, see http://www.riegl.com/uploads/tx_pxpriegldownloads/DataSheet_LMS-Q1560_2015-03-19.pdf, retrieved on 7 February 2016.

⁵ *Geospatial Intelligence Forum – Lidar's New Dimension*, 2010, see <http://www.kmimediagroup.com/geospatial-intelligence-forum/archives>, retrieved on 7 February 2016.

of LIDAR, GPS (Global Positioning System) and INS (Inertial Navigation System) could be mounted on a vehicle. By combining the dense point cloud with imagery and video data, the 3D model of an urban environment can be obtained, using realistic building textures⁶. The main limitation for using this technology is the complete control over the skies or of the surveyed area. Besides, the data processing is highly dependent on the availability of the GPS signal and on the connection with an INS. Furthermore, the equipment collects huge volumes of data that have to be stored and exploited in order to identify features. Thus, the data management and timely feature extraction would hinder the data richness.

Spaceborn sensors represent one of the most attractive sources of geospatial information for military community due to the independence on the adversary airspace. The advances in technical characteristics have reached very high spatial resolution of approximately 30 cm⁷. Besides, the availability of multiple bands and several metres geolocation accuracy give the possibility to extract valuable data. The main military applications of remote sensing are the assessment of the enemy activity or capabilities and topographic analysis⁸. For example, using 50 cm imagery, it is possible to identify objects like bridges, missile sites, minefields, radars or radio towers. Also, Buxbaum⁹ shows that the US Military use the commercial satellites owned by *Digital Globe*. In the same way, for the production of high resolution vector data in *Multinational Geospatial Co-production Programme*, sub meter commercial satellite imagery is largely utilised. The usage of satellite imagery during military operations could be difficult because of the procurement time and delivery policy of the commercial vendor. Also, the big digital files are beyond the limit of the transmission capabilities available in the field. For instance, Herman¹⁰ shows that during the Gulf War the intelligence dissemination in time was unsuccessful, especially for imagery. Another category of available data that can be used in the military is the hyper-spectral imagery. According to H. Canaday¹¹, it can be used to detect camouflaged targets, explosive materials

⁶ *3D Laser Mapping, City Modelling*, see <http://www.3dlasermapping.com/streetmapper/>, retrieved on 7 February 2016.

⁷ *Digital Globe, World View 3*, 2016, see https://dg-cms-uploads-production.s3.amazonaws.com/uploads/document/file/203/Exploration_Mapping_Group_WorldView-3.pdf, retrieved on 7 February 2016.

⁸ S. Aronoff, *Remote Sensing for GIS Managers*, Redlands, ESRI Press, 2005.

⁹ P. Buxbaum, *Electro-optical Innovation*, in *Geospatial Intelligence Forum*, 2013 11(3), see <http://www.kmimediagroup.com/geospatial-intelligence-forum/archives>, retrieved on 9 February 2016.

¹⁰ M. Herman, *Intelligence Power in Peace and War*, Cambridge University Press, 1996.

¹¹ H. Canaday, *Seeing More with Hyperspectral Imaging*, in *Geospatial Intelligence Forum*, 2013, 11(2), see <http://www.kmimediagroup.com/geospatial-intelligence-forum/archives>, retrieved on 9 February 2016.

or different types of gas. However, the processing poses many difficulties because of the massive amount of data. Also, a complex library of spectral signatures for all materials to be identified and meteorological details for the atmospheric correction are needed.

The spaceborn active sensors have evolved to high resolution availability. For example, *Radarsat 2* and *Cosmo Sky Med* offer 1 m resolution data. The advantage to operate independently of weather and daylight attracts a particular interest from defence community. For instance, Boucher¹² emphasises the importance of *Radarsat 2* for the Canadian Ministry of Defence for applications like coastal monitoring, ship detection or monitoring of the polar area where during six months per year there is no daylight. Similarly, this type of data can be used for law enforcement missions or for disaster management. As for other satellite sensor products, the limitation comes from the accessibility in time. Also, the processing and interpretation of Radar data are difficult tasks so that specialised operators are needed.

In the same area of data collection, there are some new possibilities to acquire information by reducing the need for supplementary data. Thus, the majority of geospatial software implemented capabilities for 3D visualisation in conjunction with a compliant hardware. The steep decreasing in price and the simplification of the technology by using passive glasses give the possibility to support many users with 3D capability. The geospatial analyst can benefit from a more accurate feature interpretation and extraction. Also, any staff officer could visualise imagery and terrain analysis products in 3D environment. Another source of geospatial information is represented by the *Volunteered Geographic Information (VGI)*, a significant phenomenon in the Web 2.0 era. Web sites like *WikiMapia*, *OpenStreetMap* or *Google Earth* could contain valuable data for particular situations. However, the Internet access is not guaranteed during military operations. Also, the collected information has to be treated with caution because the contributor and his intents are unknown.

Data Processing

In the context of the increasing amount of data delivered by advanced sensors and of the need for fusion with information generated by various sources, data processing delay could be a bottle neck for geospatial analysis. There are software solutions that use distributed processing in order to use computing resources

¹² M. Boucher, *The Defence and Security Applications of the Radarsat Constellation*, in *SpaceRef Canada*, 2013, see <http://spaceref.ca/space-quarterly/the-defence-and-security-applications-of-the-radarsat-constellation-mission.html>, retrieved on 9 February 2016.

available in network. For instance, *Condor* technology is used in packages like *Socet Set*, *Inpho* or *Leica XPro* for computer intensive processes like *DEM* generation or orthorectification by using the computing power of the processors running on other computers¹³. Moreover, the *GXL* solution of *PCI Geomatics* makes use of both processors and graphic cards mounted on different computers connected in a network to automate data ingestion, pan-sharpening, orthorectification and tile generation¹⁴. These technologies could be used in the military for processing satellite imagery or *LIDAR* data.

Another trend in delivering geospatial services is to implement geoprocessing tools available to clients by Web interface. Thus, various terrain analysis processes could be performed by non-specialist users, accessing a Web application with a common browser. The user has the freedom to perform geospatial analysis without contacting a specialised analyst. However, some basic training is necessary in order to avoid misuse and misinterpretation. Also, it is possible for security regulations to restrict connection between the geospatial server and the mission network.

A fast and efficient method to handle big amount of data for both storage and analysis is the *cloud computing*. This technology allows robust server side computing and synchronisation of the geospatial processes to deliver synthesised analyses¹⁵. For instance, *ERDAS Appolo* offers cloud data storage and server processing for geospatial datasets using the *OGC (Open Geospatial Consortium) Web Processing Service*. It is able to interact with clients that have little or no processing power through a web browser. Using such a technology in a theatre of operations would bring benefits by a cheaper storage, centralised computing, results delivery instead of datasets, improving this way the mission effectiveness. For example, according to Buxbaum¹⁶, the US military deployed first cloud computing to the Afghanistan theatre of operations in 2011, expecting to reduce IT costs and improve analysis for big datasets. The limitation of cloud usage in conflict areas is related to the connectivity interruptions and limited bandwidths. As a result, the clients need some processing capability locally in order to overcome these situations. Also, special software architecture should be adopted in this environment. Therefore, cloud computing is a technologic edge that the military users cannot ignore.

¹³ *Computing with HTCondor*, 2016, see <https://research.cs.wisc.edu/htcondor/>, retrieved on 9 February 2016.

¹⁴ *PCI Geomatics, GXL Professional Production*, 2016, see <http://www.pcigeomatics.com/software/gxl/gxl-overview>, retrieved on 9 February 2016.

¹⁵ P. Buxbaum, *Clouds at the Edge*, in *Geospatial Intelligence Forum*, 2013, 11(2), see <http://www.kmimediagroup.com/geospatial-intelligence-forum/archives>, retrieved on 9 February 2016.

¹⁶ *Ibidem*.

Besides efficient storage and processing power, data management and manipulation become equally important.

Data Management

The demand for quick exploitation of big databases poses a challenge for data management in order to allow data mining and retrieval. The link between spatial and non-spatial databases is implemented now by database solutions like *Oracle* and *SQL Server*, which have facilities for location data storage, indexing and analysis. The military community can fully benefit from this technology that allows the integration of geospatial data with information coming from other sources, fast analysis and all functionalities of a database management system. One of the most important facilities of such systems is the distributed implementation. According to Connolly and Begg¹⁷, the main advantages are an improved availability and reliability to users and an increased local autonomy. On the other hand, especially in a military environment, this distributed implementation comes with the disadvantage related to the security of the connecting network and users' access. Also, the data integrity is more difficult to be controlled in a network and in large datasets. A new database model called *NoSQL* emerged in order to deal with large datasets and to provide fast response to queries by employing unstructured data¹⁸. It could be used in the military in the context of analysing big datasets like the ones obtained from web sensors. One of the characteristics of the *No SQL* models is auto-sharing, meaning that data are automatically spread on many servers based on a balancing mechanism¹⁹. The usage in defence environment is dependent on the existence of many cloud nodes and a functional network, conditions which are difficult to be met in the theatre of operations. However, an implementation at the home base could be considered.

Data Distribution

The advent of *Web GIS* has changed the way data are delivered to users. Taking a step further, Web services expose own functionalities to clients and can make use of other services available on the Internet. The geospatial

¹⁷ T. Connolly and C. Begg, *Database Systems, A Practical Approach to Design, Implementation and Management*, 5th Edition, Pearson Education, Boston, 2010.

¹⁸ L. Adam and J. Mattson, *Investigating Storage Solutions for Large Data: A Comparison of Well Performing and Scalable Data Storage Solutions for Real Time Extraction and Batch Insertion of Data*, Department of Computer Science and Engineering, Chalmers University of Technology, 2010, see <http://publications.lib.chalmers.se/records/fulltext/123839.pdf>, retrieved on 9 February 2016.

¹⁹ *What is NoSQL?*, 2016, see <http://www.10gen.com/nosql>, retrieved on 9 February 2016.

industry has developed three main categories of *Web GIS* products²⁰. They are servers that publish geospatial Web services, Geospatial Web portals and client products that consume geospatial Web services. This approach to geospatial data delivery has been already implemented in the defence community. For example, *NATO Core GIS* is a project to deliver geospatial capabilities across the Alliance command structure in which a Web enabled application called *Core Geo Viewer* is used to visualise the provided information²¹. By this approach, more users will have access to geospatial data having the possibility to interact with its content. Also, the fuse with information coming from other intelligence sources is possible. At tactical level, *Web GIS* gives the possibility to build *Common Operational Picture*, where all the users can see the digital battle space. However, the entire system is dependent on the network reliability and the available bandwidth.

The transition from wired to wireless communication has led to developing mobile *GIS*. One of the most used type of applications related to them is the *Location Based Services (LBS)*, which refers to information services that integrate the location of the user. The specifics of the military operations encompass high mobility. Therefore, the access to the geospatial information depicting features and changes at a certain location would give an important advantage. Besides, *LBS* could provide location awareness and near-real-time information. However, the wireless connectivity can suffer during missions or it can be very limited. For this reason, solutions for dismounted usage should be planned. According to Thuermer²², other challenges of the mobile applications would be to tailor software to different screen sizes, to address the level of security and to minimise the bandwidth need.

Conclusions

In conclusion, considering the innovations within the civilian marketplace, the defence community would fully benefit from wider data collection assets, faster processing and tailored distribution which would support faster and more confident decisions. However, the usage could be limited by the physical access in the area of interest, by the reliability of data communication or by the availability of unaltered *GPS* signal. Thus, new digital photogrammetric cameras represent a fast solution to provide direct georeferenced imagery.

²⁰ F. Pinde and S. Jiulin, *Web GIS. Principles and Applications*, London, ESRI Press, 2011.

²¹ ESRI, *The NATO Core Geographic Service Systems*, 2016, see <http://www.esri.com/library/brochures/pdfs/nato.pdf>, retrieved on 9 February 2016.

²² K. Thuermer, *Reaching Further with Mobile Apps*, in *Geospatial Intelligence Forum*, 10(7), 2012, retrieved on 7 February 2016.

They could be used for mapping the national territory or during missions where the airspace is secured. The same limitation is also available for *LIDAR* equipment, which could be used on small areas, at tactical level. Moreover, data extraction from the point clouds needs laborious work, which is not always fit with an operational environment. The high resolutions of the commercial satellite imagery and Radar data allow for precisely identifying objects and activities of interest for tactical level, mapping large areas and targeting. However, the delivery delay and the difficulty of data transmission in the theatre of operations could limit the range of applications. In the field of data processing, the distributed solutions that use available computing power on network would help reducing the time to obtain results. Similarly, *cloud computing* concentrates high processing potential for complex and fast analysis. Together with reliable communication assets, they represent promising future tools for the distribution of geospatial services. By using the *Web GIS* standards, data originated from different sources can be fused, analysed and presented as common operational picture. In this context, the adoption of *OGC* standards is recommended because they support the implementation of such capabilities. Future trends will see further developments in the area of integration services and sensors supporting web technology as well as wide spatial awareness solutions for mobile devices.



HYBRID WARFARE

– An Inter-Institutional Approach –

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The actions considered of hybrid-type aim to mainly achieve an ongoing state of insecurity among the local population and to bring into a state of paralysis the political decision-making system.

The hybrid warfare has a vast area of manifestation with implications over a wide range of domains having negative effects both on the civil as well as on the military environment.

The solution to combat the specific methods and techniques of hybrid warfare is to find suitable forms of inter-institutional organisation and viable mechanisms to achieve the sustainable integrated crisis management.

The integrated national security crisis management system must be interoperable with NATO Crisis Response System and EU Crisis Management System covering and ensuring all complementary national security domains.

Keywords: *hybrid warfare; security crisis; integrated management; inter-institutional; interagencies*

1. Introduction

– Conceptual Clarifications

Following the end of the Second World War, the military art and science were enriched with many concepts that generally aimed to identify forms and methods of the modern warfare in order to avoid massive clashes between the classic armed forces equipped with impressive technical capabilities able to inflict huge destructions to human settlements or even produce humankind mass extinction. We believe this turning point in the contemporary military thinking resulted from a very stable balance between the destructive capacities of the US and the USSR armed forces, a global balance of power that made almost impossible an armed conflict of the two world wars scale. Even if situations have evolved to a unipolar world power and today we witness new actors' siege for a place at the global decision-making table, creating a broadly increased political instability in various regions of the planet, the new concepts related to waging war continue to grow at an increasingly higher speed.

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From this perspective, without claiming a breaking news headline, the *hybrid warfare* concept is part of the current trend developed within all the military bodies and organisations and tends to replace other concepts that have been brought into discussion so far. Therefore, the *new* concept of *hybrid warfare* seems to be the corollary of very similar concepts, such as: *asymmetrical war/conflict*, *unconventional warfare*, *effects-based operations*, *command and control warfare*, *information or network-based warfare*, *comprehensive approach to operations*, *integrated crisis management etc.* No matter how hard we may try to identify new aspects of the current security crises or armed conflicts, we find that each of the techniques and methods used by stakeholders dates back from ancient or recent military history.

Hybrid warfare involves the use of a wide range of comprehensive and highly diverse military activities, resources, programmes and applications, designed in such a way to lead to maximisation of non-violent persuasive political and economic influence, to reform the governments or hostile groups, as well as to reverse the political, social and economic instability, which is characteristic to failed states or on the brink of collapse. It also includes the full spectrum of military intelligence capabilities, unconventional weapons (including non-lethal) fighting and support equipment, ready to use at any moment¹.

It was suddenly brought back into discussion the concept of *hybrid warfare* when the crisis in Crimea started in February 2014, when “*pro-Russian gunmen occupied important buildings (government and parliament offices, among others) in the Crimean capital, Simferopol. Unidentified gunmen in military uniforms were seen around the main airports in Crimea. At the first press conference since fleeing to Russia, ex-Ukrainian President Viktor Yanukovich denounced the <coup>, insisting he was the legitimate President of Ukraine*”².

However, we must remember that the current security crisis in Ukraine started in 2008 when the European Union and NATO informed about enlargement plans towards the Black Sea region and the Caucasus, beyond the national borders of the member states from the eastern flank of both organisations. “*Latent Russian-Western disagreements over the US missile defence and associated surveillance radar systems in countries such as Poland, the Czech Republic and Turkey*

¹ Colonel Margaret S. Bond, United States Army Reserve, *Hybrid War: A New Paradigm for Stability Operations in Failing States*, p. 8, see http://en.wikipedia.org/wiki/Hybrid_warfare, retrieved on 10 October 2014.

² See Arthur Elisei, *Conflictul Rusia-Ucraina*, https://www.academia.edu/7683899/CONFLICTUL_RUSIA-UCRAINA, p. 12, retrieved on 4 October 2015.

were amplified by the fact that, at the Bucharest Summit, 2-4 April 2008, NATO invited Ukraine and Georgia to join the Alliance, a moment when Vladimir Putin rhetorically threatened Ukraine territorial integrity”³.

We say *bringing back to discussion* because the main characteristics of this social phenomenon can be found in many crisis situations or armed conflicts in the past. For example, similar security crisis or armed conflicts can be easily identified in the manifestations and violent actions carried on in the Republic of Moldova by separatists from Transnistria in early '90s or the permanent actions initiated by Hamas and Hezbollah groups in Lebanon and Israel, financially and technically supported by Iran.

Prior to the outbreak of the Second World War, Germany managed to annex Austria and to break up Czechoslovakia using techniques similar to those used by Russia in Ukraine. Romania was also curtailed not only by the political decisions taken by the great powers of the time, but also by the external military pressures from the states concerned with territorial advantages, combined with actions taken by different Romanian stakeholders from within.

Let us not forget that the Roman Empire, according to experts into ancient history, was not necessarily destroyed by classic actions specific to the art of war, but by the Christian religion penetration into the collective mind and by the ongoing pressure from migratory populations (migration that now occurs before our eyes in Europe).

2. The Defining Elements of the Hybrid Warfare

Following the analysis of the crises and armed conflicts unfolding in recent history, we will try to identify some unique characteristics of *hybrid warfare* that bring it closer to the concept of *crisis* or more specifically to *security crisis*. The main element emphasising the peculiarity of this type of warfare is the very paradox of the situation in which a state actor finds itself, of overall uncertainty and total confusion of the military leaders and policymakers regarding the unfolding phenomenon, as they do not know whether it is a state of war or not, whether the enemy comes from the inside or the outside, or whether the actions taken by a quasi-invisible enemy are according to laws and regulations pertaining to military confrontations.

On the other hand, from the analysis of the current events taking place in specific geographical areas considered to be of hybrid type, it should be noticed

³ *Ibidem*, p. 11.

that the objectives pursued by instability generating actors – maybe security crisis? – are diffuse, unclear, and generally aim to install an ongoing state of uncertainty among the local population and paralyse the decision-makers, prompting them to adopt an unclear stance regarding foreign policy and a helpless attitude on the rights of citizens in that area.

As a general objective, we believe that the actor who acts according to the hybrid warfare *recipe* aims to create a state of uncertainty among the affected population, using methods and techniques involving violence, combined with public opinion manipulation, keeping at the same time the situation within the conventional boundaries of peace and war, without the latter being reached. By this, the *hybrid warfare* is almost melted with the *crisis* concept, which could be called in this case *security crisis*.

As a preliminary conclusion and given the above mentioned characteristics, we suggest the following definition: *the hybrid warfare is a social phenomenon, characteristic to both state and non-state actors, which involves using a wide range of methods and forms of armed conflict specific to the regular military forces, along with actions and methods employed in guerrilla warfare or terrorist attacks, including acts of indiscriminate violence, organised crime or public disorder.*

The *hybrid warfare* principles are clearly stated in a comprehensive report of the *Joint Special Operations University and the Strategic Studies Department*, MacDill Air Force Base, Florida/USA, as follows:

➤ “A hybrid force operates, holds the necessary capabilities and configures itself in a unique way, depending on the context.

➤ The ideology of the hybrid-type force establishes the internal conduct of the organisation.

➤ The existing threat perception depends on the potential adversary. This type of the threat perception results in the hybrid-type force abandoning the conventional military thinking in order to survive in the long run.

➤ There is a direct relation between the hybrid force capabilities and those of the potential adversary.

➤ A hybrid-type force has both conventional and unconventional elements. Such elements often consist of <accepted> military technologies and non-military technologies, specific to guerrilla groups.

➤ The hybrid-type organisations rely on defensive-type operations.

➤ The hybrid-type force uses the attrition tactics⁴.

⁴ See Timothy McCulloh and Richard Johnson, *Hybrid Warfare*, JSOU Report 13-4, Joint Special Operations University and the Strategic Studies Department, MacDill Air Force Base, Florida 2013, see http://jsou.socom.mil/JSOU%20Publications/JSOU%2013-4_McCulloh,Johnson_Hybrid%20Warfare_final.pdf, pp. 16-17, 10 September 2014.

It can also be easily seen that this type of warfare has a higher rate of success in countries where the government is not really aware of the real needs of the population, and the particular state no more represents the interests of its individuals. In general, these states are called *failed states*, being “often characterised by the state authority erosion, authoritarian regimes incapable of satisfying the needs of the population, widespread corruption within the central governmental system, repression of political opponents, violation of human rights, a social system close to collapse, extreme poverty affecting most of the citizens, high rate of criminality etc. Generally, the failed states are torn by civil wars resulting in the nation disintegration. So the opposition organises itself into paramilitary groups and starts fighting the regime. Clashes between the national army and rebel groups result in collateral victims among the civilian population. Sometimes, in order to weaken the rebels, the regime deliberately turns the weapons against the civilian population if they are believed to support the insurgent groups”⁵.

Regarding especially the last paragraph, we would further add that a state that fails to create adequate mechanisms to mitigate the vulnerabilities and to react to the national security threats as an essential part of crisis and security management⁶ – nationally or internationally – is certainly a potential victim of *hybrid warfare*.

To conclude, when we talk about the *hybrid warfare* and its scope, it comes up the need to include it within the crisis phenomenon, as it is explained in the military literature, from the security crisis perspective. By the given examples, we have shown that, essentially, the solution to combat the hybrid warfare specific methods and techniques actually consists in finding internal forms of inter-institutional organisation and viable mechanisms for achieving an integrated crisis management, in this way meeting a previously stated goal of the Defence, Public Order and National Security System – SAOPSN in Romania.

Therefore, in order to serve the intended purpose of this paper, we propose the following general definition of a *security crisis situation*: *an abnormal situation for a national or international actor at given moment, as a result of the emergence of certain disturbing factors, political, economic, social, military, terrorist, cultural etc., or determined by extreme weather phenomena, fundamentally threatening the security*

⁵ See GEOPOLITICS.RO, <http://geopolitics.ro/statele-esuate/>, 10 October 2014.

⁶ The security, military and terrorist crises can manifest internally or internationally, with the involvement of a wide variety of state and non-state actors, having in common the multinational action of the forces and mechanisms allocated for solving the conflict situation.

of human and material values, with deep implications for changing the existing organisational and functional systems.

From national perspective, we define the *security crisis situation as an abnormal situation triggered **simultaneously** by internal and external political, economic, social, military, terrorist, cultural factors etc., or by specific risks associated with emergency situations that threaten the citizens' fundamental rights and freedoms, as stipulated in the Constitution, the balance of the society, the economic and political stability, security and public safety, territorial integrity as well as the national interests of the Romanian state.*

Regarding the internal security crises forms and manifestations, we recommend using the following classification: *"the internal crises can mainly manifest in the following forms: protests, demonstrations, processions or any other meetings organised in a violent manner, involving any type of weapons and law violation; aggressions triggered from within by groups that were previously and clandestinely trained, with paramilitary units, against national independence and integrity; the organisation, training, and command and control of groups in order to encroach upon the police, gendarmerie or military authority; the conduct of illegal activities to forcibly change the legitimate political leadership; committing attacks against a community; ethnic tensions; large-scale terrorist attacks; internal armed conflicts between the legal armed forces and organised groups"*⁷.

3. Sectoral Systems for Crisis Management

The key issue regarding the *hybrid warfare* or hybrid-type threats consists in both understanding the phenomenon and finding solutions to combat it. As we have proved in the first section, the *hybrid warfare* has a wide range of manifestations, having implications over various domains of activity, with negative effects on the civil-military environment and with decisive impact at the strategic decisional level. Moreover, counteracting the hybrid warfare threats is part of the wide spectrum of crisis management, topic largely discussed in the specialised military literature. NATO has already had an effective crisis response system.

Although, internally, the political and military decision-makers have made some progress regarding crisis management, it must be said that the current accomplishments are far from being what they were supposed to be at national level, if we only refer to the compatibility with NATO structures. Although currently

⁷ See Teodor Frunzeti, *Soluționarea crizelor internaționale*, Institutul European, Iași, 2006, p. 51.

Romania is actively taking part in NATO crisis management operations around the world, its own relevant institutions operate quasi-independently, without a unified concept and, especially, without a joint and permanent coordination from a well-established national body.

If at the political decision-making level things are clear – the central authorities responsible for taking appropriate measures to ensure security and national defence are stipulated in the Constitution and subsequent laws, represented by Parliament, the President of Romania, the Supreme Council of National Defence (CSAT) and the Romanian Government –, at the executive strategic level things get complicated as the national crisis management system is fragmented and completely oriented towards the specific tasks of central public administrations within the ministries or intelligence services.

For example, the *National Coordination Centre for Actions on Public Order – CNCAOP* is ensuring public order coordination, being a structure that “*according to the law, functions under the Ministry of Internal Affairs as a support decision inter-institutional structure for the integrated crisis and special situation management*”⁸. In this context, the term *integrated crisis and special situation management*⁹ should not be interpreted according to the widely accepted definition by the Alliance or specialised crisis management literature, because, according to Art. 13 para. (4) of the Government Emergency Ordinance No. 30/2007, CNCAOP ensures the public order crisis management. Therefore, even if Romanian relevant institutions send *a state secretary or undersecretary, secretary-general or a deputy* as representative in the Decision Centre within the CNCAOP, its limited area of responsibility makes that during the crisis situation the needed response measures cannot be implemented because they fall under the responsibility of a far wider corresponding domains belonging to other institutions within the Defence, Public Order and National Security System – SAOPSN or under the responsibility of other authorities of the central public administration.

⁸ Art. 1 of *Government Decision no. 1152/2014* on the organisation, functioning and composition of the National Public Order Centre.

⁹ According to Art. 2 letter a) and b) of *Government Decision no. 1152/2014*:

- special situations – situations generated by those actions/events that directly or gradually have a major impact on the public order and the safety of citizens, which require measures and urgent action, the allocation of specialised resources and management unity of the forces and means involved;
- crisis in the public order domain – the situation that, by its nature, complexity, scale and intensity, threatens or endangers life and health of the population, the environment, property, political, economic or social order and constitutional values or the fulfilment of the state international obligations, and which require the adoption of specific measures by the unitary action of the relevant institutions and authorities.

Another domain relevant to fighting hybrid-type threats is preventing and combating terrorist acts and, since 2001, the *Romanian Intelligence Service – SRI* is the national authority ensuring this task. In this regard, under the command of the *General Directorate for Prevention and Combat Terrorism – DGPCT*, was established the *Antiterrorist Operative Coordination Centre – CCOA*, responsible for providing logistical and operational support to the *National Counter-Terrorism Centre – CNAAT* during terrorist crisis situations.

The *National System for Preventing and Combating Terrorism – SNPCT* was fully operational in 2005, when the Supreme Council of National Defence adopted the Regulation on the Antiterrorist Operative Coordination Centre organisation and function. Thus, the *CCOA* became the structure responsible for the *SNPCT* technical coordination.

At *SRI* request and depending on the gravity and the nature of the terrorist attack, there can also be involved the special forces from the Ministry of Interior, Ministry of Defence, and Security and Protection Service as well as components of SAOPSN¹⁰.

Related to the public disorder manifestations and terrorism associated activities that, in the event of real threats similar to *hybrid warfare*, can have a major impact on the security situation, we bring into discussion those emergency situations whose management at national level is ensured by the *National Emergency Management System – SNMSU*, as it was provided by the Government Emergency Ordinance no. 21/2004, amended and supplemented. Thus, according to Art. 8¹, paragraphs (1), (4) and (5) of Government Emergency Ordinance no. 21/2004, “*in order to ensure the strategic planning, to continuously monitor and assess the risk factors, threats and vulnerabilities, as well as to coordinate and manage the emergency situations determined by the risks agreed and established by Government decision, it was set up the National Committee for Special Emergency Situations, led by the Deputy Prime Minister for National Security. The Committee’s decisional support is ensured by the Government’s Control Operational Centre, which has in its composition experts and specialists from the National Emergency Management System and operationally subordinates all operative and operational centres established at central and local level. The Emergency Situations Department, through the General Inspectorate for Emergency Situations, ensures the functions of the permanent technical secretariat of the National Committee*”.

¹⁰ According to, Art. 12 alin. (4) *Law no. 535/2004 on Preventing and Combating Terrorism*.

As for the public order, the emergency situations management is performed inter-institutionally, but the SNMSU area of responsibility ensures only one associated segment of the security crisis management.

In practical terms and based on the analysis carried out so far, it seems that there are some early elements of an integrated national security crisis management system, including all relevant state institutions, but they do not act as a truly *integrated* system because there is no specialised decisional support to meet this deficiency in Romania. Imagine a scenario in which, simultaneously, Romania has to implement the NATO Crisis Response Measures, to deal with public disorder or terrorist activities on the national territory and to carry out activities associated with the emergency situation management. It should be noted that the crisis response measures cover a wide range of areas, starting from measures to increase the intelligence services personnel or to activate some structures designated to take part in NATO operations, to measures to strengthen the security and protection of the critical infrastructure or of other objectives essential to daily life routine.

On the other hand, currently, Romania is increasingly interconnected with NATO and EU institutions and security mechanisms, as part of the crisis management system at the level of the two supranational entities. Therefore, it is necessary to set up an integrated national security crisis management system to be interoperable with the two systems and to cover all complementary fields of national security.

Setting up a decision support executive strategic structure should solve the truly implementation of this desideratum represented by the key word *integrated* in the expression often used *integrated crisis management*, especially since we have mentioned that Romania does not have a *national integrated crisis management system* built on the general rules of an *interagency body*.

Essentially, such a system should join under the same umbrella the existing systems, ultimately achieving a system of systems to establish clear relations of cooperation, procedures and rules of operation that are flexible and accessible both to the specialists in civil institutions and to the staff within SAOPSN.

4. National Integrated Crisis Management System – SNMIC

The idea of setting up such a system is not new and there have been many attempts to achieve it over time. Thus, since Romania took part for the first time in NATO' crisis management exercises in 2006, the Ministry of National Defence together

with the other institutions represented in the *National Response Cell* demonstrated the need to set up a *SNMIC*, based on support decision elements already in force within the central public administration authorities.

Later on, in 2010 *National Defence Strategy* draft, in the *crisis management* chapter, it was stated: “*in order to effectively act on the entire spectrum of crises, from prevention to collective defence, Romania envisages the full implementation of the integrated national crisis management system*”¹¹.

The lack of this system and its subsequent shortcomings were more obvious at the beginning of 2014 when the crisis in Ukraine broke out and Romania was faced with the task of solving practical issues such as implementing the response measures agreed by the North Atlantic Council. Also, the implementation of the existing planning and politico-military mechanisms under the national laws showed that *integrated* activities of the relevant institutions to ensure the country’s security remained theoretical, and accomplishing the *interagency* informational-decision flow encountered syncope.

The integrated crisis management issue is again resumed in the current *National Defence Strategy* and it is changed into a course of action with the aim to “*improve the integrated national crisis management system*”¹².

Thus, the political institutions are truly concerned with the development and improvement of effective *SNMIC* to address a security and defence gap, but unfortunately, it seems that it takes longer than necessary.

What is this system about? How should it be designed? Perhaps a serious debate in an inter-institutional working group would reach relevant conclusions and interesting solutions in terms of setting up such a viable system. From our perspective, in order to achieve as economically as possible this goal, the existing early elements of *SNMIC*, and we refer to public order crisis management systems, fighting against terrorism, the emergency situations management as well as operative/operational centres set up in every public administration dealing with crisis or emergency situations, should be reunited under the command and coordination of an *Integrated National Crisis Management Centre – CNMIC*, an institutional decision support structure for the *CSAT*.

CNMIC could be set up based on a modular structure with few personnel in peace time/normal situation (we could call it peace if taking into consideration

¹¹ *National Defence Strategy, For a Romanian state that guarantees the security and prosperity for the next generations*, București, 2010, p. 27.

¹² 4.2.6. The management dimension for crisis situations, *National Defence Strategy for 2015-2019 – A Strong Romania in Europe and the World*, București, 2015, p. 21.

the hybrid-type warfare) with the possibility to be augmented, depending on the seriousness of the crisis situation, with experts from relevant domains in order to effectively respond to threats to the security of the country. This centre needs to be permanently interconnected with both the operative/operational centres functioning within the central public administration and the existing NATO and EU Crisis Response Systems.

The simple establishment of such a centre will not solve the problem of providing an integrated security crisis management. It will have to be included into a legal framework that first of all should define the security crisis, as well as other types of crises under the responsibility of defence, public order and national security structures. Secondly, a legal framework would be necessary defining the organisation, responsibilities, internal relationships and operation of the *Defence, Public Order and National Security System*¹³, and afterwards a law bringing together the *SAOPSN, the National Preventing and Combating Terrorism System, and the National Emergency Situations Management System* in an integrated system called the *Integrated National Crisis Management System*.

Based on this legal framework, there should be clearly stipulated the procedures and instructions regarding the inter-institutional cooperation on planning, management and implementation of response crisis operations.

The *SNMIC*'s main objectives should be: to achieve a common strategic picture to anticipate and prevent crises and implement the integrated options and responses to crisis situations; to make the crisis management subsystems operational, including the integrated implementation of emergency situation management and preventing and combating terrorism; to develop national programmes for planning crisis management capabilities in advance; to timely perform integrated and simultaneous actions across the crisis area; to integrate humanitarian aid interventions into the general framework of the crisis response; to ensure interoperability with NATO Crisis Response System, the EU Crisis Management System and other similar existing international systems; to cooperate with non-governmental national and international organisations.

¹³ Currently, the system of defence, public order and national security is not treated as a whole in any legislative norm. There are only laws that define parts of this scheme: *Romania's National Defence Law no. 45/1994, for the national defence system*; *Government's Decision no. 1152/2014 on the organisation, functioning and composition of the National Centre for Public Order, for public order domain*; *Law no. 51/1991 on national security*, republished, **for the national security domain**. Additional to these: *Law no. 535/2004 on preventing and combating terrorism*, describing **the national system on prevention and combating terrorism**; *Government Ordinance no. 21/2004 on National Emergency Situations System*, with subsequent modifications (a system that should be part of the *SNMIC*).

Surely this paper cannot cover all aspects of the organisation and operation of a *SNMIC* or *CNMIC* nor can it claim it has brought to the attention of the specialists in crisis management a new topic, but we believe that our ideas will constructively add to the collective effort to improve the response of the structures responsible for ensuring national defence and security.

Therefore, the final conclusion is that if we do not rapidly adapt to the new challenges generated by concepts such as *hybrid warfare* we risk to remain anchored, or even better said paralysed, in the current unidirectionally configured crisis response structures, without the perspective of integrated or interagency actions, and based on different procedures and management mechanisms impossible to put into practice by all stakeholders in countering threats to national defence and security.

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INFORMATION OPERATIONS IN THE CONTEXT OF HYBRID WARFARE

Colonel BEng Sorin CÎRSTEA

Hybrid warfare may be considered a type of conflict conducted in a smarter or more effective manner, whereas it seeks to achieve political objectives without the use of widespread violence and armed forces. The usage of various means, such as cyber attacks, economic sanctions, information operations, and violent attacks that can fuel considerable uncertainty for the entire population, has the potential to influence the pursued political objectives.

A key feature of hybrid warfare stands for the difference between the state of peace and war, which tends to zero, being difficult to assess. In general, hybrid warfare is not a declared conflict and its outbreak is typically not observed or it is not likely to lead to a major armed conflict. In this context, the crisis in Ukraine is a clear example regarding the use of the psychological side of the hybrid warfare.

Keywords: *information operations; hybrid warfare; psychological dimension; revolutionary war*

Introduction

Years ago it was stated that the evolution of contemporary international life increasingly highlighted a trend to supplement or even replace the forceful intervention strategy with a communication strategy or a strategy based on persuasion. This assessment has proved its validity especially in the current geopolitical context. The requirement to influence a target audience is found along the entire spectrum of military operations from the state of peace to the state of war and throughout the post-conflict phase.

It is obvious that the ruling power of any age and from any corner of the world has been concerned with controlling communication, whether direct, mediated or through mass communication means. Throughout this century, the interest in military psychological operations has been an episodic one, increasing and decreasing during and after major conflicts involving the forces.

The psychological effect of the war has the same history as the war itself.

Colonel BEng Sorin Cîrstea – Commander of the Psychological Operations Centre, the Ministry of National Defence.

Sun Tzu, in his *Art of War*, highlighted the importance of human behaviour manipulation, and the actions of Duke William of Normandy, in Alencon, demonstrated the psychological effect of terror. The modern concepts that are used in the context of the psychological warfare emphasise the use of information and propaganda throughout the careful preparation of military campaigns. The aim of these types of tools is to demoralise the enemy by reducing its willingness to fight while protecting the morale of own forces.

Although belonging exclusively to the military, information operations – especially through their characteristics and their effects – fall within the general spectrum of new activities such as political, military, economic and social ones, displaying an increased importance within the framework of hybrid warfare. The political and social context that followed the Second World War and the one in the mid-60s imposed as a solution the political and psychological warfare, viewed as key instruments for national defence strategies. Although currently it is increasingly assumed that the use of such techniques just reflected the specific mentality of the *Cold War*, the psychological dimension of conflict became a very important aspect of the contemporary world.

Modern communication technologies and totalitarian regimes that were specialised in the use of ideology as means of aggression and subversion represented a strategic issue for the Western countries. The lessons identified from recent history (and in many cases those resulting from the conduct of armed conflicts) have aroused the interest of sociologists regarding political propaganda and political communication generally perceived as a phenomenon of mass society.

Any attempt to redesign the role that psychological and political actions play in contemporary strategy development must take into account these fundamental and permanent obstacles. Prior to a systematic investigation of this type of actions, it is required to highlight some basic aspects of information operations and the relationship between them and the other instruments of national power. This brief analysis is particularly important with regard to the confusion that this topic might generate – the possible confusion is due to the involvement of a number of powerful bureaucracies with completely different views, which also reflects an inherent problem.

Especially in the 60s, confusion was created by using the terms *psychological warfare* and *political warfare* interchangeably. Thus, intentionally or not, other concepts such as *ideological warfare*, *war of ideas*, *political communication*, *psychological operations* and others were omitted. The recorded uncertainty derives from the fact that this kind of war is conducted, to a large extent, through the use of weapons that are not quite distinct. There are really means to disseminate information

and ideas, such as radio broadcasts, printed publications of various kinds, as well as educational and cultural programmes, but they could not be seen as separate psychological instruments.

This represents the psychological dimension of each instrument belonging to national power, including the military presence at any level. Similarly, the major developments in the military and economic field obviously generate political effects.

Psychological warfare and political warfare refer to political and cultural symbols, emotions and perceptions, individual and group behaviour under stress, or to the cohesion of alliances and organisations.

1. From Psychological Warfare to Revolutionary Warfare and then to Hybrid Warfare

A manifest or latent attitude of many people regarding the practice of psychological warfare is the disgust with any kind of psychological manipulation or deception activities. The preconceived idea that psychological warfare is a *black art* that can be morally justified only in extreme situations represents the cause of such attitudes. Even if we assume that such elements are inseparable from psychological operations, undoubtedly the moral value remains paramount during such activities.

Extremely important is managing the cultural sensitivities within the psychological conflict. A substantial effort is necessary not only to develop smart ways to manage these sensitivities but also to achieve own cultural awareness that is essential for an effective conduct of this type of conflict. This is imperative because people tend to assume that their peers from other parts of the world largely resemble them and they are characterised by similar fundamental motivations and similar viewpoints regarding the environment. This inability to distinguish the psychological features of the population of a state could represent a deadly handicap for anyone who attempts to influence the psychological orientation and political behaviour of foreign audience.

The media has an equally important role as the one played by the effect of cultural differences. The quick juxtaposition of images containing death and destruction creates a real confusion among the audience, a situation commonly met in TV programmes during periods of conflict, which appeals to the inevitable feeling that the given conflict is useless, immoral or absurd. It is obvious that the conflicts that are predominantly psychological and political in their nature are more susceptible to the influence of direct reports released by the media.

The major feature of the current security environment has changed with the appearance of *hybrid warfare* also known as “*nonlinear*”. NATO strategists

were completely taken by surprise in the spring of 2014 by the fast actions of unmarked military – the well-armed little green men – who occupied Crimea in a few days, while Moscow was inveighing against the “*fascists*” who would have occupied the government in Kiev and forced the “*legitimate*” President Viktor Yanukovych into exile in Russia. It was the first contact with the “*hybrid war*”, the strategic invention through which Russia tries – and has succeeded so far – to project its power beyond its borders and to compensate its military procurement shortfall compared with the Western armed forces.

The clearest description of the concept belongs to a Russian military. In February 2013, Valery Gerasimov, the newly appointed Chief of Staff of the Russian Armed Forces, wrote an article for the magazine specialised in defence issues – *VPK*. Gerasimov defined the war and peace in words that now may seem prophetic, as quoted by the *Financial Times*, by stating that war and peace stand for concepts whose boundaries are increasingly blurred. “*The methods of conflict*” have changed and now involves “*massive resort to political, economic, informational, humanitarian and other non-military means*”¹. All those could be supplemented by strengthening the support provided by the local population as a “*fifth column*” and the forces acting undercover.

Gerasimov quoted the Soviet military theorist Georgy Isserson who stated that mobilisation did not happen when the war was declared but “*it occurs unnoticed, much before the war starts*”².

Only after the annexation of Crimea, the Western experts began to ask: “*How do you defend yourself during such a war? You cannot defend against the computer or cyber attacks with tanks and you cannot launch cruise missiles to stop hostile propaganda*”. The hybrid or “*nonlinear*” warfare is, according to Professor Mark Galeotti at New York University, a “*postmodern war*”, it is never formally declared, but it is continuously conducted through military and non-military means, from covert cyber-attacks to massive lobbying operations that may be seen as a vast propaganda offensive against the only opponent that Russia has ever recognised: the West³.

In the early '60s, Evgeny Messner, a former colonel in the tsarist army, prominent theoretician of war science, academician and also immigrant, developed a study called “*Mutiny, or the Name of the Third World War*” where there were identified certain fundamental characteristics of a new kind of war related to the information

¹ See m.hotnews.ro/stiri-international, retrieved on 27 June 2015.

² *Ibidem*.

³ See <https://meduza.io/en/feature/2015/02/13/the-west-and-russia-are-already-at-war>, retrieved on 16 September 2015.

age. He mentions the absence of the front line and the boundaries that clearly separate the opposing parties and especially the creation of a key objective that tackles social consciousness' transformation by influence. He brings into question the transformation of the idea of "battlefield" into the one of "battle space"⁴.

Even if it appears as a new concept, *hybrid warfare* was described by Michel-Louis Rouquette in his study "About the Knowledge of the Masses" as the revolutionary war. In the author's conception, it was only about a change of dimensions, from the physical to the psychological one.

It acted therefore on the environment itself, in its economic and institutional components, so that they could influence attitudes. Everything was conducted, of course, in the name of one cause able to provide legitimacy, containing perspective and meaning, summed up in a *nexus*, repeatedly brought to the forefront, national independence or revolution being often viewed as means than goals: the means to ensure cohesion, to introduce an ethical guideline and complete the action. The masses should be mobilised because they are an important part of internal or external manoeuvre. It is not directly about a matter of values; it is mainly a technical matter.

In the classical scheme of communist strategists, as it was applied more or less accurate during the colonial conflicts between 1945 and 1975 (and prior, at least partially, by some movements of resistance under the German occupation), the revolutionary war consisted of five phases.

In the first phase, the conducted action is primarily intended to consolidate a climate of dissatisfaction and insecurity that might cause an increase in the availability of the masses for subsequent engagement. Essentially clandestine or partly concealed, propaganda plays a major role during this phase. Some slogans, as well as caricatures, easy to remember, are spread gradually. It aims primarily at discrediting the ruling power, stressing its contradictions and inadequacies. The *Evil* image is assigned to the ruling power, emphasising its injustice, corruption and cynicism. In return, the national values are exalted. The idea of possible changes begins to carve the way; this phase essentially consists of contesting the domination. The violent action remains limited, with only several attacks recorded.

Once achieved this first objective related to awareness, it comes the moment of structuring the masses or, at least, their neutralisation. The police cannot cope with the situation and the government that is pressed by the nature of the threat will make use of the military force. Due to the fact that regular armies are not enough

⁴ See https://en.wikipedia.org/wiki/Evgeny_Messner, retrieved on 18 September 2015.

prepared for this type of mission that goes beyond the traditional framework of their competence, they will inevitably commit errors and excesses that will enhance solidarity, passive at first, then active, for a growing number of opponents.

In the third phase, the military and psychological actions are closely related. On the one hand, it is about the establishment of an outright guerrilla, intensifying terrorism and sabotage of government facilities. On the other hand, the classifications performed at the population level intensify and become general with the aim of mass rallying, discrediting or intimidating. The goal is to show the presence rather than to persuade.

The next phase is characterised by the establishment of bases in areas more or less extensive, over which the government apparatus cannot exert control. These bases have primarily a military task: accommodating to discipline, instruction, combat training, creation of stocks, interventions or support to larger-scale operations etc. The clashes grow generally without any real front line. The enemy is ambushed everywhere, even in the capital, in the form of individual or collective attacks. The population is exposed to these attacks and, consequently, the perception of security is decreasing. So far, the state is gradually losing any possibility of long-term control over a wide area of its territory.

Theoretically, the final phase is a general offensive that will crumble the former power. The priority rests on military operations, relying on different support bases and enemy disruption. The psychological action over the masses reinforces somehow by itself, it feeds by its own successes: as it could be seen in the frequent defections and rallying within opposing troops, civilian aid increases in number, either through imitation or by contagion, the reputation of the ruling power is going down; furthermore, each individual is perceived by the ruling power as a suspect. At the same time, the psychological action benefits from international support, seen as “*external manoeuvre*”, which increasingly legitimises the insurrection: for example, during the demonstrations of support organised in the capitals of other countries, partisan information massively penetrates through all global media means etc. Compared to the previous phases, the masses could be mobilised in a far greater number; the feeling of force exceeds the one of dread, the defeat of the opponent seems inevitable. This stands for the phenomenon of “*state-of-the-art resistance*”.

If we look at the presence of “*little green men*” in Ukraine and we set up the occurred events within the five phases described above, it is clear that we have witnessed, live, a real *information operations masterpiece*.

2. The Crisis in Ukraine – an Event that Brought to the Fore the “Revolutionary War” by Changing again the Rules of the Game

If a country is attacked by conventional land, naval and air forces, it is generally clear how to respond in such situations. But what happens when the country is attacked by a mixture of special and unconventional forces, and campaigns of misinformation are the focus? The analysis of the crisis in Ukraine shows the capability of this new type of conflict – the hybrid war – and highlights the importance of the related information warfare. Russia’s information campaign was, is and will be the centrepiece of its operations in Ukraine.

The crisis in Ukraine represents an accurate example of the use of the psychological side of the hybrid conflict employed by Russia. This factor is treated with the utmost attention by the planners from the Kremlin, since the pressure exerted by a well-planned psychological action might be able to eliminate the need to openly use force, the latter being represented only by the employment of high readiness sabotage structures. Concerning the use of psychological means, we must make a clear distinction between the three target audiences that are accessed by Russian propaganda: the external audience, the domestic Russian audience, and the local population within the areas where the military aggression is ongoing.

The objectives and the basic themes developed through psychological operations, which are directed to the opposing forces are very diverse, as follows: discredit the social system, political system and rule of law, discredit the capacity and integrity of political and military leadership; promote the “*real*” causes and the development of the conflict; develop a positive image of the aim pursued by revolutionary forces and their military capability; overstress the hardships of war and the deprivations faced by opposing forces; influence the attitudes of fighters’ families; promote the cooperation with the revolutionary forces as a positive alternative; incite insubordination, desertion or surrender.

The information component of warfare is an essential means for assessing the psychological impact on all three target audiences. For external audiences, such as Europeans and Americans, the arguments consist in promoting the “*legitimate*” actions of Russia in Ukraine, including the example of “*reunification of Crimea and the city of Russian glory, Sevastopol, with mother Russia*” in conjunction with the argument offered by Khrushchev and with the “*unjust act represented by the annexation of Crimea to the Ukrainian SSR in 1954*” (deliberately omitting that Ukrainian ethnic territories as regions of Belgorod, Voronezh, Kursk, Bryansk

and Rostov were ceded to the RSFSR). The same types of arguments are absolutely valid for the domestic Russian audience, in order to stimulate the public opinion favourable to the Kremlin.

The key example that has been used by Russia for all the three target audiences portrays the new Ukrainian government as an illegitimate one (this is the reason that prompted Russia to use the term “*junta of Kiev*” in its own vocabulary).

Regarding domestic propaganda, it should be noted that to the Russians living in Russia, the cliché from the Soviet era, namely the existence of an external threat to the Russian state, is gradually renewed. Together with the old methods, new symbols such as the one of “*polite people*” (members of sabotage units, intelligence officers and agents of the foreign intelligence services, Russian entities seeking to defend Russia’s interests and restore Russia’s power and prestige) are implemented. Sevastopol image as the “*city of Russian glory*” was successfully employed to provide legitimacy to the status of Crimea as part of the Russian Federation. The symbol of Slavyansk was also used – as the Donbas centre of terrorism, where the “*Slavic unity revolted against the fascist junta of Kiev*”⁵. On the other hand, the Russian media attempted to set up a *halo* effect around the city of Donetsk.

The most prevalent symbol that records a psychological impact on the population of Donbas is the idea of support for the Russian unity (Slavic), which increasingly identifies with linguistic identity. The Russian-speaking Ukrainian is rather a Russian individual, or at least, an agent of Russian influence, in the Kremlin’s view. Therefore, the long-term rhetoric relating to the protection of the Russian-speaking population employed by Moscow as well as nostalgia for the Soviet past is supported by local people in Donbas.

Even relatively ineffective, a generally employed method was the use of the religious component within the framework of information campaign, including the creation of the “*Russian Orthodox army*” of Donbas. This army of “*true Orthodox believers*” actually consists of the low-class local population, who do not possess anything than faith. A failure recorded in such a religious campaign was the use of native mercenaries originated in Chechnya, Dagestan and Ossetia, whose religion was Muslim.

I identified the following 10 most prominent themes employed by Russia’s propaganda machine⁶:

- ❖ The West meddled in Ukraine’s internal affairs, organised and orchestrated the Euromaidan protests with the help of fascist groups.

⁵ See http://www.pravdareport.com/world/europe/26-01-2015/129604-ukraine_truth, Ukraine: *The Truth instead of Lies*, retrieved on 7 October 2015.

⁶ See http://www.kas.de/wf/doc/kas_37844-1522-2-30.pdf?140612145651: *Ten Myths Used to Justify Russian Policy in the Ukraine Crisis*, retrieved on 7 October 2015.

- ❖ The transitional government in Kiev came to power through a coup and therefore has no legitimacy.
- ❖ The transitional government in Kiev and fascist groups discriminate and threaten ethnic Russians who mostly live in southern and eastern Ukraine.
- ❖ The armed separatists in the south and east of Ukraine are self-defence forces of the Russian-descent population in that region, the majority of whom hope to become a part of the Russian Federation.
- ❖ The government in Kiev is waging a war against its own people by deploying the military in the east of the country and is repressing peaceful protests.
- ❖ Due to their common history and ethnocultural ties, Ukraine is under Russia's natural sphere of influence and therefore has limited sovereignty.
- ❖ The self-determination of the people and the held referendum legitimise the secession and accession of Crimea and other regions to the Russian Federation.
- ❖ The West is using double standards with the secession of Crimea because of what it did in the case of Kosovo's independence.
- ❖ The West has pursued a systematic policy of excluding and weakening Russia since the fall of the Soviet Union.
- ❖ Despite previous assurances, NATO has expanded into the former Soviet region, seeks the inclusion of Ukraine, which affects Russian security interests.

At the end of 2013 the propaganda apparatus of the Russian Federation consisted of *Russia Today TV*, its associated news website *rt.com*, social media accounts assigned to *facebook.com* and *twitter.com*, and ultimately the *on-line* platform that was providing when needed the related video content material for news, *ruply.tv*. Their content has grown over the past years being developed in English and the news production approach is especially designed for western consumers.

Thus, the site associated with television *rt.com* whose own description was "*RT is the first Russian news channel in English 24/7 format which offers Russian perspective on global events*"⁷ recorded about 50 million users monthly having a volume of 120 million pages viewed by the audience. About 20% of the viewers originated in the United States of America⁸.

The transmission of the content to the ultimate audience may be conducted in two ways: directly when the ultimate user receives first-hand information, or indirectly when it receives replicated information after being processed

⁷ <https://www.rt.com/about-us>, retrieved on 22 September 2015.

⁸ *Ibidem*.

by another publication which retransmits by quoting or not the source that originated the content.

Therefore, the media exposure of the information provided by the Russian propaganda system could not be even roughly assessed, certainly exceeding more than 50 million users/viewers.

In order to determine how the media system has addressed the Ukrainian crisis, we must take into account a very important event that occurred basically simultaneously with the developments in Ukraine, being promoted as the biggest international sports' event organised by the Russian Federation.

The 22nd edition of Winter Olympic Games took place in Russia in Sochi from 7 to 23 February 2014. The application of Sochi as the host city was strongly supported by Russian President Vladimir Putin, standing in fact for the first Winter Olympics hosted by the Russian Federation. We could perceive this event as a personal project of Vladimir Putin, who invested a huge capital not only in his own image but also in the project implementation.

The Olympic Games from Sochi cost more than any other edition of Winter Olympics that had been organised since 1924; President Putin announced that only 7 billion dollars were spent for the construction of arenas but according to the statements of the opposing parties' members the bill raised at about 50 billion dollars⁹.

In order to identify a media plan model to be implemented by the propaganda apparatus of the Russian Federation in the preamble of the Ukrainian crisis, it was carried out an audit on how the portal *rt.com* addressed the news events that were related to Ukraine from 1 February to 10 March 2014.

During the period, the aforementioned portal published about 297 news messages in English, which addressed directly or indirectly issues related to Ukraine, with direct references to Ukraine within the content of the articles.

The way the issues related to Ukraine were presented on the portal showed multiple perspectives. The portal included: direct presentation of news topics, statements of key enablers as President Vladimir Putin and Foreign Minister Sergey Lavrov, analyses or comments within the section *Op-edge* (*rt.com* platform), where they were conveyed as views of so-called international subject matter experts, video recordings of TV programmes within the section *shows/crosstalk* (*cross-shows and interviews*).

⁹ See http://www.digi24.ro/Stiri/Digi24/Sport/Stiri/Cea_mai_scumpa_Olimpiada_Soci_2014_Comisioane_Vladimir_Putin, retrieved on 19 September 2015.

The frequency of the articles or news about Ukraine is an irregular one, probably because of the events that occurred within the timeframe. The following chart highlights their daily distribution (*figure 1*).

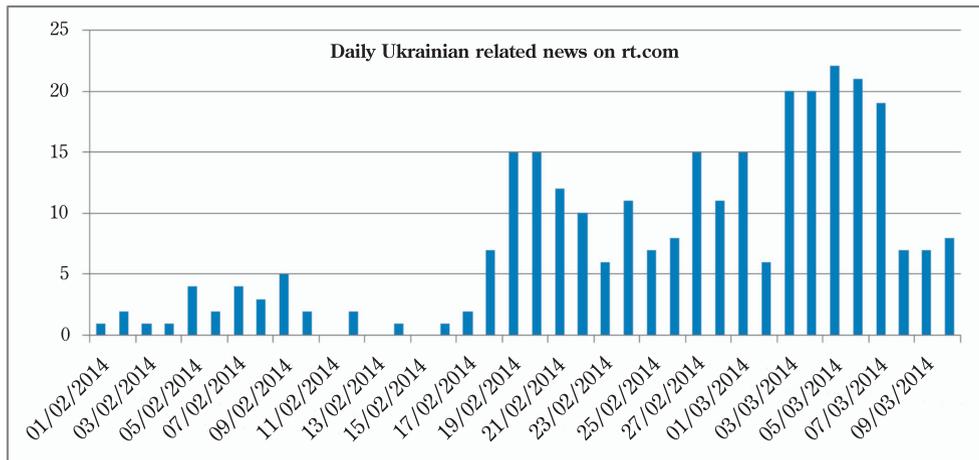


Figure 1

In the first part of the month of February 2014 the number of events was below 5 due to the given events that were occurring in Kiev; there were also days without media coverage on the Ukrainian topic (11 and 13 February 2014).

This period overlapped substantially with the one of Winter Olympics in Sochi and the importance of the latter may have influenced the way in which the “*Ukrainian issue*” was addressed, not only by the number of very low media appearances but also by their quality, topics and virulent messages that might be perceived as “*soft*” ones.

Moscow passed through a similar situation during the Summer Olympic Games in Moscow, in 1980. In 1979, the Soviet Union invaded Afghanistan and as a result, many Western countries did not attend the games, leading to a decrease in its global significance, despite Soviet efforts to exemplarily organise the event.

As the events in Kiev were heading clearly to the removal of the Yanukovich regime under pressure from the Euromaidan, the number of media appearances substantially increased; they reached even a triple amount (15 appearances from 19 to 21 February 2014) and their orientation was to flare the message.

The media plan implemented by *rt.com* was a demonstration of how to conduct a total information war. Thus, in order to prepare the audience for the subsequent conventional military actions, the respective portal introduced a daily average of 20 news messages on Ukraine, within the time frame 3-7 March 2014,

covering consequently the period of 6 March 2014 when Crimean Parliament voted for the unification with the Russian Federation.

A new element regarding the topics presented by *rt.com*, which could be considered a key landmark in the evolution of the crisis, stands for the presentation of the “*why*” theme, since 27 February 2014, through the article “*Facts you need to know about Crimea and why it is in turmoil*”¹⁰. References to it emerged as links to several articles on Ukraine that were published from 28 February to 9 March 2014.

The peculiarities of Russia’s information aggression identified during the crisis in Ukraine are as follows:

❖ The absence of a single front line (it is a total war whose fronts can be located in a particular country as well as in any other country in the world; and your follower could be the enemy while a foreigner could be your ally, for example if he or she claims that “*Russophobia supports the leading elites from the respective country to further remain in power*”).

❖ Information environment is the main battleground (the end state of applied psychological treatment is to establish fear to the point of panic occurrence, as the case of Crimea in the spring of 2014; the propaganda war seeks to weaken the enemy’s morale and to reinforce the one of the allies).

❖ There was no formal declaration of war, and the difference between periods of war and peace had an increasingly vague character (the information war against Ukraine has been running since 2004 when stereotypes of propaganda, as “*orange plague*” and “*Banderovtsy’s Junta*” were used for the first time).

❖ There are pursued efforts to mask objectives and official military actions (Vladimir Mukhin, the geopolitical analyst, said recently that “*the problem is that to win without combat*”).

❖ The conflict involves large groups of the public (“*defence of Russians is a patriotic duty of citizens*”).

The information operations carried out by Russia in Ukraine were crucial if we consider the successful annexation of Crimea and the conduct of subsequent hostilities in Donbas region. The effort of Russian information operations could be divided into three areas¹¹:

- Russia’s “*humanitarian*” foreign policy;
- Pro-Russian media within Ukraine;
- Global Pro-Russian media focused on Western countries.

¹⁰ See <https://www.rt.com/news/crimea-facts-protests-politics-945>, retrieved on 22 September 2015.

¹¹ See <http://smallwarsjournal.com/jrnl/art/non-linear-warfare-in-ukraine-the-critical-role-of-information-operations-and-special-opera>, retrieved on 22 September 2015.

The operations conducted in Crimea represented an opportunity for Russia to globally demonstrate its capabilities and potential to conduct the information war. The purpose of information war is to make use of hardly detectable methods in order to subdue the elites and societies of other countries, by employing various covert operating channels (intelligence, diplomacy, and media), exploit the psychological impact, the ideological and political sabotage¹².

Conclusions

Information warfare represents a dangerous tool that can indirectly lead to physical destruction. During the post-*Cold War* period, the popularity of information campaigns diminished among the Western public. People around the world enjoy wide access to information; a broadcast of Radio Free Europe would not have the same impact it had years ago. Despite it, the disinformation activities carried out by Russia were surprisingly effective. Freedom of expression is one of the most important human rights, but in some cases, Russian media can serve as a method of indoctrination of those susceptible individuals, who may carry out a series of dangerous plans. In this regard, we must bear in mind that psychological means are employed to manipulate large masses of people¹³.

The success of *hybrid warfare* depends on the advantage recorded over the vulnerabilities of a stronger opponent. The information war carried out by Russia, particularly the doctrine of reflexive control, is a critical component of the *hybrid war* conducted by the Kremlin. This new type of doctrine (reflexive control) exploits the reluctance of Western leaders and the population of those countries to engage in a conflict by addressing it in a confused and controversial manner. As in the case of a movement of Judo, the best result is achieved when you manage to use the force of the opponent in order to achieve your own objectives. In the case of Ukraine, the West preferred not to act, and Russia's information operations secured the necessary support for this type of policy. Russia met its aim: the West refrained generally from a substantial intervention despite the fact that Russia recorded multiple violations of international law, it supported the most important mechanised conflict in Europe since 1945,

¹² Jolanta Darczewska, *The Anatomy of Russian Information Warfare, Point of View*, no. 42, May 2014, Warsaw, p. 5.

¹³ See [http://www.icds.ee/fileadmin/media/icds.ee/failid/Eve_Hunter_Piret_Pernik - Challenges of Hybrid Warfare.pdf](http://www.icds.ee/fileadmin/media/icds.ee/failid/Eve_Hunter_Piret_Pernik_-_Challenges_of_Hybrid_Warfare.pdf), retrieved on 7 October 2015.

and finally, it contributed to the major destruction of Ukraine, a state that was seeking integration within the European Union and NATO¹⁴.

Mahatma Gandhi stated that “*victory through violence will lead to defeat because it is temporary*”¹⁵. Father of India’s independence and promoter of revolution without violence, Gandhi stated the essence of the *hybrid war*: achieving victory by any means but without the use of military aggression. In the absence of military forces and with no declared conflict, winning the war on the information level becomes the main effort that will enable a long-term victory.

Currently, the lure of supplying the military with the last generation weapons that fueled the arms race during the *Cold War* fades in front of broader high technological development effects from the past century. Technological progress has allowed the emergence of a paradoxical phenomenon. On the one hand, it has favored an unprecedented interaction between people by creating “*bridges*” between remote cultures and civilisations. On the other hand, the evolution of the media and the new media, in particular, has emerged as a normal interaction in a virtual space. In this environment, the audience enjoys a limited opportunity to verify an extremely large amount of information. In addition, traditional media institutions do not often take the necessary steps to verify the information due to their goal to be the first exploiting the respective event in order to maintain their market shares.

The originators of carefully planned information campaigns, as could be noticed in the conflict in Ukraine, are aware of the importance played by ordinary people as disseminating vectors within the framework of *hybrid warfare*, whether they are located in the territory of aggressor state, in the disputing territories, or they belong to an external audience. No matter whether you are *pros* or *cons*, the key is that you could serve, without your will, the opposing informational objectives whatever your opinion is; this opinion is expressed in an environment controlled by a company with employees whose sole activity is to flood the virtual area with messages designed to create solidarity in support of tragic nonexistent events, social tension or vulnerabilities that exploit the exacerbated economic, cultural and social issues.

We may clearly state that the Ukrainian crisis has represented one of the most important worldwide media event that has reaffirmed the importance

¹⁴ See http://understandingwar.org/sites/default/files/Russian_Report_Putin's_Information_Warfare_in_Ukraine-Soviet_Origins_of_Russia's_Hybrid_Warfare.pdf, retrieved on 21 October 2015.

¹⁵ See subiecte.citatepedia.ro, retrieved on 21 October 2015.

of the psychological component of the *hybrid warfare*. Although known since ancient times, the importance of the psychological side began to be increasingly recognised as a result of recent conflicts.

In this context, we suggest reviewing and timely adjusting the current framework (doctrines, strategies, regulations, instructions, orders) to the new conditions and requirements that regulate the battle space nowadays; enhancing cooperation between the institutions and organisations responsible for safety and security at national and international level; establishing, training, equipping and institutionalising special forces designed to fight terrorism, in which to be included psychological operations structures as the main capability of information operations; adapting the missions of Armed Forces to the specific conditions required by the participation in the fight against terrorism.

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HYBRID APPROACHES TO THE UKRAINE CRISIS

Colonel Dr Gabriel ANGHEL

Since the beginning of the Ukrainian conflict, a new buzzword has dominated the international security debate: "hybrid warfare". But in spite of the recent hype about this topic, the idea of using unconventional means and actors in conflict is not new. In fact, it is in many ways as old as warfare itself. In a recent speech, NATO Secretary General Jens Stoltenberg reiterated that "... the first hybrid warfare we know of might be the Trojan Horse, so we have seen it before". But what we may not have seen before in warfare is the scale of use and exploitation of old tools that we have recognised from before are now put together and used in new ways. According to NATO's Supreme Allied Commander (SACEUR) Philip M. Breedlove, "... new things are how these tools that we have recognised from before are now put together and used in new ways to bring new kinds of pressure..."

Keywords: *hybrid warfare; conventional forces; unconventional forces; hybrid conflict; information operations*

institutions and international bodies to know and anticipate, and subsequently prevent and combat them both internally and externally. Moreover, the new threat pattern is generally unconventional, dynamic and sometimes even random

The major global security changes that occurred at the end of the century continue to deeply impact the beginning of the 21st century, characterised itself by substantial changes to the classic analysis parameters of the international security evolution. Therefore, during the *Cold War* we could speak about certain symmetry in the relations (including conflict ones) between the two major political and ideological blocs, and currently we witness the emergence of some multiple forms of asymmetry in the contemporary conflicts and not – as it might seem at first glance – asymmetry as the result of differences between conventional warfare and new types of conflict.

The novel characteristic of the new risks and threats (international terrorism, proliferation of weapons of mass destruction, transnational organised crime, cyber crime etc.) is that they cannot be considered independently. The fragile and fuzzy edge between them determines an increased interconnection and networking, generating in the same time difficulties for both the state

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and nonlinear in appearance, without any constraints and rules of engagement – in other words: asymmetric. It does not have a doctrine of its own, it is difficult to quantify or anticipate and it is supported by a variety of entities (if we strictly refer to persons, then we can talk about terrorists, extremists and religious fanatics, xenophobes and individuals associated with organised crime networks). The enemies of the past were predominantly symmetrical: static, predictable, homogenous, hierarchical, rigid and resistant to change. The current enemies are asymmetrical: dynamic, unpredictable, fluid, interconnected, self-organised, able to adapt, constantly evolving.

In order to meet these challenges, it has been necessary to rethink the current security systems, national or international, for a higher adaptability of the structures involved in defending the states/alliances.

Therefore, the military structures, as the main entities dealing with war and crisis situations, have gradually changed in order to be smaller in size, flexible, mobile, modular, self-sustained, with a higher combat capability, able to carry out combat actions far from their bases, in very diverse geophysical and psychosocial environments.

The current military conflicts oppose individuals, groups and transnational groups supported by states or international organisations performing specific combat actions both in the local conflict zone and globally. We face different forms of violence, such as terrorism, insurgency, organised crime with specific targets (cyber attacks) and disorder by intimidation or meddling. The tactics, techniques and procedures continue to be improved to bring benefits and influence to adversaries, including economic, financial and even diplomatic. These forms of conflict exceed our perception about the military combat actions, whether conventional or asymmetrical.

The military operations will become increasingly dependent on other components and non-military capabilities; besides the intelligence community, they will also entail cooperation with forces of the Ministry of Interior together with other state or private power structures, decentralised at the tactical level. The comprehensive approach would actually mean a symmetrically balanced response to the asymmetrical chaotic threats.

The USA experience, as well as that of NATO in recent conflicts in Afghanistan and Iraq and that of Israel in the Second Lebanon War in 2006, revealed limitations and gaps in counteracting the actions of the adversaries that, faced with a conventional superiority, resort to unconventional and innovative methods and techniques. Therefore, the war of the future is the result of thinking, intelligence and technology, exceeding the classic combat instrument – the military.

Addressing the future entails taking measures to minimise the gap between “soft” and “hard” means. In this respect, military analysts have suggested that the war/conflict in the future will be sub-conventional¹, irregular and/or unconventional and therefore they have requested these forms of war, considered unclear and becoming more frequent and increasingly lethal, to be analysed.

Conceptual Approaches to the Term “Hybrid”

The *hybrid warfare* concept emerged and developed in the US military thinking over the past decade as a theoretical response to the US forces’ need to adapt to the new realities in an unclear confrontational environment². The US Marine Corps team led by Frank G. Hoffman and James N. Mattis was the one that developed the concept, they being considered the parents of the *hybrid warfare*³.

The concept was firstly launched in the academic world in 2005 in the article with the headline *The Future Warfare. The Rise of Hybrid Wars*⁴. According to the authors, the conflicts in Afghanistan and Iraq influenced the balancing act of the US strategic thinking, which is now searching for ways to respond to a wide range of threats to the US interests. However, it is also emphasised the idea that conventional threats will never disappear and that the US Armed Forces have to maintain the superiority in the field in order to be able to conduct highly intense military activities.

The superiority of the US military capabilities determined the opponents of the American thinking to identify the so-called niche solutions, in the form of technological combinations and unusual tactics to obtain strategic advantages; actually they are the *hybrid threats* that generate the *hybrid warfare*⁵.

The hybrid threat has a significant irregular component due to the fact that by the use of terrorist and guerrilla tactics, organised crime, cyber or informational

¹ “*Sub-conventional warfare*” – is a generic term including all types of armed conflicts surpassing the state peaceful coexistence but on the brink of the war, including militancy, insurgency, proxy war and terrorism, engaged as tools in insurrection or independent movements. The term was used by India when adopting the *Sub-conventional Warfare Doctrine*, in 2007, setting up the main directions for counterinsurgency operations in urban and rural areas, see http://citation.allacademic.com//meta/p_mla_apa_research_citation/3/1/2/9/0/pages312900/p312900-1.php

² Colonel Dr Valerică Cruțeru, “*About the Hybrid Warfare Concept in the American Military Thinking*”, in *Buletinul UNAp*, vol. I, no. 3/2014, p. 30.

³ At the time the first ideas about the concept of “*hybrid warfare*”. In 2005, Lieutenant General James Mattis was the Commander of the US Marine Corps Combat Development Command, Quantico, Virginia, and Lieutenant Colonel (r.) Frank Hoffman worked for the Centre for Emerging Threats and Opportunities in Quantico.

⁴ James N. Mattis & Frank Hoffman, *Future Warfare: The Rise of Hybrid Wars*, US Naval Institute, *Proceedings Magazine*, November 2005.

⁵ *Ibidem*, p. 2.

attacks it can easily affect the US security interests; it can also take the form of an opponent that wants to obtain tactical advantages in different domains, which become strategically important when are involved information operations and mass-media, with the purpose to weaken the American forces' will to continue the engagement. Therefore, the American troops must simultaneously deal with different types of threats and successfully operate against various adversaries in complex conflict environments. So, according to the authors, this is the essence of *hybrid warfare*⁶.

Frank Hoffman emphasises the impressive adaptability of some adversaries, capable of planning and employing in an innovative way different capabilities and asymmetric methods. Consequently, the conflicts of the future could not be classified as conventional or unconventional, because the most dangerous adversaries would want to combine different capacities and capabilities in a typological complex mix, and so the approach means would be constantly unclear. The challenge will not come from a state that favours a particular approach, but from states or non-state actors opting for those technologies and tactics that are strategically fitted in their own geography and culture⁷.

The ideas expressed by the American theoretician were taken over by officials; the basic document governing the joint operations of the US forces in the near future states: "*As it sometimes happened in the past, the future conflicts will take a hybrid form, comprising simultaneously various and dynamic combinations of organisations, technologies and techniques defying categorisation*"⁸.

Also, in the documents regarding the American ground troops training, the hybrid threat is defined as the "*diverse and dynamic combination of regular forces, irregular and/or criminal elements, unified to generate benefits*"⁹. Other experts have proposed similar definitions for the hybrid threat, under the form of an adversary able to simultaneously perform several specific actions; others have shown how armed groups from less developed societies tend to include the enemies' advanced technologies and implement specific tactics, distinct from traditional ones¹⁰.

⁶ James N. Mattis & Frank Hoffman, *op. cit.*, p. 2.

⁷ Frank G. Hoffman, *Conflict in the 21st Century: The Rise of Hybrid Wars*, Potomac Institute for Policy Studies, Arlington – Virginia, December, 2007, p. 27.

⁸ Department of Defence, *Capstone Concept for Joint Operations*, Version 3, Washington DC, 15 January 2009, p. 2.

⁹ US Department of the Army, *Hybrid Threat*, Training Circular 7-100 (Washington DC, 26 November 2010), 1-1.

¹⁰ William J. Nemeth, *Future War and Chechnya: A Case for Hybrid Warfare* (Monterrey CA: Naval Postgraduate School, June 2002).

The “*hybrid threat*” phrase is more used to conceptualise a realistic threat description that defines how potential adversaries use their available capabilities to counter the conventional advantages, believed to be symmetric, in order to achieve their strategic objectives. At the same time, the hybrid threat concept can be considered a sophisticated amalgam of unrestricted activities, characterised by decentralised leadership, military and non-military activities employed simultaneously, a combination of traditionalism and asymmetry, unconventional actions, including organised crime, adapted to a complex operational environment, all with the aim of adopting an appropriate decision for the stated situation.

First of all, hybrid threats exploit the adversary’s vulnerabilities. The chosen combination of conventional and unconventional means coincides with the adversary’s identified weaknesses and vulnerabilities.

The *hybrid threat* concept can be considered valid because it is something new that challenges the current conventional thinking, emphasises the wide spectrum of contemporary conflicts, draws attention to the potential risks and informs over the debate on potential threat represented only by the classic military devices¹¹.

Another approach to the same concept can be found in the US Doctrine in 2011, where the hybrid threat is defined as *a diverse and dynamic combination of conventional and asymmetric forces, of criminal elements, or a combination of these forces and unified elements to achieve and mutually benefit from the resulting effects*¹².

In other words, the hybrid threat can be defined as *the conjunct activity of a state or non-state adversary incorporating in an adaptive and fast manner various and dynamic elements from the conventional and asymmetric spectrum, terrorism and organised crime, as well as unconventional and non-military means, using simultaneously the entire conflict spectrum as a unified force to achieve the stated goals*.

According to the studies conducted by NATO experts¹³, the term *hybrid* appears in different combinations: “*hybrid strategy*”, “*hybrid warfare*”, “*hybrid threat*” and “*hybrid pattern*”, which, although seeming to belong to the same class, are still different in scope, being either manifest across the entire spectrum of military operations or limited to the tactical level.

¹¹ Frank G. Hoffman, *Further Thoughts on Hybrid Threats*, in Small Wars Journal, 3 March 2009, <http://smallwarsjournal.com/blog/2009/03/further-thoughts-on-hybrid-thr/>, retrieved on 11 November 2014.

¹² US Army, *Field Manual 3-0 Operations C-1*, GPO, Washington DC, February 2011.

¹³ *NATO and New Ways of Warfare: Defeating Hybrid Threats*, NATO Defence College, Rome, 29-30 April 2015.

The *hybrid strategy* is considered a comprehensive strategy fulfilling (geo)political and strategic objectives, based on extended, complex and adaptable means, integrating combinations of conventional and/or unconventional, direct and/or covert, military, paramilitary methods, civilian and/or asymmetric actors, targeted at all power holders (diplomatic/political, informational, military, economic, financial, intelligence, legislative) with the aim to create ambiguity and to reveal adversaries' weaknesses and vulnerabilities. Hybrid strategies focus specifically on decision-making processes.

The *hybrid threat* comes from a state or non-state actor having the capability and apparent intention to implement a hybrid strategy. A hybrid threat will be used in those domains lacking direct conventional military actions that can be conducted over a long period of time.

The *hybrid warfare* (hybrid attack) entails adversaries using the hybrid strategies including the threat of using the force or even using it, while the *hybrid pattern* is a specific manifestation of a hybrid strategy implemented by a particular opponent.

The problem that comes along the hybrid warfare is that the enemy tries to evade military victory, focusing on long-term political victory. Directly related to this aspect, there should be considered three decisive elements¹⁴: *focusing the efforts on the cognitive and moral dimensions* (influencing the will of the enemy's population and temporarily isolating own population in order to reduce the leverages); *the evasive and fluid form of the threat* (the hybrid enemy has a physical footprint difficult to identify and engage, because it is dissipated in the environment, it has the ability to extend the conflict, leading to the adversary's resources depletion and diminishing its will); *the existence of fighting capabilities across the full spectrum of the conflict* (globalisation, information technology availability and affordability, cyber means and modern weapon systems easy to obtain).

The experts' opinions regarding the definition/meaning of the *hybrid warfare* concept have both similarities and differences. However, all of them mostly emphasise the threat evolution and the need for the armed forces to adopt effective combat strategies against this phenomenon. *Hybrid warfare* will be the dominant feature of the confrontation in the 21st century due to the different hybrid threats combining the attributes of various forces operating at the same time as regular troops, guerrilla groups, terrorist or organised crime elements using a wide variety of weapons and tactics, with no respect for the laws of the war.

¹⁴ Lieutenant Colonel Daniel T. Lasica (US Air Force), *Strategic Implications of Hybrid War: A Theory of Victory*, School of Advanced Military Studies, United States Army Command and General Staff College, Fort Leavenworth, Kansas, 2009, pp. 20-22.

The Phases of Russian Hybrid Warfare in Ukraine

The recent geopolitical approaches undertaken by the Russian Federation come under the old forms of territorial control, dating back from Catherine the Great and the lessons learned from the siege of Moscow by the Tatars. Because geographically the European part of the Russian territory is a flat plain with few tactical advantages to prevent the advance of any Western conventional troops towards the capital, along the history Russia confronted itself with the inability to deploy troops well outside “the city” and fight the invading forces away from the centre of power¹⁵.

Therefore, Russia needs space. Today, the new technologies greatly diminish the space importance as a military dimension, making it almost useless, easy to overcome by using the long-range missiles, strategic aviation or airborne troops. It is true that this dimension cannot be entirely ignored, if we only discuss about the corridors, the flight permission or the use of other countries military bases and facilities. But Russia’s inclination to geopolitics, in particular, and to *realpolitik*, in general, is topical. When the relapse into the 20th century nationalism, revisionism and ignorance of the rules of international law (or their disguise following the model of Hungary in 1956, and of Czechoslovakia in 1968), combined with the frozen conflicts experiences are added, we deal with the current threat of re-discussing and re-drawing the borders of Eastern Europe¹⁶.

The current events in Ukraine show us the contemporary reality that otherwise we would not have guessed. It is true that there have been always objections to the defence thesis “Russians, Russian-speaking population and compatriots”¹⁷, because it highly exceeds the defence of their rights in the origin states, with respect for territorial integrity and rules of international law.

However, the actions taken by the Russian Federation before and after the outbreak of the crisis in Ukraine have revealed the sophisticated, complex and multiple approach of the strategy regarding the use force in order to achieve the stated strategic goals. For that, the Russian military planners and policymakers imported the classic Soviet-era elements and included them in the current Russian military capabilities, so creating new military types of action adapted to the contemporary security environment.

¹⁵ George Friedman, *Russian Geopolitics*, Stratfor, 2009.

¹⁶ Dr Iulian Chifu, *Geopolitica Regiunii Extinse a Mării Negre după criza ucraineană*, in *Impact strategic*, no. 3/2014, see http://cssas.unap.ro/ro/pdf_publicatii/is52.pdf, retrieved on 5 January 2015.

¹⁷ David D. Laitin, *Identity in Formation: Russian Speaking Population in the Near Abroad*, Ithaca, Cornell University Press.

Basically, the Russian Federation is currently taking steps for a rapid transition from the conventional approach to solving a conflict, predictable, built on the classical pattern, focused on the balance of forces, to the hybrid model, less predictable and more difficult to counteract, which allows the deliberate and timely combination of conventional and unconventional military capabilities with other state power instruments under the umbrella of a comprehensive information campaign.

The events in Ukraine have shown the flexibility of Russian military apparatus to rapidly and successfully adapt to various military and geopolitical situations by using different strategies and tactics – mostly in accordance with the political and strategic guidelines outlined in the military doctrine. The crisis in Ukraine has demonstrated the potential of the Russian armed forces (in contrast with the shortcomings highlighted by the conflict in Georgia) and the ability to achieve political objectives through the hybrid warfare specific instruments.

In the case of Ukraine, the key hybrid approach elements to achieve strategic interests in both the Crimean Peninsula and the separatist regions in the East of the county were represented by the informational domination and manipulation of the ethnic Russians, having a common language, culture or ethnic heritage¹⁸. These two approaches were successful due to the Russian media (largely controlled by the state), the common historical, cultural and family relations, contributing to rapidly spreading the strategic message across the country as well as to selectively presenting the situation in the international environment according to own interests.

This approach enabled the surprise, the strategic initiative, the disorganisation of the Ukrainian forces and administrative bodies, using especially misleading both in terms of naming the aggressor and legitimising the Ukrainian actions of any kind, as response affecting the Russians' interests and contributing to conflict escalation. Therefore, staging these actions came natural, apparently unrelated to the previous events, for protecting the ethnic Russians interests.

As previously stated, there are not distinct stages or phases of a developing hybrid-type conflict. However, the analyse of Russian actions during the crisis in Ukraine has led us to identify **four phases**, more or less visible, of **hybrid warfare**, namely the *strategic modelling*, the *operational and tactical modelling*, the *conduct of operations*, and the *consolidation of operations*.

Strategic modelling. Moscow's strategic goal is to redefine the global security system, in the way of regaining the status of a great global power, reducing NATO's

¹⁸ Sam Jones, *Ukraine: Russia's New Art of War*, 28 August 2014, see <http://www.ft.com/cms/s/2/ea5e82fa-2e0c-11e4-b760-00144feabdc0.html#axzz3Ppm1XptZ>, retrieved on 10 January 2015.

influence and blocking the expansion of the Alliance and the EU towards the “*near abroad*”, in order to restore the influence into the Eastern Europe and Central Asia. Any external interference into the ex-Soviet sphere of influence is considered a threat to Russian “*special interests*”.

In our opinion, the strategic modelling was not developed in the eve of the Ukrainian crisis; it was a long process, difficult to fit into specific time landmarks. In the past 20 years, Moscow has been constantly concerned with the society consolidation under single authority and has developed a strategy to re-instate itself as a regional power, using the natural resources and military strength as leverages in the foreign relations. The interference into the internal policy of the former Soviet countries, particularly in Ukraine, was aimed at bringing it within the Russian sphere of influence, firstly compromising its European and Euro-Atlantic aspirations.

Thus, in practical terms, the strategic modelling was achieved using mainly non-military means (political, economic, social and informational) in order to generate strategic effects by staging destabilising actions and espionage, altering the perceptions and mentalities, ensuring the legitimacy for the subsequent actions, dividing and undermining the local, regional and national authorities and entities, creating some alternative and parallel administrative structures, increasing social tensions and raising dissatisfaction in relation to the central authorities.

Drawing a parallel with somewhat similar actions carried out in 2008 in the conflict with Georgia, we can say that the Russian Federation exploited and exacerbated the tensions of the civil war¹⁹ in 1992, eroded the Georgian government legitimacy, used economic leverages to amplify social tensions and named loyal leaders in the separatist provinces.

In Ukraine, especially in the areas inhabited by ethnic Russians, basically there were carried out the same type of actions combined with an aggressive information campaign, meant to create the perception of an “*illegitimate*” and “*fascist*”²⁰ Ukrainian government, to divide the international community

¹⁹ At the end of 1991, Georgia was paralysed by the protest demonstrations and meetings. On 6 January 1992, the Georgian President escaped into Armenia from where he came back after 10 days, establishing its base into Kutaisi from where he tried to regain his position. Without success, while the insurgents led by the prime minister and the chief of the National Guard were seizing the power. Being in Moscow, the former first-secretary of the Communist Party, Eduard Shevardnadze saluted the new authorities in Tbilisi. Once Shevardnadze came to power with the help of those who ousted Gamsahurdia, he confronted himself with a civil war against Gamsahurdia’s supporters, with a war in Abkhazia and another one in South Ossetia and with tensions in Adjara.

²⁰ *Nezavisimaya Gazeta*, 21 October 2014, see http://ng.ru/editorial/2014-10-21/2_red.html, retrieved on 12 January 2015.

in order to legitimise the subsequent actions. Within the national borders, the information campaign led to increased public support for the actions undertaken in Ukraine, of course, for the good of the citizens, for their protection, and also for countering and reversing the tendency of diminishing or affecting the interests of the Russian Federation in the region.

This phase of strategic modelling is ongoing, diffuse, uncertain, making it difficult to identify and quantify the transition indicators to the next phase.

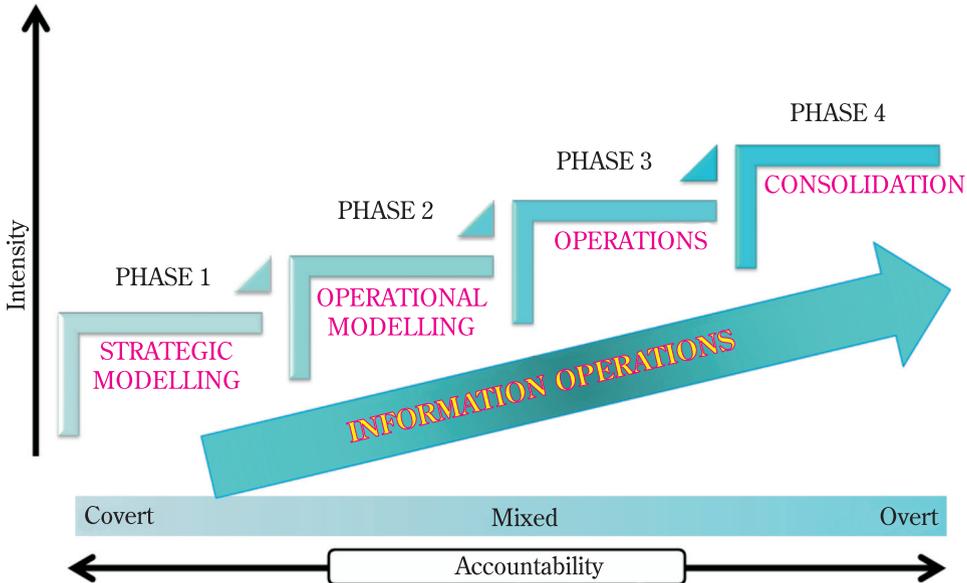


Figure 1: Phases of hybrid war

The operational and tactical modelling was achieved by concentrating power instruments in order to choose the proper moment, pretext and conditions for future tactical actions, securing, controlling or destabilising (depending on the situation) the military capabilities, the main access routes and points, critical infrastructure elements, while simultaneously blocking the other actors access.

The actions were basically unconventional, carried out by forces outside the military system (private security companies, local paramilitary groups with a nationalist agenda), supported and coordinated by tactical units belonging to special forces²¹ and other military categories that were not wearing identification insignia (*little green men*)²². Simultaneously, in the proximity of the area of operations

²¹ H. Reisinger, A. Golts, *Russia's Hybrid Warfare*, NATO Defence College, Research Paper no. 105, November 2014, see http://www.ndc.nato.int/news/current_news.php?icode=732, retrieved on 12 January 2015.

²² Concept used in mass-media with reference to the green men and the unknown origin of these units.

were deployed significant conventional²³ forces to increase tension and to support the information campaign.

The conduct of operations entailed the simultaneous use of conventional and unconventional military forces as part of the military power leverage. Thus, the conventional forces were rapidly deployed near the area of operations to support the actions carried out by the unconventional forces to take control over the urban centres, infrastructure elements, communication lines, while avoiding direct military engagement. The unconventional forces carried covert actions in order to create instability and pressure, allowing Russian leadership to deny²⁴ any involvement in the conflict.

The unconventional actions were also carried out by non-military forces, many Russian nationalist groups currently involved in the crisis in Ukraine. They were probably mandated by the Russian Federation to support and enforce the Russian interests on the targeted territory: irregular forces composed of Russian paramilitaries, Cossacks or Chechens, ethnic Serbs, the Russian Orthodox Army, the Night Wolveres (a motorcycle club of nationalists) etc.²⁵.

The hybrid approach placed both the unconventional and irregular forces in the centre of the operations. The conventional forces deployed at the Russian borders sent a strong strategic message before effectively engaging into combat. So did the nuclear strategic forces, reinforcing Russian position on the international stage and acting as the ultimate deterrent element.

We assume that the role of the unconventional forces (*FSB*, *GRU* or special operation forces) was to organise, train and coordinate irregular forces, performing in the same time reconnaissance and sabotage operations, or even direct actions against military and political targets. It is also assumed that the Russian unconventional forces in Ukraine had acted long before, creating or encouraging pro-Russian sentiments and identifying potential recruits for the irregular forces. Regarding the military actions performed in Ukraine, showing compelling evidence on the involvement of such forces is a difficult task, being an important feature of the hybrid approach. They could be identified only based on the analysis of their behaviour, individual skills, discipline and equipment.

Simultaneously, the irregular forces provided Russia with the perfect cover and also an effective method to secretly operate inside Ukrainian territory, while denying any allegations. Their usefulness and reduced operating costs make such forces very attractive. Another advantage of the irregular forces recruited

²³ H. Reisinger, A. Golts, *Russia's Hybrid Warfare*, *op. cit.*

²⁴ See <http://eng.kremlin.ru/news/6763>, retrieved on 10 January 2015.

²⁵ See <http://www.rbnpress.info/wp/dezvaluiri-cine-sunt-separatistii-din-ucraina-cum-ii-pregatesterusia-si-cum-mor-aiurea>, retrieved on 10 January 2015.

from the Russian minority, dissident political groups, ethnic groups and other criminal elements in Ukraine is that they are indigenous, with a real understanding of the operational environment. Irregular forces are hardly detectable when not overtly involved into an armed conflict. Although the main motivation behind their involvement is financial benefits, the irregular forces are effective not only as subversion elements but also as a cover force, therefore enabling Russia to deny and reject any involvement in Ukraine.

Soon after Crimea's annexation and its integration into the Russian administrative borders, Moscow based its strategy on getting a critical mass of demonstrators in the Eastern regions of Ukraine in support of the Ukrainian state federalisation forcing Kiev to amend the Constitution in this regard. The lack of reaction or the insignificant riposte from the Russian minority determined the Russian leadership to infiltrate into these regions specially trained groups using local security destabilisation methods and procedures by taking control over the public institutions offices, including the law enforcement forces.

Simultaneously, the Russian Federation maintained a significant military build-up on the Eastern borders of Ukraine in order to exert additional pressure on the leadership in Kiev, as well as to discourage Ukrainian security forces to fight against pro-Russian separatists.

The crisis in Ukraine demonstrated the Russian leadership ability to order and rapidly deploy and support at its borders a large number of troops from all military branches and military districts. These forces, besides exerting pressure on potential adversary, allowed Russia to prove not only its intention but also the capability to carry out a direct military intervention.

By the snap military exercises²⁶, the Russian leadership aimed to the conventional forces high-readiness, to cover the preparations for both the operations and support for the separatists. The lessons identified following the conflict in Georgia and the subsequent military exercises enabled leaders to find solutions for deficiencies in the chain of command and control, mobilisation and logistics. New reform measures and exercises will likely follow leading to the creation, by 2020, of more agile, better equipped and trained armed forces.

The nuclear forces have been seen as the ultimate guarantor of security. During the crisis in Ukraine, the Russian Federation used all nuclear activities to support the hybrid approach of the conflict as a strategic message to deter any conventional military response. The nuclear activities included firing

²⁶ *Working meeting with Defence Minister Sergei Shoigu*, 2 July 2014, see <http://eng.kremlin.ru/news/22590>, retrieved on 10 January 2015.

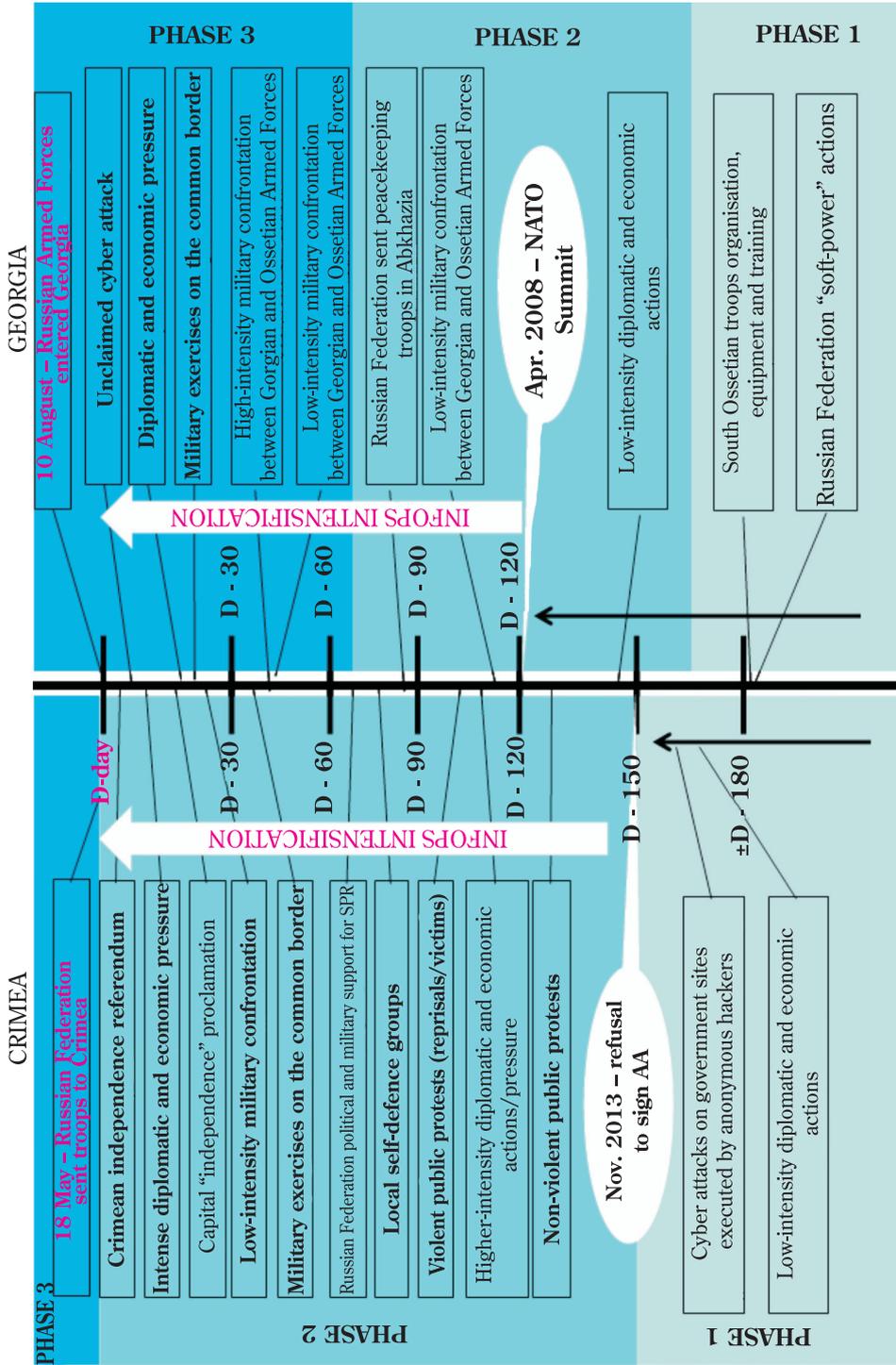


Figure 2: Comparative analysis

intercontinental ballistic missiles, large-scale exercises, strategic aviation or submarines routine deployments.

Unlike the transition from the first to the second phase, the transition to the third phase of the hybrid conflict as well as the Russian forces involvement in the conflict is easy to be observed and more difficult to deny.

We can expect the deterrence offensive to continue, which involves a Russian military presence along the border with Ukraine and in the entire Black Sea region as well as the supply of the tensions generated by separatist elements in Eastern Ukraine with the aim to destabilise Ukrainian pro-Western policy and reduce the power of the institutions under reform.

The consolidation of operations. After achieving all the tactical, operational or strategic stated goals, the Russian Federation will try to “*normalise*” the situation, strengthen the successes and prevent return to the previous state by stationing the conventional forces into the occupied or controlled areas, together with creating own political and economic structures and involving in the social areas.

The constant and never-ending clashes in the separatist regions and the risk of transforming into a civil war difficult to control can serve as a pretext for the Russian Federation to increasingly use the “*soft power*” and “*hard power*” leverages, and to intensify the regional states dependency on Moscow, maintaining at the same time the current frozen conflicts or generating others.

Moscow continues to use as pressure factors the embargo on “*targeted*” products exported mainly to Russian market, the threats of expulsion to the citizens coming from those states and working on Russian territory, the access restriction based on ID documents and visas.

This brief analysis of the recent actions indicate doctrinal and operational adaptability, displaying enhanced management capabilities of modified forms of actions specific to hybrid conflict that maximise power while exploiting the weaknesses of the adversary.

This type of conflict provides the Russian Federation with tactical and strategic advantages, including legitimacy and cover for the direct involvement in the Ukrainian crisis through so-called self-defence forces. These procedures were firstly tested during the exercises and drills with broad involvement of the Special Forces carried out during 2013 and implemented successfully in Crimea and later in pro-Russian regions in the Eastern Ukraine, in early 2014²⁷.

²⁷ Alexandr Golts, *The Forth Conquest of Crimea, Pro et Contra*, Volume 18, Issue 3-4, May-August 2014, see <http://carnegie.ru/proetcontra/?fa=56758>, retrieved on 11.01.2015

The Information Component of the Hybrid Approach in the Crisis in Ukraine

In early 2013, the Chief of the Russian General Staff, General Valery Gherasimov said: *“The armed conflicts, including those associated with so-called colour revolutions in North Africa and the Middle East showed that within few months or even days a prosperous state can be turned in a powerful armed conflict, becoming a victim of foreign intervention, being thrown into chaos, a humanitarian catastrophe and a civil war”*²⁸. The two lessons Russia learned were to avoid at all costs a “colour revolution” and to carefully analyse the use of its own military and non-military resources.

According to Valery Gherasimov’s words, *“the rules of the war have significantly changed. Using non-military methods to achieve strategic and political goals proved, in some cases, more effective than the use of force. [...] Used at significant scale, the asymmetric means can lead to neutralising a superior enemy. These may include the use of special operations forces and domestic opposition to create a permanent front in the enemy’s state territory, and the impact of permanently improved propaganda tools”*²⁹. In fact, the Russian military strategists realise that strategic stated goals can be easily achieved by hybrid means, using the conventional forces in a more effective way.

In early May 2014, when the war in Eastern Ukraine was unfolding, the Russian Defence Ministry organised a conference with the subject *“International Security”*³⁰. The main topic was “colour revolution”, defined as a major threat to the national security. During the conference, Russian military leaders concluded that the *“colour revolution is a new form of war, taking the form of an armed struggle under the rules of engagement, but in this case uses all possible means”*³¹. The idea was developed by other military leaders *“In the beginning, [...] the country’s military potential to plan an overthrow of the enemy’s government is used to exert open pressure. Its purpose is to prevent using security forces to restore law and order. Then, while unfolding the hostilities between the opposition and the government forces, the interested foreign countries begin to offer economic and military aid to rebels. Finally, a coalition of countries [...] can embark on a classic military operation to help the opposition to retake power”*³².

²⁸ Valery Gherasimov, *Tsennost nauki v predvidenii, Voenno-Promyshlenny Kuryer*, 8 (476), 27 February 2013, see <http://www.vpk-news.ru/articles/14632>

²⁹ *Ibidem*.

³⁰ *Moscow Conference on International Security* (MCIS), 23/24 May 2014, following the Security Conference in Munich (MSC) pattern, but with a low attendance from Europe and the USA.

³¹ See also Iuri Gavrilov, *Igry s nulevym rezultatom. Rossiyskaya Gazeta*, 26 May 2014, see www.rg.ru/2014/05/23/konferenciya-site.html

³² Alexandr Tikhonov, *Otkuda izchodayat ugrozy miru. Krasnaya Zvezda*, 27 May 2014, see <http://www.redstar.ru/index.php/newspaper/item/16298-otkuda-iskhodyat-ugrozy-miru>

This scenario may be an explanation for the plan Moscow implemented in Eastern Ukraine. At first, it massed major military forces on the common border, as a show of force, then provided weapons and trainers to the separatists. Therefore, we concluded that the *hybrid warfare* against Ukraine is part of a long-term strategy Russia launched long before the outbreak of the military hostilities. Before the outbreak of the crisis, Russia consolidated its position in Ukraine by staging a strong propaganda campaign, developing client networks, respectively controlling the strategic economic operators and taking over the dominant positions in the economy.

However, the theory of *hybrid warfare* has a long tradition in the Russian intelligence and military thinking if we take into consideration that its basic elements were developed long ago during the Soviet times: carrying out subversive local activities and propaganda to affect the state institutions, ensuring the control over the media, establishing loyal oligarchic networks, creating local political organisations etc. In particular, in the case of Ukraine, the campaign unveiled a centralised decision-making system dominated by the Kremlin, the repeated transfer of operational responsibilities to various intelligence services, as well as the ongoing effort to create functional local structures to manage the occupied territories.

The Russian political and military elite was delirious for the total success of this new model of military, economic and diplomatic power system, which resulted in the annexation to its territory of a part from the neighbouring state and the exertion of additional pressure on its government so they could enjoy themselves watching how NATO leaders were condemning Russian actions in Ukraine³³. The Russian Defence Minister Sergei Shoigu compared the Western leaders steps to establish a link between the Russian forces involvement into Eastern Ukraine with finding “*a black cat in a dark room*”, while evoking his appreciation for the Russian special forces, admitting that “*black cats*” are “*intelligent, polite and brave*”³⁴.

Combining the military theory, doctrine, capabilities and Russian conventional forces evolution with the opinions expressed in the national media in a total information campaign became a matrix for the operations conducted in the field by Russian troops.

In fact, not only did Russia launch a misleading campaign, but it also created an entire parallel reality, heavily dependent on fabricating false information.

³³ Roger McDermott, *Myth and Reality – A Net Assessment of Russia’s “Hybrid Warfare” Strategy since the Start of 2014*, Jamestown Foundation, Publication: Eurasia Daily Monitor Volume: 11 Issue: 75, 17 October 2014, see http://www.jamestown.org/single/?tx_ttnews%5Btt_news%5D=42966&no_cache=1#.VM-odCyJ1dg

³⁴ Roger McDermott, *Black Cats in a Dark Room: Moscow’s Denials of Military Involvement in Eastern Ukraine*, Jamestown Foundation, Publication: Eurasia Daily Monitor Volume: 11 Issue: 75, 23 April 2014, see http://www.jamestown.org/single/?tx_ttnews%5Btt_news%5D=42255&no_cache=1#.VM-owyyJ1dh

In this regard, the Kremlin exerts almost total control over the media (especially on television) those institutions being given massive funds for propaganda activities. The target audience (Russia and the Russian-speaking population in the vicinity) of this parallel reality is indoctrinated to resist any influence/external pressure and fully trust the media and the Russian Government.

In May 2014, President Putin awarded distinctions for some 300 journalists, cameramen and technicians who broadcast reports about the events in Crimea. All of them are state media employees. The Consumers Protection chief whose responsibility was to block unwanted websites³⁵ was also rewarded. Therefore, it became so obvious how important the information campaign was, conducted by media channels (especially the state ones, totally controlled by the Kremlin), on the internet platforms or social media, as well as the denial of the defaming comments from outside Russia.

In the first phase of the disinformation campaign, conducted in a very efficient way, the social movement “*Euromaidan*” in Kiev was marked as “*fascist*” in order to bring into light memories of the past Soviets fights against the Nazis. For example, the Russian Minister of Foreign Affairs, Sergey Lavrov spoke about “*the Nazis who are marching in Kiev and other cities in Ukraine*”³⁶. In the same context, the Kiev’s military campaign was described as a war against its own people. Putin even compared the Ukrainian military action with the German siege against Leningrad: “*The Ukrainian army has occupied small and big towns, executed fire against residential areas in order to destroy infrastructure as well as the people’s will to fight back. Even sad as it seems, this matter reminds me events of the Second World War when Nazi troops occupied our cities, particularly the city of Leningrad [...] and fired directly into the city and against its habitants*”³⁷.

In the aftermath of the annexation of Crimea and after a complex covert action to support separatists with modern weapons, ammunition and combat assets, the Russian Federation used another information technique, namely “*the plausible negation*”, in order to cover the real actions and objectives for which the Russian officials gave hallucinating explanations. Some of them sound bizarre enough like the 4 March 2014 Russian President’s declaration in which he stated that the unidentified troops in Crimea were not Russian, and the new uniforms they were wearing could be bought from any second hand store³⁸.

³⁵ H. Reisinger, A. Golts, *Russia’s Hybrid Warfare*. Research Paper – NATO Defence College, Rome, no. 105, November 2014, p.5, see http://ftalphaville.ft.com/files/2014/11/rp_105.pdf

³⁶ *U Kremlya mogut byt dva plana po Ukraine*, *Nezavisimaya gazeta*, 21 October 2014, see http://www.ng.ru/editorial/2014-10-21/2_red.html

³⁷ See <http://www.kremlin.ru/news/46507>

³⁸ See <http://eng.kremlin.ru/news/6763>

Russia denied and continues to deny its involvement in the bloody conflicts in Eastern Ukraine, even in front of solid evidence. Another “funny” explanation was that the Russian soldiers reached the Ukrainian soil by mistake. When a Russian paratroopers group was captured in the vicinity of Mariupol, the Russian mass media reacted by stating that the group “*was patrolling on the border and got lost*”. After one of the many confrontations in the vicinity of Donetsk airport, on 26 May 2014, when among the victims were also Russian soldiers, the official declaration was changed and the Russian soldiers were named “*volunteers*” whose convictions pushed them to fight for freedom. Those soldiers joined the separatists with no orders from their commanders, being on “*vacation*”³⁹.

Pro-Russian rebels also confirmed such narrative. A. Zaharченко, the separatist leader and Prime Minister of the self-proclaimed Donetsk Popular Republic, declared during an interview that 30-40,000 Russian soldiers fought against the Ukrainian troops, together with his units: “*Among us are soldiers who do not want to leave on vacation to the seaside; they instead prefer to stay with us, as brothers, fighting for freedom*”⁴⁰.

Another “*humanitarian narrative*” was used when the Ukrainian armed forces were regaining some of the territories occupied by separatists and the Kremlin became the defender of the humanitarian cause. The daily news regarding the Russian humanitarian convoys and the Russian people call for civilians rescue were supported by pictures of “*the Russian minority protesting*” or the long refugees’ lines at the border between Ukraine and Poland, suggesting the attempts of the Ukrainian population to save themselves from “*fascism*” and to move then to Russia.

The use of such special techniques of the information warfare represents a small amount of proof regarding the fight conducted in the information domain. Due to the already globalisation of information and because the support of its genesis and circulation is a very complex network, more exactly a system of complex networks, we could come to the conclusion that the information warfare is a network warfare conducted in the information space, for information, in order to secure information domination and, of course, to manipulate information. This topic is not new, the information manipulation being performed since Sun Tzu until today. What is new in this type of war is the information domination, the capacity of information sensors to monitor more and the occurrence and development of information in the virtual space.

³⁹ Maria Turkenkova, *Gruz 200. Continuation*, in *Novaya Gazeta*, 2 June 2004, see <http://www.novayagazeta.ru/politics/63873.html>

⁴⁰ Interview, *Russia 24 TV Channel*, 28 August 2014, see <http://www.vesti.ru/onair/>

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After the end of the *Cold War*, Russia supported “*frozen conflicts*” by threatening the stakeholders with the use of military intervention in order to secure its interests in certain regions, without risking a clash with NATO. However, this policy created in the '90s the premises to degrade the combat operational level of the Russian troops and the military efficiency.

The lack of Russian commitment to the new principles and values that legitimised the security of Europe in the last 25 years correlated with the pledge to “*unfrozen*” these conflicts by using conventional forms of fighting or, moreover, an unconventional approach to conflict, represent an evolution of strategy in the Russian policy with effects and implications at regional and international levels.

Generally speaking, the Russian actions conducted in Ukraine proved a well-developed model of the military thinking, based on a traditional approach upgraded with new concepts of modern military operations that involve more unconventional means in reaching the proposed strategic objectives. Russia has adapted the military art and thinking by developing a flexible system for military power projection over national territory and abroad, while keeping its nuclear and conventional power at strategic and operational levels as deterrence factors, supporting and protecting the tactical level, conventional or unconventional.

Compared to NATO, in the case of the Russian Federation, the planning and decentralised execution of military actions within a *hybrid war*/conflict allow a very high degree of adaptability, which is not affordable in the case of classic structures, having a complex decision-making process. Moreover, it is very difficult to have a clear picture of the enemy, of its chain of command and operational links, facts that complicate the reaction against a hybrid threat.

The ongoing events in Ukraine anticipate the conclusion that the Russian Federation will not cede this country to the West and, if needed, without Crimea. At the same time, Ukraine in its actual borders has no chance to join the European and Euro-Atlantic organisations even in the context of the enthusiastic discourses of the new political leaders from Kiev or the will of the majority of the population in the western part of the country. A territory with one Russian soldier is a piece of land blocked for integration in the Euro-Atlantic space and Russia knows that.

Even though, after 1990, the Russian Empire experienced a historic reflux and the West advanced towards the actual borders of the Russian Federation, it seems that a strategic alignment exists beyond which the western values cannot pass. Moreover, the diplomatic and military reactions of Ukraine and the West do not seem to prevent Russian President Putin from following his own plan to reintegrate the former “*empire*” space not just at a declarative level but also factual. Therefore, currently, it seems that Moscow has developed a firm agenda meant to bring all Russian speaking people in the Russian Federation even if they are living

in the neighbouring sovereign states, to re-establish the Russian influence in the ex-soviets states, to redraw the international borders and to be in permanent conflict with the West, considering this policy as being beneficial for the internal stability and legitimacy.

In such circumstances, we can conclude that, until now, the specific elements for the new type of war, the hybrid one, have allowed meeting the proposed objectives. However, it is clear that the future of Europe itself is at stake as the situation in Ukraine will decisively influence the regional geopolitics.

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POLICY, STRATEGIES, STRATEGIC OBJECTIVES

– A Comparison between the West and the East –

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This paper is the result of a comparative analysis between the policies, strategies and strategic military objectives of member countries of NATO and CSTO, as international organisations representing two of the major forces that shape the international security environment. Moreover, these two organisations enjoy the membership of some of the most important actors in the international relations, such as the USA, Germany, the United Kingdom, France and Italy within NATO, and the Russian Federation within CSTO. From this perspective, the comparative analysis of the strategic military objectives of NATO member countries and of CSTO member countries is an important element in the scientific endeavour to understand the complex and dynamic character of the security environment, particularly useful for policy makers in developing/updating national policies and strategies.

Keywords: *policy; strategies; military strategic objectives; NATO; CSTO*

Foreword

This paper integrates two analytical directions: first, a purely theoretical one, arisen from the need to clarify the conceptual relations between security policies, strategies and objectives, and the second direction, a comparative analysis of security and defence key policies and strategies of the member countries of the North Atlantic Treaty Organisation (NATO) and of the Collective Security Treaty Organisation (CSTO) that are framed in the strategic concepts and outlook of these two organisations¹.

The need for analysing the theories on the relationship between the three mentioned concepts derives from the fact that their use is not always in compliance with the meaning and context developed by experts, but rather with the common knowledge. Moreover, some states pay more attention to some specific areas over others. According to Charles R. Miller, Professor of International Relations (IR) at West Point, electoral democracies, in particular, face the problem of clearly defining the strategy and its application

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¹This paper introduces and updates the conclusions of the research study named “*Analiza comparativă a obiectivelor militare strategice ale statelor membre NATO și ale celor membre CSI/CSTO*” (Editura Universității Naționale de Apărare “Carol I”, București, 2014) and develops the issues

in foreign policy². This statement leads to the formulation of another problematic issue that is specific to the contemporary world, namely the relationship between policies, strategies and objectives. Hence derives the need to study the most important theoretical guidelines on the mentioned relationships.

Regarding the comparative analysis component, at the basis of the scientific approach is, on the one hand, an analysis grid of NATO and CSTO, and, on the other hand, an analysis of the public strategic papers of the member countries. The comparative analysis of NATO and CSTO can be performed not only at organisational level but also at the level of member countries. Both are the subject of extensive scientific studies so that their presentation might seem redundant and, therefore, the scientific approach can be reduced to the analysis grid covering the most important elements for identifying their common and different features.

The present scientific approach started from a number of assumptions that correlate the countries' status on the international arena with the national orientation towards a common direction, according to the international organisation whose member they are. It is thus easily noted that there is a common line for all of the countries, regardless the organisation to which they belong, to align to the goals and missions of the organisation (tendency resulting from their membership). There is also a predominant orientation towards the global level of security of the countries that have the status of superpower or great power, and towards the regional level of security of the countries with a lower international status (obviously that the achievement and preservation of national security is the main objective of all the analysed state actors). Furthermore, the main security and defence papers of NATO countries are directed mainly to the universally valid security interests, while those of CSTO countries bring in the foreground the issues of national and regional security and the improvement of the defence potential in the framework of a strong propagandistic feature.

1. Theoretical Guidelines

Charles R. Miller's statement correlated with the number of countries that are electoral democracies (according to the methodology developed by Freedom House³) shows that out of 195 countries, 122 are likely to have problems in clearly defining their strategies and their implementation in foreign policy.

in the paper "*Ante actio: marea strategie, politici, strategii și obiective în domeniul securității naționale*" (*Impact Strategic* no. 2/2014, Editura Universității Naționale de Apărare "Carol I", București, pp. 64-75).

² Charles R. Miller, "*Defence Policy and Doctrinal Insulation*", in *Policy & Management Review*, Vol. 2, no. 2, 2002, pp. 29-73, EBSCO Host Connection.

³ According to Freedom House, *Freedom in the World – Electoral Democracies*, 2014, see <http://www.freedomhouse.org/sites/default/files/Electoral%20Democracy%20Numbers%2C%20FIW%201989-2014.pdf>.

Arguing these statements, Miller describes the *grand strategy* as a synthesis of military, economic, diplomatic, cultural fields, which is intended to achieve the state's fundamental interests and objectives⁴.

Continuing the theoretical approach, it arises the need to define the concept of *policy*. According to the definition commonly used in social and human sciences, policy is the process by which a group of people with initially different views and interests reach collective decisions and choices that are enforced upon the entire group⁵. Thus, one can argue that *policy is a network of interrelated decisions concerning the choice of objectives, means and resources allocated to achieve them in specific situations*⁶.

Considering the policy definition, the analysis takes into account another concept related to policy, namely *strategy*. The origins of this concept are identified in the military domain, in the times of Ancient Greece, and nominate forms and methods used by the military commander in carrying out his duties⁷. At present, strategy is one of the basic elements of governmental and nongovernmental programmes, business environment etc. Thus, strategy can be broadly defined as a means of achieving goals that are themselves the objectives of that specific organisation⁸. John M. Collins, researcher at the US National Defence University and former Chief of the Strategic Research Group of the War College (USA), underlines that no nation can prosper in the long term in a competitive environment without determining ways to promote and protect its fundamental interests and the premises that derive from them⁹. At this statement, we would add that the international security environment is in constant change and subject almost constantly to pressures that, paradoxically, come from the inside. In this context, it is obvious the need to develop and implement effective and clear strategies, from national to sectoral level (the military one, in this case).

At the core of strategies design are the national interests/objectives in relation to national security interests/objectives. The latter constitute the basis for developing valid national objectives that define the goals of a country, being the general

⁴ Charles R. Miller, *op. cit.*

⁵ Nicolae Lotreanu, "Politică", in Cătălin Zamfir and Lazăr Vlăsceanu (Eds.), *Dicționar de sociologie*, Editura Babel, București, 1998, pp. 430-431.

⁶ Adrian Miroiu, *Analiza politicilor publice. Course*, 2008, p. 12, see <http://adriamiroiu.files.wordpress.com/2008/05/capitolul-1.pdf>.

⁷ Milan N. Vego, *Joint Operational Warfare. Theory and Practice*, Naval War College Press, Newport, 2009, p. I-36.

⁸ Constantin Brătianu, *Management strategic*, București, 2000, p. 54, see <http://www.lefo.ro/carmensylva/Carmensylva/ppap/2000/an2/sem1/bratianumanstrat.pdf>.

⁹ John M. Collins, *Military Strategy: Principles, Practices, and Historical Perspectives*, Potomac Books, Inc., Washington DC, 2002, p. 3.

expression of the desires and needs of a nation, particularly in terms of protecting its people, values, institutions, territory and lifestyle¹⁰. It is obvious that the magnitude of these interests varies from state to state depending on the status and the role they have in the international system. Thus, if a superpower's interests may cover the entire planet, a state with low power focuses on regional or even local interests.

The typology of national security interests differs from the dictatorial to democratic ones, from the temporary to permanent ones, or depends on the level of importance that is attached to them by that country; still, there are national interests that are universally valid. Collins summarises them as follows, mainly referring to the field of security:

- Universally important security interests: survival, homeland defence, internal peace, military power, national credibility, freedom of action;
- Variably important security interests: peace, stability, prosperity, ideology, geostrategic position, morality¹¹.

Based on security interests, Collins identifies *security objectives* and, furthermore, *basic military goals*. According to him, each national security objective corresponds to some basic military goals in order to complement and support national policy objectives. The characteristics of this category of goals are: unambiguity, consistency, possibility to be achieved with the available armed forces, and flexibility. In his work on strategy, Collins underlines the following six security objectives and associated military goals:

- ⇒ to deter aggressors: avoid challenges, deploy a superior power, instil fear of reprisals, deceive opponents, demoralise opponents;
- ⇒ to defeat aggressors: destroy the enemy armed forces, limit collateral damage, occupy the enemy territory, calm the insurgency, destroy terrorists' safety havens;
- ⇒ to train forces: improve the mobility of land forces, develop the air power, improve antimissile capabilities, improve defence in case of chemical or biological warfare, improve information dominance;
- ⇒ to create strong coalitions: promote compatible doctrines, improve joint/combined training, promote interoperable logistics, strengthen security assistance, obtain or maintain overseas bases;
- ⇒ to promote technological progress: improve projection needs and programmes management, reduce procurement time, improve applicability between services, lower costs;

¹⁰ See also "National Security Interests" in the US Department of Defence, *Joint Publication 1-02, DOD Dictionary of Military and Associated Terms 08 November 2010 (as amended on 15 January 2014)*, see http://www.dtic.mil/doctrine/dod_dictionary/ and John M. Collins, *op. cit.*, 2002, p. 13.

¹¹ John M. Collins, *op. cit.*, 2002, p. 14.

⇒ to improve the recovery capacity: consolidate the reserve, improve mobilisation procedures, improve health and care of victims, reinvigorate civil defence, strengthen the relations between the military and industry¹².

The prioritisation of these security objectives and military goals varies from state to state, but a coherent strategy, regardless of the level to which it refers, should include them all. In this respect, it is particularly important that the civilian and military decision-makers should understand that there is a close relationship of mutual determination between objectives, especially the strategic ones, and national instruments of power.

2. NATO and CSTO: Organisations and Member Countries

The grid used for the comparative analysis of NATO and CSTO is based on the establishment of the “*identity*” of the two organisations, such as date and document of establishment, type of organisation, number of members, number of states that have withdrawn, number of candidate countries, and basics of strategic thinking. The next step is to identify the elements of power of these two organisations and the specific indicators of member countries: aggregate area, aggregate number of population, aggregate GDP, aggregate budget of defence, number of military manpower, nuclear capability, operations outside the area of member countries, military bases/military forces of non-member countries stationed on their territory, military bases/military forces stationed on the territory of other member countries, military operations of other international organisations in the territory of the member countries.

Since NATO was established 65 years ago to respond to Soviet expansionism, to the trend of revival of European nationalistic militarism¹³, and to encourage the political integration of Europe devastated by the Second World War, CSTO history started with the CIS (Commonwealth of Independent States), about 23 years ago, and its creation had as pretext finding new forms of cooperation among countries of the former Union of Soviet Socialist Republics. To analyse comparatively NATO and CSTO is inevitable for two main reasons: on the one hand, the rhetoric of IR correlates them through the power relations between their member countries and, on the other hand, they are two of the most visible international organisations with military goals in the world (empirically, one can say that the number of international organisations with military or politico-military profile is well below that of those with economic profile).

¹² *Ibidem*, p. 37.

¹³ According to *A Short History of NATO*, see <http://www.nato.int/history/nato-history.html>.

Comparing the number of members and their geographical spread, it is obvious that NATO, with its 28 member countries, covers a wider area (the North-Western hemisphere), while the CSTO, with only six permanent members, but with an aggregate area comparable to that of NATO countries (20,404,536 km², compared to 24,578,094 km²) is restricted to a single continent with vast unpopulated areas (8.74 inhabitants/km² compared to 37.45 inhabitants/km²)¹⁴. It is obvious that a larger population accounts for a larger active military force, the aggregate number of the Alliance forces being more than three times larger than those of the CSTO. There are also significant differences between the aggregate GDP of NATO countries and the one of CSTO countries, the first being about 13 times greater than the second, while the aggregate budget for defence of the Allied countries is over 10 times higher than that of the CSTO countries.

Another important aspect of the comparative analysis is the perspective on the enlargement process of the two organisations. NATO applies the *open door policy* (Art. 10 of the Washington Treaty; four countries are currently candidates for membership: FYR Macedonia, Bosnia and Herzegovina, Montenegro – invited to join NATO on 2 December 2015, and Georgia) and no country has withdrawn from the Alliance. CSTO has no status of candidate country, although Iran was invited to join the organisation in 2007; Azerbaijan, Georgia and Uzbekistan withdrew from this structure. NATO also has an important network of institutionalised partnerships such as the Euro-Atlantic Partnership Council, the Mediterranean Dialogue, the Istanbul Cooperation Initiative, the NATO-Russia Council (whose activity is suspended), the NATO-Georgia Commission, and the NATO-Ukraine Commission.

Regarding the nuclear capabilities, although NATO has three nuclear powers (the USA, the United Kingdom and France) and CSTO has only one nuclear power (the Russian Federation), it is important to underline the fact that NATO countries possess 8,225 nuclear warheads and the Russian Federation has 8,500 nuclear warheads out of a total of 17,300 nuclear warheads worldwide¹⁵. Of them, the strategic operational ones are as follows: 1,800 in Russia; 1,950 in the USA; 290 in France and 160 in the United Kingdom. The USA declared the existence of other 200 nonstrategic operational nuclear warheads that are deployed in six sites from five countries (Belgium, Germany, Italy, the Netherlands and Turkey)¹⁶. Moreover, in 2015, the USA began the process of integrating

¹⁴ According to Central Intelligence Agency, *The World Factbook 2015*, 2015, see <https://www.cia.gov/library/publications/the-world-factbook/#>.

¹⁵ According to Federation of American Scientists, *Status of World Nuclear Forces*, 2013, see <http://www.fas.org/programs/ssp/nukes/nuclearweapons/nukestatus.html>.

¹⁶ *Ibidem*.

the new B61-12 nuclear weapons on NATO F-16 aircraft (Belgium, the Netherlands, Turkey) and Tornado (Germany and Italy), thus improving NATO's nuclear posture in Europe (completion in 2017)¹⁷.

There are also important the criteria regarding the presence of the member countries in other states, in or outside the mandate of that organisation: for instance, NATO has participated with troops in nine theatres outside its area, while CSTO proved, at least in the conflict in Kyrgyzstan (2010), that it could not develop such operations, although it holds peacekeeping forces. Moreover, on the territory of NATO countries there are no CIS member countries' military forces, while on the territory of CSTO states there are such forces of NATO and partner countries (Germany in Uzbekistan and Ukraine in the Republic of Moldova).

Therefore, the balance of power between NATO and CSTO is in favour of the Alliance, which has a larger number of member countries and partnerships, real prospects of enlargement, increased funding for defence and a broader pool to select the troops. In addition, NATO, as a political-military alliance, conducts peace operations on three continents, representing one of the leading security providers at global level.

The comparative analysis of NATO and CSTO member countries in terms of military and security policies and strategies, focusing on strategic military objectives, assumes that these specific objectives are similar in those countries belonging to the same organisation. This similarity also derives from the fact that the political objective and the strategic military objective are correlated, the former being determined mainly by the international status of that country (member of a certain international organisation). It is also necessary to consider that, in general, in terms of strategic documents, the interests and goals that are publicly available are generally viable and accepted. Therefore, further conclusions can be extracted from a comparative analysis of the military power of the countries concerned because, beyond official statements, their real objectives may be intuited from the study of elements such as armed forces strength, their organisation, number of reserve and paramilitary forces, commitment in missions abroad, budget for defence, nuclear capabilities etc.

There are no notable differences in the organisation of the armed forces of NATO countries in comparison with the CSTO ones. The main factors that determine the existence and number of the forces services are the geographic, demographic and economic ones; this line is currently governing the organisation of armed forces around the world. Thus, a landlocked country has no naval forces. In addition,

¹⁷ Hans M. Kristensen, *B61-12 Nuclear Bomb Integration on NATO Aircraft to Start in 2015*, 13 March 2014, FAS Strategic Security Blog, see <http://blogs.fas.org/security/2014/03/b61-12integration/ãmore-6232>.

it is obvious that a country with a large population has numerous military and reserve forces, especially in countries where the compulsory military service system is still active.

Regarding military budgets, countries feel the effects of the financial crisis: the military spending declined in 2014 in North America and Western and Central Europe. The decrease in US military spending for the period 2012-2014 is 7.8% being attributable not only to the cuts in the military budget but also to the cuts in spending on operations abroad, notably Afghanistan and Iraq. Instead, Russia's military spending increased by 4.8% over the same period and it was directed mainly to the renewal and improvement of weapons¹⁸.

In addition, it can be said that a country with vast territory will tend to increase the number of troops so that, when necessary, can defend its entire territory. However, there are exceptions that prove the importance of other factors in setting the numerical configuration of armed forces, such as the economic development of that country (a poor country cannot sustain large military manpower), the level of technological development (the next generation systems of surveillance and reconnaissance would take over the role of people in the territory) and, last but not least, the political and strategic vision on national security and defence.

There are specific cases that challenge the first two hypotheses related to military manpower: for instance, countries with large population and military manpower lower than those of countries with small population (comparison between Germany and France and between Belarus and Kazakhstan) and countries with larger military manpower than countries with a higher defence budget (Belarus-Kazakhstan, Turkey-France). In such cases, an important factor to consider is the one of political and military vision on national security and defence.

Comparing NATO and CSTO ones, it appears that between the "leaders" of the two categories and the other member countries are relatively large discrepancies in terms of GDP, defence budget, military manpower, number of missions abroad in progress and, in particular, nuclear capabilities. In a ranking for 2014 by the criteria of international organisation membership and GDP, the USA is an absolute leader (\$ 17,460 bn.) of NATO countries, followed by Germany (\$ 3,621 bn.), France (\$ 2,587 bn.) and the UK (\$ 2,435.5 bn.). In the case of CSTO countries there are also major discrepancies: the Russian Federation has a GDP of \$ 3,568, Kazakhstan – \$ 420 bn., and Belarus – \$ 171 bn.

¹⁸ Sam Perlo-Freeman; Carina Solmirano, *Trends in World Military Expenditure, 2013*, SIPRI Fact Sheet, April 2014, see http://books.sipri.org/product_info?c_product_id=476#.

The lowest GDP of NATO countries is that of Albania (\$ 30 bn.), while Kyrgyzstan has the lowest GDP in CSTO (\$ 19 bn.)¹⁹.

Therefore, for a comparative analysis of the military strategic objectives of the mentioned countries, it is particularly important to assess their military power, as this indicator places them in a higher or lower position in the hierarchy of IR and determines the structure of their official documents and the international role they play.

The analysis of the official documents on security and defence of the referred countries, as well as the data published by international databases such as *Military Balance*²⁰ and *World Defence Almanac*²¹, reveals the fact that a common element of all strategies of these countries, regardless of the organisation they are part of, is the need to preserve the independence, sovereignty, integrity and inviolability of their borders. Also, for countries that do not have a highly visible status and role on the international arena, the public strategic objectives and main military missions are similar and prioritise the national and regional security and the cooperation in the framework of the international security organisations to which they belong.

The case is different for the countries classified as superpowers or great powers; their policies and strategies reflect their international status. Furthermore, there are major differences between the approaches promoted by NATO and CSTO countries to security and defence issues. If NATO countries have an approach in line with NATO documents, CSTO countries focus on achieving the strategic objectives related to regional cooperation, both within and outside the CSTO, as well as to the cooperation with the USA.

The year 2015 brought significant changes in the security strategy of the USA and intended adjustment to that of the Russian Federation. Thus, though the USA considered the relationship with Russia as important for future development and cooperation²² and “occasionally difficult”²³, the *National Security Strategy* in February 2015 emphasises the regional level of the challenges to its security

¹⁹ According to Central Intelligence Agency, *The World Factbook 2015*, 2015, see <https://www.cia.gov/library/publications/the-world-factbook/#> and The International Institute for Strategic Studies, *The Military Balance 2014*, Routledge, London, 2014.

²⁰ The International Institute for Strategic Studies, *The Military Balance 2014*, Routledge, London, 2014 – This document has been in the analysis of all of the listed countries.

²¹ Mönch Publishing Group, *World Defence Almanac 2012, Military Technology*, no. 1/2012 – This document has been in the analysis of all of the listed countries.

²² The strategic papers of both the Department of Defence and the Joint Chiefs of Staff emphasise the desire to militarily cooperate with Russia. See also Department of Defence, *Sustaining US Global Leadership: Priorities for 21st Century Defence*, 2012, p. 9 and Joint Chiefs of Staff, *The National Military Strategy of the United States of America. Redefining America's Military Leadership*, 2011, p. 15.

²³ Business Monitor International, *United States Defence & Security Report Q1 2014*, London 2014, pp. 9-10.

and, moreover, refers clearly on a tough tone to the Russian Federation, stating that it will continue implementing sanctions and other means to counteract the misleading propaganda of Moscow, will deter Russian aggression, will continue monitoring its strategic capabilities, and will support the US allies and partners to resist Russian coercion in the long run, if necessary²⁴. Regarding the Russian Federation, in late October 2015, President Vladimir Putin announced that he would make certain changes to the *National Security Strategy* (2009), but without mentioning the specific issues²⁵; at the end of 2015 he signed a new *National Security Strategy*²⁶ in which it is established as a national priority the strengthened position of Russia as one of the world major powers²⁷. Earlier, at the end of 2014, Moscow revised *The Military Doctrine* which, in the version of 2010, identifies as the main external military threat the desire to give NATO's military potential some global functions that are considered by Russia to contravene the international standards and to move the Alliance's military infrastructure closer to the borders of the Russian Federation, including the bloc enlargement²⁸. The 2014 edition of the same paper brings up a similar theme, but as an action already in progress, and highlights the danger of Western weapons systems located closer to the Russian territory²⁹. The same theme is to be found in the new *National Security Strategy* stating that “*expanding the force potential of NATO and endowing it with global functions which are implemented in violation of international legal norms, the bloc's military activation, its continued expansion, and the approach of its military infrastructure to Russian borders, all create a threat to national security*”³⁰. Still, the new strategy

²⁴ USA, *The National Security Strategy*, 2015, The White House, see https://www.whitehouse.gov/sites/default/files/docs/2015_national_security_strategy.pdf.

²⁵ ***, “*Putin Decides to Amend National Security Strategy by End of 2015*”, in *The Moscow Times*, 22.10.2015, see <http://www.themoscowtimes.com/news/article/putin-decides-to-amend-national-security-strategy-by-end-of-2015/540151.html>.

²⁶ Although the Doctrinal Conference of the Romanian General Staff on “*The 3rd Millennium Military Challenges – The Hybrid War as a Current Phenomenon*”, to which the *Gândirea militară românească* issue no. 1/2016 is dedicated, was held on 19 November 2015, the importance of the events that followed led to updating the information presented in this paper. Thereby, the author introduced into consideration the latest version of both the National Security Strategy of the Russian Federation and the National Security Strategy and the Strategic Defence and Security Review adopted by the United Kingdom and Northern Ireland at the end of 2015.

²⁷ ***, *Russian NSS for 2016: Key Updated Points*, see <http://sputniknews.com/russia/20160102/1032599111/russia-national-security-strategy.html>.

²⁸ Russian Federation, *The Military Doctrine of the Russian Federation*, 2010, p. 3.

²⁹ Olga Oliker, *Russia's New Military Doctrine: Same as the Old Doctrine, Mostly*, RAND Corporation, 2015, see <http://www.rand.org/blog/2015/01/russias-new-military-doctrine-same-as-the-old-doctrine.html>.

³⁰ *Russian Federation National Security Strategy*, apud ***, *Russian National Security Strategy for 2016: Key Updated Points*, 02.01.2016, see <http://sputniknews.com/russia/20160102/1032599111/russia-national-security-strategy.html>.

shows Russia's availability to cooperate with the USA and its allies but only in counteracting the current threats (terrorism, instability, and proliferation) and if they accept Russia's leadership role³¹.

The other member countries of these two organisations that are identified as "leaders" of the international system – Germany and France –, have a slower adaptation to the changes in the international security environment: Germany announced for 2016 a new *White Paper on Security Policy* (still in force the one from 2006³² and the defence policy formulated in 2011³³) and France renewed in 2013 *The White Paper on Defence and National Security*³⁴. The United Kingdom changed the programmatic document on security and defence at the end of 2015. The new one, the *National Security Strategy and Strategic Defence and Security Review 2015. A Secure and Prosperous United Kingdom*, observes the "more aggressive, authoritarian and nationalist"³⁵ behaviour of Russia and the use of hybrid tactics in order to undermine the wider international standards of cooperation to secure its own interests. However, given that the Russian Federation is one of the five permanent members of United Nations Security Council, the United Kingdom commits itself to seeking ways to cooperate with Russia, especially on issues such as the ISIL threat³⁶, along with expertise development on this area, because it is considered to be vital for the security and prosperity of the UK³⁷.

Conclusions

The comparative analysis of Western (NATO member countries) and Eastern (CSTO member countries) policies, strategies and objectives confirms the assumptions set out above and, moreover, supports the following conclusions: a common approach to security issues involving actors of the CSTO exists

³¹ Olga Oliker, *op.cit.*, 2015.

³² German Federal Ministry of Defence, *White Paper 2006 on German Security Policy and the Future of Bundeswehr*, Berlin, 2006, see http://www.bmvg.de/portal/a/bmvg/!ut/p/c4/Dca7DYAwDAXAWVgg7unYAuicYCVp-QrnSz7omqObfoUnPHfUwolOuhx2u4zN0xuFC_IGQddWEzqi4eLF1i7mqXFkKf-WQNUOF6jFY_sAY_7e5g!!/.

³³ German Federal Ministry of Defence, *Defence Policy Guidelines. Safeguarding National Interests – Assuming International Responsibility – Shaping Security Together*, Berlin, May 2011, see http://www.nato.diplo.de/contentblob/3150944/Daten/1318881/VM_deMaiziere_180511_eng_DLD.pdf.

³⁴ *Livre Blanc Défense et Sécurité Nationale – 2013*, Paris, April 2013, p. 47, see <http://www.sgdsn.gouv.fr/IMG/pdf/Livre-Blanc.pdf>.

³⁵ HM Government, *National Security Strategy and Strategic Defence and Security Review 2015. A Secure and Prosperous United Kingdom*, November 2015, p. 18, see https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/478933/52309_Cm_9161_NSS_SD_Review_web_only.pdf.

³⁶ *Ibidem*.

³⁷ *Ibidem*, p. 48.

among NATO countries, while different approaches to NATO and the USA exist among CSTO member countries (for example, the declaration by the Russian Federation regarding the “*danger*” represented by NATO, in contrast with the attitude of other members who do not oppose military cooperation with the USA, the main actor of the Alliance).

Consequently, the specific elements of the Alliance’s Strategic Concept are present in the strategies of *NATO member countries*, such as:

- collective defence;
- crisis management;
- cooperative security;
- non-Article 5 operations.

The strategic documents of *CSTO member countries* are built around the idea of collective security, which is operationalised by the following:

- indivisible security;
- equal responsibility in providing security to the participating states;
- respect for territorial integrity and sovereignty;
- non-interference in internal affairs;
- accountability to the interests of other member countries;
- collective defence on regional basis;
- consensus in providing collective security;
- correlation of the organisation and readiness of forces according to the scale of the military threat.

The above assertions are meant to provide a scientific basis for issues related to the common knowledge and psychosocial representation of the distribution of power in IR system; it is obvious that the USA, Germany, France and the United Kingdom are regarded as “*leaders*” within NATO, while the Russian Federation holds the “*monopoly*” within CSTO. The status of leader confers them influence in terms of identifying and managing security and national and collective defence, in other words their security and defence strategies constitute a model for other countries of the world.



HYBRID WARFARE

– Ways of Manifestation and Counteraction

from the Euro-Atlantic Perspective –

Lieutenant General Dr BEng Gheorghe SAVU

At the NATO Summit in September 2014, as a response to hybrid threats, it was decided to take measures to address the need for the Alliance assurance and adaptation, the military response being the most significant decision. However, the rapid military response is not sufficient because it is difficult to identify the source of threat to reach the timely consensus of all allies on a possible collective action. Moreover, classical military power is not sufficient to counteract hybrid threats and the hybrid threats dynamic and broad spectrum make it difficult for NATO to take a decision regarding concrete military actions. In this context, the author mentions the threats environment, time, duration, origin, possible targets, and international legislation.

Keywords: *cooperation; military planning; hybrid threat; Article V*

1. Introduction

The illegal and immoral intervention of the Russian Federation in Ukraine, resulting in the rapid annexation of Crimea (16 March 2014) and the outbreak of a separatist conflict in the mainly pro-Russian South-Eastern Ukraine, has brought the concept of *hybrid warfare* to the public and the military strategists attention.

Hybrid warfare is considered a form of warfare that includes conventional and unconventional actions, carried out by regular, irregular or paramilitary armed forces and civilian forces through covert or overt actions, conducted in the entire spectrum of power elements (diplomatic, political, informational, cyber, economic, financial, military, legal etc.) in order to create ambiguity, targeting the vulnerabilities of the state that is subject to aggression. Although the *hybrid warfare*, as a new way of aggression against the sovereignty and independence of a state, is concerning many states and the North Atlantic Alliance (NATO) and the European Union (EU), a clear definition has not been achieved yet and strategies covering the whole complex of threats specific to *hybrid warfare*

Lieutenant General Dr BEng Gheorghe Savu – Military Representative of Romania to NATO and the EU.

are far from being designed. Following the decisions of its Summit of September 2014, the Alliance is in full process of defining the *hybrid warfare* concept. Based on it and on the security situation in its neighbourhood, NATO intends to adopt its own strategy on countering the hybrid threats until its next Summit in Warsaw, July 2016. A similar development happens in the EU as well.

The *hybrid warfare* term has been increasingly used in the past decade being specifically described for the first time to define the Hezbollah strategy during the 2006 war in Lebanon. Basically, since 2006 this concept has gained increasing attention from military specialists dealing with current and future nature of war; the *hybrid warfare* term has entered the common language of Western military strategists and has been promoted as part of modern military thinking and strategies. At the same time, efforts are made to identify the components of the *hybrid warfare* and the interdependence between them (*figure 1*). *Hybrid warfare* is an evolving concept that depends on the results of the successful implementation of some of its components, on the technological development in this field, on the dynamics of the opponent vulnerabilities and on the methods and means of countering hybrid threats.

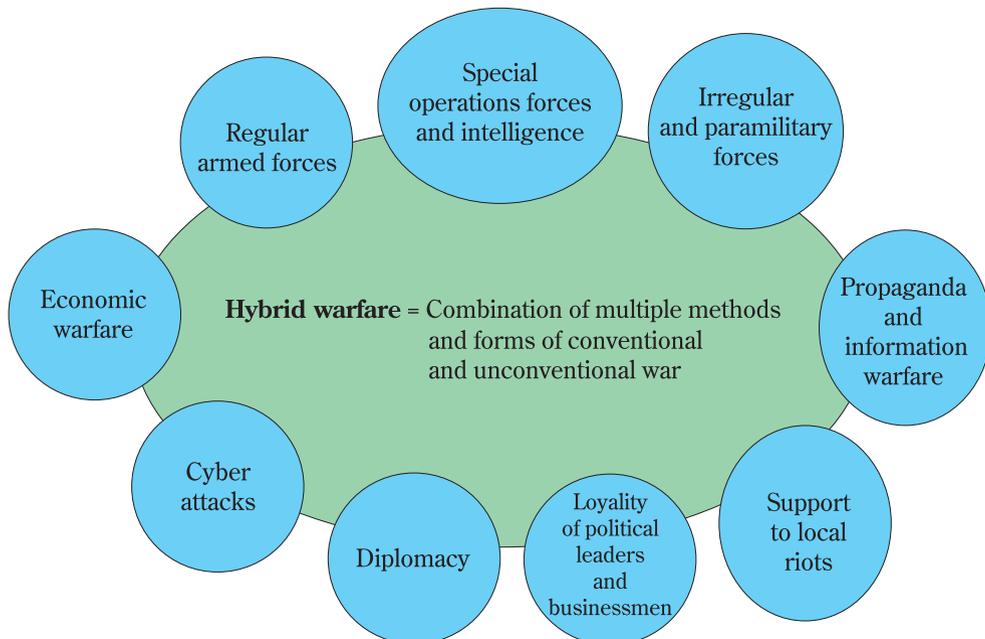


Figure 1: Components of hybrid warfare

The Russian Federation was aware that it could not cope with the conventional military superiority of the West and, as a consequence, a few years ago, it adopted and implemented in its military doctrine and strategy methods specific to *hybrid warfare*, trying to exploit comprehensively and with great flexibility the whole spectrum

of modern warfare in which conventional capabilities are only part and not the main means of waging battle.

It was generated by the nature of aggression that Moscow was preparing against countries like Ukraine, with the objective to limit to the minimum possible the international impact by denying Russian direct military involvement and to achieve the strategic surprise of the target state and the international community. The employment of the *hybrid warfare* against Ukraine was encouraged by the successful implementation of some hybrid components in the two Chechen wars and especially in the Russian-Georgian War in 2008.

The possibility of using the *hybrid warfare* by the Russian Federation in what is called “*near abroad*” became a reality in January 2013. The aim was obvious: to bring back the former Soviet states within Russian sphere of influence (Ukraine, Georgia and Moldova) and to give a strong warning to other former Soviet states that could opt for a pro-Western orientation to the detriment of pro-Russian one or for reducing their dependence on Moscow (Belarus, Kazakhstan). Then, the Chief of the General Staff of the Russian Armed Forces, General Valery Gerasimov, stated in his speech held at the Military Academy of Sciences: “*The very rules of war have changed significantly. The use of non-military methods to achieve political and strategic objectives has in some cases proved far more effective than the use of force. (...) Widely used asymmetrical means can help to neutralise the enemy’s military superiority. These include the use of special operations forces and internal opposition to the creation of a permanent front throughout the enemy state, as well as the impact of the propaganda instruments, forms and methods that are constantly being improved*”¹.

As evidenced by the conflict in Ukraine, unlike from the conventional military conflict, the essence of *hybrid warfare* is the use with predilection of a certain part of the population, usually the one with separatist tendencies, which is against the authorities of the state on whose territory it lives and wants the union with the aggressor state or the creation of independent or separatist republics with privileged status and protected by the aggressor state. Through a well-executed information campaign, the aggressor secures local popular support and uses intelligence techniques to attract policymakers and even military leaders in its sphere of influence in order to destabilise the targeted state and polarise the civil society. The *hybrid warfare* matched totally to Ukraine, a vulnerable country with weak state authorities. The Russian Federation was firmly convinced

¹ H. Reisinger and A. Golts, *Russia’s Hybrid Warfare. Waging War below the Radar of Traditional Collective Defence*, NATO Research Paper No. 105, November 2014, p. 2.

that the aim of destabilising the Ukrainian state could be achieved with minimal risks in terms of human life loss and of a possible action in force of the international community, especially of the USA and/or NATO and the EU, including by providing military assistance to Ukraine.

The Russian Federation aggression against Ukraine provides a first lesson to be learned: the preventive measures are the best option to counter the *hybrid warfare* because irregular threats are very difficult to manage when they turn into an obvious attempt to destabilise a state. States vulnerable to *hybrid warfare* must implement programmes to strengthen their security institutions before hybrid threats start to manifest. As demonstrated by the Ukrainian case, the *hybrid warfare* enters in its latest forms of manifestation through covert deployment of military forces and equipment on the territory of the target state. Once deployed, these forces engage fire with its regular units with the purpose to create a situation that can degenerate easily into an insurgency that has no foreseeable political solution. And, again, as the situation in Ukraine demonstrates, the result may be a frozen or preserved/canned conflict that undermines the strategic decision-making process of the target country, creates long-term instability and hampers the economic, social and democratic development. Thus, the strategic decision-making process of the aggressed state becomes dependent on the aggressor's one.

2. Hybrid Warfare Ways of Manifestation. The Ukrainian Example

The aggression against Ukraine in 2014 is the most complex case of *hybrid warfare* against a state with security institutions that do not function properly and whose strategic decision-making process could be made dependent on the interests of the aggressor – the Russian Federation. What the Chief of the Russian General Staff and subsequently different Russian military personalities declared the year before demonstrates an action plan developed by Russian authorities and implemented successfully in South-Eastern Ukraine with four main components: 1) deployment to Ukrainian border of an impressive number of military forces, armament and weapon systems, concomitantly with missions executed undercover on Ukrainian territory by special operations and intelligence forces; 2) propaganda and political, material, financial and military support (weapons, ammunition and instructors) to separatist formations already present in conflict areas and run by Russian or pro-Russian leaders closely linked

to Russian intelligence services; 3) direct invasion of overt military forces (Crimea) or under cover in support of separatists (South-Eastern Ukraine) without identification marks; 4) the end of *hybrid warfare* either through annexation of territories (Crimea) or by instauration of the pro-Russian separatist authorities to rule the territories in question becoming the subject of the negotiations with the authorities of the aggressed state (South-Eastern Ukraine).

One of the lessons learned by the Russian Federation following the Russian-Georgian War was that in order to have success against a country like Ukraine the use in the early stages of the *hybrid warfare* of intelligence and special operations forces, propaganda and support with basic commodities to the local population is not sufficient. Therefore, Russian military strategists thought a comprehensive strategy and adopted an implementation plan that used the most specific components of the *hybrid warfare* successively or simultaneously, with great flexibility in the level of expression and adaptability to the situation on the ground and to the attitude of the authorities in Kiev and the international community. Russian actions were carried out in an apparent legitimacy, at least as part of the communication strategy aimed at Russian or pro-Russian public opinion: authorisation to use armed force in Ukraine by the Russian Federal Council, adoption of laws to facilitate the annexation of Crimea, and grant Russian citizenship or organise illegal referendums that do not respect the international standards. All these served to create the image that the Russian Federation acted lawfully, at the legitimate request of the population in areas subject to aggression, who must be protected against the “*fascist regime*” in Kiev and to whom Moscow has historic moral duties.

During all stages of manifestation of the *hybrid warfare*, Russian **propaganda** was very active in the separatist territories, for the domestic and foreign public opinion, proving that the Russian specialised institutions rank first worldwide in techniques of strategic communication; Russian propaganda follows an extremely simple and fast decision process, in which President Putin is the central pillar. In parallel, to put pressure on the Ukrainian authorities and to reassure the separatists that they would be supported against any Ukrainian use of force, the Russian Federation deployed permanently important troops and combat equipment on the border with Ukraine. It staged frequent troop manoeuvres and large-scale alarming exercises and performed continuous reconnaissance and surveillance missions of airspace, land and sea surface in areas where separatist armed actions were taking place or where Moscow intended to open new separatist fronts. Thus, in February 2014, on the orders of President Putin, the Russian Federation

deployed close to the border with Ukraine military forces amounting to 30-40 thousand troops, indirectly warning Kiev that it was prepared to invade Ukraine, if necessary. In March 2014, the Russian Federation organised an alarming exercise in Central Military District with over 65,000 troops, more than 230 aircraft and about 5,500 vehicles, demonstrating its ability to deploy alarmed units in 72 hours. The data were made public by Defence Minister Sergei Shoigu² and NATO officials confirmed them. The scale and diversity of subsequent military exercises carried out by the Russian Federation employing all armed forces services, on national territory and beyond, constituted a warning message sent both to close neighbouring states and to the Euro-Atlantic institutions: the Russian Federation has now the necessary defence and offensive capabilities that can be used as main instruments to achieve the strategic and geopolitical goals of its foreign and military policy.

It is obvious that the large-scale military exercises organised by the Russian Federation in recent years represent a return to Soviet era practices. They do not necessarily have the role of training and building the combat capacity of the Russian Armed Forces, but are an important component of the Kremlin's communication strategy. The message is clear: the military power has been restored to the necessary potential to support the achievement of the Russian strategic objectives both in relation to former Soviet states, through the ability to intervene militarily whenever and wherever deemed necessary, and in terms of creating a Russian military posture able to counter NATO. Basically, the Russian Federation gives a very clear signal that it has abandoned the concept of using military force as a last resort; now, the military force becomes again a continuation of political instruments by other means. The new Russian military posture contravenes the international efforts made since 1990 to make security more predictable and stable by arms control and reduction; Moscow demonstrates in this way that the Vienna Document loses its relevance for Putin's regime.

In all the phases of the *hybrid warfare*, but especially in the initial ones, the Russian Federation used extensively special operations and intelligence forces, infiltrating the targeted territory with military personnel that acted without the uniforms and insignia of the Russian armed forces, under the cover of local security forces, the so-called "*little green men*"; it already happened at a much lower level of involvement in the Chechen War of 1994 and in the Russian-Georgian War

² See <http://en.kremlin.ru/events/president/news/46133>

of 2008. Besides the specific tasks of the special operations and intelligence forces, the troops deployed in Ukraine undercover had an important role in the psychological warfare orchestrated by Moscow; their exact role was not known and often their presence was interpreted as a possible direct involvement of the Russian Federation in the fight with the Ukrainian authorities, a thing that happened in the case of occupation of the Crimean Parliament building.

Unlike in the Crimean War, in the early stages of the *hybrid warfare* in the separatist regions of Donetsk and Luhansk, Russian strategy was based mainly on the use of special operations and intelligence forces to train the separatist fighters to use the modern heavy weapons supplied by Moscow. When the success of the Ukrainian forces was imminent, Moscow sent in fight troops undercover who provided direct support to separatist forces. Again, despite evidence and casualties among its troops, Moscow denied any military involvement in South-Eastern Ukraine. In fact, **denial** became part of the information war, serving primarily to the negotiations and dialogue that the Russian Federation was forced to be engaged in with various international actors. At the same time, labelling the Ukrainian authorities as a result of the “*Maidan fascist movement*”, Moscow branded Kiev’s military campaign in separatist regions as a war waged against its own people, bombarding residential areas and destroying local economic infrastructure.

The way the Russian Federation approached Crimea and Donetsk and Luhansk regions denotes a well-prepared plan with clear final objective. In case of Crimea, the final objective was annexation because of its high geostrategic value, the border security and defence being achieved easily with regular troops. As for the two separatist regions the situation is more complex and exceeds the capacity of the Russian military to provide security and protection of borders that are supposed to separate the breakaway territories from the rest of Ukraine (it is estimated that the annexation of the separatist republics would require permanent deployment of about 100,000 Russian troops on these territories). That is why, it appears that Moscow prefers creating a frozen or preserved conflict in South-Eastern Ukraine, by the famous models of Transnistria, South Ossetia or Abkhazia, to influence the strategic decision-making process in Kiev and to stop the Euro-Atlantic integration of Ukraine, without bearing responsibility for the administration and conduct of economic and social life in the two separatist territories. This demonstrates the great diversity of the strategies employed by Russia in its near abroad, its strategic objectives for Ukraine being carried out with minimal efforts and responsibilities.

3. Possible Ways of Counteracting Hybrid Warfare from the Euro-Atlantic Perspective

As concluded by the *Seminar on NATO Transformation*, with the participation of NATO key political and military leaders, organised by the Atlantic Council and Allied Command Transformation in March 2015 in Washington, there is no agreed definition of what *hybrid warfare* means; the Alliance debates the subject in view of the NATO Summit in July 2016, in Warsaw³. A definition of the *hybrid warfare* unanimously accepted by all NATO member states is particularly important because it will facilitate the identification of the concrete ways the Alliance can counter the hybrid threats that are already challenging the Euro-Atlantic community, through propaganda, political pressure and trends of influencing Russian or pro-Russian population living in some NATO countries. In addition, given that *hybrid warfare* involves countering irregular type of threats (asymmetric) as well, there is a need for closer cooperation of the Alliance with other international organisations, especially with the European Union (EU). Although, in recent years, the Alliance has developed capacities to combat certain types of threats specific to *hybrid warfare*, particularly in the fields of cyber defence and counterterrorism, as a military alliance, NATO is not able to develop capabilities to counter the full spectrum of threats specific to *hybrid warfare*. It is obvious that NATO should cooperate more closely with the EU in this area as one of the best means for ensuring peace and stability in its neighbourhood, at least against threats such as those successfully implemented by the Russian Federation in Ukraine.

As a first response to the hybrid threats from the East, the NATO Summit in September 2014 decided assurance and adaptation measures of the Alliance, rapid military response being the most significant in this regard. It is obvious that rapid military response is not sufficient because it is difficult to identify the source of threat long before so that the Alliance can reach in a timely manner the consensus for a possible collective action. Moreover, conventional military power is not sufficient to counter hybrid threats and the dynamic and wide spectrum of expression of such threats generate difficulties for the NATO decision-making process regarding concrete military action to counter them (for hybrid threats

³ *NATO Transformation Seminar 2015*, Washington, DC, 24-26 March 2015, *Next Steps in NATO's Transformation: To the Warsaw Summit and Beyond WHITE PAPER*, see http://www.atlanticcouncil.org/images/files/publication_pdfs/NATO_NTS_2015_White_Paper_Final.pdf

it is difficult to identify their area of expression, when they materialise, their duration, possible targets, nature of the international law violation, origin of threats etc.). It is clear that a conventional approach to countering hybrid threats is not effective and the Alliance must adopt a flexible and comprehensive policy that is to discourage its possible opponents. This should be done by employing a wide range of tools, which could lead to redefining the missions and capabilities of the Alliance in the new strategic context and even a decision-making process that should be more rapid than at present.

In accordance with the decisions of NATO Summit in 2014, Heads of State and Government decided to ensure that *“NATO is able to effectively address the specific challenges posed by hybrid warfare threats, where a wide range of overt and covert military, paramilitary, and civilian measures are employed in a highly integrated design. It is essential that the Alliance possesses the necessary tools and procedures required to deter and respond effectively to hybrid warfare threats, and the capabilities to reinforce national forces. This will also include enhancing strategic communications, developing exercise scenarios in light of hybrid threats, and strengthening coordination between NATO and other organisations, in line with relevant decisions taken, with a view to improving information sharing, political consultations, and staff-to-staff coordination (...) We have tasked the work on hybrid warfare to be reviewed alongside the implementation of the Readiness Action Plan”*⁴.

The prevention and counteraction of the *hybrid warfare* involve a complete set of tools that the Alliance cannot have as a result of limitations arising from its role and missions, cooperation with the EU being the best solution at hand. This is on the agenda of the two organisations, which have already a very good cooperation in cyber defence. This cooperation can be extended to other areas specific to *hybrid warfare* because the EU has a range of tools that can be used against most components specific to this type of war. Given that there are 22 states belonging to both NATO and the EU, the Union is the most appropriate international organisation to complement NATO’s capacity in the *hybrid warfare* domain. The two institutions can offer a wide and comprehensive spectrum of diplomatic, political, military and economic instruments to counter hybrid threats. NATO-EU strategic partnership is already recognised by the 2014 NATO Summit Communiqué and the hybrid threats to the Euro-Atlantic area have the potential to contribute to its development.

⁴ Wales Summit Declaration issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in Wales, para. 13, see http://www.nato.int/cps/en/natohq/official_texts_112964.htm

The Russian-Georgian War in 2008, the annexation of Crimea and the triggering of a separatist conflict in South-Eastern Ukraine have changed radically the perception of the Euro-Atlantic community regarding the threats facing Europe. The 2014 NATO Summit decisions on improving the response capacity, increasing defence budgets and strengthening institutional cooperation with the EU are good premises of the intensification of NATO-EU cooperation, which must become more systematic and concrete. The new context set up in Europe by illegal Russian actions against Ukraine must be used by the Euro-Atlantic Community to implement better coordination processes for military planning, military capabilities development and complementarity of efforts based on the capabilities of the EU, NATO and their member states.

It is obvious that for an effective capacity to fight the *hybrid warfare*, NATO must strengthen its specific capabilities and develop the partnership with the EU to complement each other so as together to have the ability to counter the *hybrid warfare* wherever and whenever the Euro-Atlantic security is threatened. Moreover, NATO and the EU should exploit the potential represented by their partnerships with the buffer states between them and the Russian Federation, concentrating their efforts on the most vulnerable among them having pro-European orientation, such as Georgia, Moldova and Ukraine.

The concept of *Security Sector Reform* defined in the Resolution 2151 of the United Nations Security Council offers in the current context an important tool in countering specific hybrid threats by strengthening the capacity of a vulnerable state to ensure its national security, safety of citizens, economic development, prosperity, democracy and rule of law. The EU is the only international organisation that has already had expertise in this area (the success of EUSEC RD Congo is a good example) as well as institutions and mechanisms able to contribute to the *Security Sector Reform* of its partner states vulnerable to be destabilised by the Russian Federation, as is the case of Georgia, Moldova and Ukraine. Through the implementation of the *Security Sector Reform* concept, NATO and the EU can help these countries to strengthen their national security institutions to be more resistant to the destabilising threats of the Russian Federation, thus contributing to peace and stability in the Euro-Atlantic area.

In general, experts believe that countries need to develop national plans to combat the hybrid threats with the aim of preventing, deterring and defending against them. Of these, **prevention** is the most important and is achieved through a variety of means, such as identifying and analysing the early warning

indications based on multisource information. Prevention requires both to eliminate the national vulnerabilities to hybrid threats and to share information at national and allied levels, together with a comprehensive process to identify the types of threats and possible ways of their manifestation and to anticipate the need to react in time to counter them. **Deterrence** is about the preparedness of a country to respond effectively to hybrid threats. It is achieved through the complementarity of means and actions of the national military and civilian security structures, together with the acceptance at the national level of a set of indicators that generate decisions regarding the use of all available countering means (military economic, political, financial, informational etc.). **Defence** is performed by all means available to the aggressed state that are suitable to respond to hybrid threats, along with a possible support from NATO, the EU or other international organisations, including the invocation of Article 5 of Washington Treaty if the hybrid threat turns into an armed or cyber attack against a member state.

4. Conclusions

The *hybrid warfare* started by the Russian Federation against Ukraine has changed dramatically both regional and Euro-Atlantic security situations and put Europe in front of a set of risks and threats that have to be managed. Meanwhile, the Ukrainian case demonstrates that potentially aggressive states can compensate their military shortfalls by using the *hybrid warfare* techniques. As a consequence, *hybrid warfare* becomes an easy way to destabilise a vulnerable state. Ukraine's vulnerability was evident, this state was fragile, politically and socially fragmented, corrupt, with weak central and local state institutions, non-functional market economy and democracy; more than that the Ukrainian armed forces were unreformed, numerically smaller, non-professional, underfunded, poorly equipped and trained. These vulnerabilities facilitated Russian aggression; Moscow knew that Kiev was not able to counter hybrid actions and it did not have the necessary forces to fight against paramilitary forces that often conducted the fight in urban centres and used the local population as a protection shield.

To counter the techniques specific to *hybrid warfare*, state security institutions must be strong and with specialised structures such as special operations and intelligence forces. Warning information regarding the internal situation in regions with separatist or anti-government tendencies and those relating to intentions, capabilities and actions of potential aggressor must be developed and utilised at national level to ensure a unitary and comprehensive picture

of domestic and foreign security situation, based on a national system of warning indicators that provide timely and relevant information to political decision-makers. Along with antiterrorist fight and cyber defence, countering the *hybrid warfare* is an area where all security institutions of a state, military and civilian, must coordinate their efforts, exchange information, develop action plans that should be integrated and coordinated at the state leadership level. Warning is important and responsiveness is just as important as long as *hybrid warfare* has multiple forms of expression, is dynamic and flexible, the aggressor is often difficult to be identified and even the legality of the actions performed by the national security institutions on their territory can be questioned.

Given that in the early stages of hybrid aggression against a state it is most likely about internal security challenges, even for a NATO state, the responsibility to counter these threats lies with the state concerned, by employing all national instruments available as part of a national plan. When the hybrid action carried out by a hostile state or international actor is obvious, NATO and the international community support should be coordinated by the national authorities of the aggressed state, in full compliance with national and international legislation.

The Allied states close to the Russian Federation face a potential hybrid Russian aggression that can take the form of propaganda, cyber attacks, political and economic pressures and even some attempts to stimulate the protest movements of Russian and pro-Russian population on their territories. For this reason, it is necessary for member states to adopt national strategies to combat *hybrid warfare*, preferably in line with the drafting of the NATO strategy on *hybrid warfare* that takes place at NATO Headquarters as a result of the task set by the Heads of State and Government at the NATO Summit in September 2014.



NATO RESPONSE FORCE

– A New Approach –

Captain (N) Vicențiu CĂTĂNEANU

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NATO Response Force – NRF is designed to act as an entity that can easily adapt to the operational requirements to meet the security challenges to the Alliance. NRF missions focus on the principle “any mission, anywhere”, so that, in the current security context, they can successfully provide the practical and visible assurance of the Allies and convey a clear message related to NATO cohesion, force and determination, not only to promote deterrence but also to ensure collective defence. NRF missions, the chain of command and the decision-making process to deploy and/or engage forces demonstrate, in the authors’ opinion, the preponderantly defensive nature of NRF, its main role being that of deterring the actions of a possible aggressor.

Keywords: *collective defence; forces deployment; command and control; multinational force*

Motto:

“We are already implementing the biggest reinforcement of our collective defence since the end of the Cold War, boosting the size of the NRF and also establishing a high readiness ‘spearhead force’ as the centrepiece of the Enhanced NRF”.

Jens Stoltenberg,
NATO Secretary General

The uncertainty, dynamics and unpredictability of the parameters defining the current international security environment have brought to the attention of political and military Allied decision-makers and experts the role that rapid reaction forces¹ should have in securing protection and security interests of NATO and of the Allied States. Thus, in the context of the development and continuation of the crisis in Ukraine, as well as in the context of the security challenges caused by Russia’s actions or by the threats coming from the Middle East and North Africa to the Alliance, at the NATO Wales Summit (September 2014), the Heads of State and Government of the member countries of the Alliance adopted the *Readiness Action Plan – RAP* that basically provides the reconfiguration of the Alliance

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¹ The first Allied rapid reaction force was established in 1960 – AMF – Allied Command Europe Mobile Force, expanded, over time, in the NRF.

military strategic posture for defence and deterrence, in Europe and in its vicinity, as well as the support for achieving the objective of “*NATO Forces 2020*”. Moreover, the Allies decided to revive *NATO Response Force – NRF – “Enhanced NRF”*, by creating a “*spearhead force*”, namely the *Very High Readiness Joint Task Force – VJTF*, ready to be deployed within a span of a few days, in response to the emergence of a crisis situation. In addition, it was agreed that starting in 2016, a challenging programme of exercises, in which the *NRF* represents a crucial element, including during high-visibility exercises², should be established and implemented.

In this general framework, we can assert and claim that the *NRF* will continue to represent both a political tool for demonstrating the determination of the Allies, and a military one, intended not only to project credible military power but also to achieve and/or maintain deterrence against any possible threats to NATO member states.

In this respect, NATO military authorities (*Military Committee, Supreme Allied Commander, Europe/SACEUR and Supreme Allied Commander Transformation/SACT*) were tasked, inter alia, to identify ways to improve the level of reaction/response of the *NRF*, including proposals for forces components, command and control arrangements/C2, training etc. A direct consequence was the initiation of undertakings, both of nations and of the organisation itself, to reorganise the current *NRF* to meet mostly conventional missions³ in an appropriate and effective way (in fact, they remain unchanged), as well as sophisticated approaches and challenges, specific to the *hybrid warfare*, non-linear operations and unconventional threats. At present, at the level of NATO military authorities, this task has been implemented by the adoption of the improved *NRF* concept, submitted for approval by the North Atlantic Council/NAC. This concept is only one of the measures identified and implemented under the auspices of *RAP*, with the stated purpose to improve and optimise the Allied response to security challenges and to strengthen collective defence.

Historically, the evolution of the *NRF* has been marked by a series of relevant steps. As part of the process of transformation and adaptation of the Alliance to the challenges of the 21st century, at the NATO Summit in Prague (2002), it was initiated the idea to establish the *NRF* – an entity designed and designated to answer in a short period of time to any challenges to the security of the Alliance and to its members. The first *NRF* concept was approved at the meeting of Defence Ministers in June 2003. Subsequently, the first *NRF* elements have participated

² See the series of exercises “*Trident Juncture*” that, in 2015, are hosted by Italy, Portugal and Spain.

³ Not only in the spectrum of collective defence, but also in that of crisis-response operations.

in various exercises and activities where they have demonstrated the structure developing capabilities. In 2004, in Romania⁴, NATO Secretary General and SACEUR announced that the *NRF* had met the requirements of *Initial Operational Capability – IOC*, being able to execute the missions, and *Final Operational Capability – FOC* was declared on the occasion of the NATO Summit in Riga (2006).

In its evolution, the *NRF* or its components have performed various missions, such as: participation in major exercises⁵ (for assessing and testing both the *NRF* and NATO Command and Force Structure); support for the protection of the Olympic Games in Athens (2004); support during the presidential elections in Afghanistan (2004); support in case of disasters (in the aftermath of Hurricane Katrina in the USA, in 2005, after the floods and the earthquake in Pakistan, 2005-2006). It is relevant the fact that, due to the geopolitical and security situation, in conjunction with the operational requirements of the Alliance, the *NRF* concept was “*adjusted*” twice – in 2008 and in 2010. The main elements of such adjustments focused on a more flexible approach to the generation of forces in the *NRF* organisational chart.

The present intentions for reconfiguring the *NRF* (structure, capabilities, responsiveness etc.) focus on two main directions of action, which are interdependent. On the one hand, preserving some elements, structures and procedures of the current configuration of the *NRF* (which served the purpose for which they were established), and on the other hand, the adoption and/or adaptation of other elements to meet the new operational requirements concerning response time, composition and structures agility and equipment, command and control requirements etc.

Therefore, from the category of the elements preserved according to the current design and construction of the *NRF*, we emphasise the maintaining of the purpose of NATO Response Force – a joint force structure (land, naval, air, special operations and support capabilities), intended for ensuring an immediate military response, which should be multinational, flexible, rapidly deployable anywhere in the world, well equipped, capable of remaining in operation for 30 days⁶ and adapted to the full spectrum of Allied missions⁷, with the purpose of defending

⁴ The informal meeting of Defence Ministers of NATO Member States, Poiana Braşov, 13 October 2004.

⁵ The exercise “*Destined Glory 05*”, in Italy, September 2006 (over 8,500 troops, 37 ships and 57 aircraft); the exercise “*Steadfast Jaguar 06*”, Cape Verde Islands, June 2006 (the first exercise in which there were simultaneously engaged all the *NRF* components – land, naval, air and SOF).

⁶ Complete self-support.

⁷ With a focus on Article 5 and NA5CRO (Non Article 5 Crisis Response Operation) – maintenance of NATO allies territorial presence and show of force, military assistance, peace support operations, embargo, support in the event of a disaster, first entry operations in the theatre of operations, critical infrastructure protection, security operations etc.

and/or promoting the Alliance interests. Thus, the *NRF* is and will be the “*engine and bond*” of the Alliance’s transformation, in both conceptual (policies, strategies, plans) and operational (education, training, exercises etc.) terms. Based on the decisions taken⁸, the *NRF* significantly contributes to the development and implementation of some Allied initiatives and projects (e.g. *Connected Forces*, *Smart Defence*, *Framework Nation Concept*), supporting the overall achievement of the objective “*NATO Forces 2020*”.

Some other crucial elements that have been maintained are: the decision to deploy the *NRF* or some of its components belongs to NAC; at strategic level, the general command of *NRF* belongs to SACEUR, and at operative level, it belongs to the designated NATO Joint Force Command⁹; forces are assigned for an operational period¹⁰ of 12 months (stand-by interval); the preparation prior to the forces participation in *NRF* is the responsibility of each country (training, equipment, compliance/meeting the operational requirements); on the basis of the approval by NAC, *NRF* is still open to the participation of the partner states that have military capabilities¹¹.

Besides *VJTF*, the major components that characterise the new *Enhanced NRF* structure are: *Initial Follow-on Forces Group – IFFG* and *Follow-on Forces Group – FFG*. All *NRF* components, which amount to about 30,000 troops, have their own elements of command and control, as well as different *readiness* and *responsiveness*, the political and operational requirement being “*to rapidly respond to any threat*”. For operational reasons, in order to better understand the fundamentals of the *NRF* reorganisation, we consider that it is necessary to briefly describe its components. As one will be able to ascertain, the aspects that have been subject to the *NRF* reorganisation mainly regarded the components of land forces. The naval, air, and special operations forces have generally remained within the same organisation due to operational specifications.

The land forces component of *VJTF*, named *VJTF(L)*, will be built on a land forces multinational brigade structure, with a strength of about 5,000 troops, having 3-5 combat/manoeuvre battalions. *VJTF(L)* will have a 5-7-day reaction time, some units having even a much higher level of responsiveness.

⁸ See the Summit in Chicago in 2012, as well as the subsequent meetings of Defence Ministers from NATO member states.

⁹ On the basis of the rotational principle, either the *Joint Force Command Brunssum* (the Netherlands) or *JFC Naples* (Italy).

¹⁰ We will also continue to develop some other aspects of the force allocation for the general construction of *NRF*.

¹¹ The conditions for participation are restricted by the fact that the involvement of the partners is limited to certain components of *NRF*, and their contribution is additional and complementary to the *NRF* actual structure of forces.

VJTF(L) will be supported by joint combat units/elements, structures adapted to the requirements and to the characteristics of the mission. Based on these parameters and operational requirements, *VJTF(L)* will be able to deploy as soon as the first signs and indicators confirm a possible threat to NATO, prior to the commencement of the crisis itself, in order to be perceived as a deterrent military action¹². *VJTF(L)* command will be annually provided by the framework nation. For example, in 2016, Spain will be the framework nation. In addition, the framework nation is responsible, with SACEUR support, to coordinate the efforts of other Allies to contribute to the formation of the force, as well as to ensure the command framework (including C2 capabilities) and the majority of combat capabilities. In accordance with the decisions of the Ministers of Defence¹³, *VJTF* must meet specific operational requirements until the NATO Summit 2016 (8-9 July 2016, Warsaw, Poland).

Initial Follow-on Forces Group are those forces amounting to the strength of two multinational land forces brigades, which, in case of a crisis, can quickly be deployed to reinforce, support or replace the *VJTF* forces. They have adequate readiness and responsiveness to meet this requirement. *Joint IFFG* components, special operations forces, CBRN (Chemical, Biological, Radiological and Nuclear) elements, together with elements of combat support (CS) and combat service support (CSS) ensure the required posture for this entity for timely and effective responsiveness. The naval component is redesigned according to the structure of current *Standing Maritime Groups*¹⁴.

Follow-on Forces Group, according to the present allied documents, refer to those national forces that are not designated for other military immediate response mechanisms/tools and are intended to support military action in the event that an operation in progress escalates.

Currently, a number of allied states (e.g. United Kingdom, Spain, Italy, Poland and Turkey), together with the other allies, have engaged in the establishment of *VJTF(L)*, as framework nation. Up to the completion and implementation of the conceptual and organisational framework of the new *NRF*, for 2015, they will establish an interim capability (*interim VJTF*¹⁵), which will not only ensure the fulfilment of *NRF* missions but also test and assess the procedures and effective

¹² The message is: “any attempt to violate the sovereignty of one NATO nation will result in a decisive military engagement with all 28 allied nations”.

¹³ The meeting on 5 February 2010, in Brussels.

¹⁴ *Standing NATO Maritime Group (SNMG) and Standing NATO Mine Countermeasures Group (SNMCMG)*.

¹⁵ Generally, land forces and capabilities are provided by Germany, the Netherlands and Norway (German-Dutch Corps 1), and the air and naval forces by the United Kingdom, France, Spain and Belgium.

working relationships, the chain of command, both during training and especially during planned exercises (including exercises for drilling/training in implementing procedures¹⁶, those exercises specifically intended for alerting and/or assessing the capacity of rapid deployment of forces and assets¹⁷, ending with a series of high-visibility exercises “*Trident Juncture*”¹⁸, in which *NRF* is part of a large multinational force, engaged in a complex scenario. It should be noted the fact that during these exercises, significant troops and combat equipment and assets in the inventory as well as the facilities required to command and control and to maintain daily living conditions are employed and deployed. In order to improve and/or strengthen the Allied interoperability, these exercises can be connected with similar national activities, in which headquarters and forces are engaged in the conduct of activities according to the designed scenario. All these operational, logistical and administrative activities shall be performed in compliance with NATO procedures.

In order to initiate the process of transformation, from the old configuration of *NRF* to the new one, the *interim VJTF-2015* Brigade will consist of about 3-4,000 troops. For organisational reasons, related to the financial ones, by 2016, *the interim VJTF* will not have the battalion manoeuvre structure, with a higher responsiveness (2-3 days) for a permanent quick response¹⁹. As a result of *interim VJTF-2015* practical assessments, as well as on the basis of the lessons identified/learned, at the Allied level, *VJTF(L)* is intended to be fully operational by the end of 2016.

In order to ensure a high level of flexibility, *NRF* can be configured (composition, capabilities etc.) to meet the preparation and, in particular, the conduct of a specific mission in which it can be engaged. The inclusion of the forces provided by nations in *NRF* can be performed only after taking certain training steps at national level²⁰, where all the operational requirements for the respective capability (equipment and technology, documents and standard procedures etc.) are completed and tested. Subsequently, NATO command structure entities will evaluate and certify these forces, during some exercises, thus formalising their presence within *NRF*.

Another relevant aspect in the new approach to the establishment of the *Enhanced NRF* is planning, organising and conducting instructional

¹⁶ *TTX – Table Top Exercise*.

¹⁷ See *NOBLE JUMP* series.

¹⁸ In 2015, the exercise was held between October 21- November 06, 2015, in Italy, Spain and Portugal.

¹⁹ The meeting of Foreign Ministers of NATO Member States, December 2014.

²⁰ As a rule, in the 6 months preceding the entry in the *NRF*. It is recommended that nations begin training the national forces which will be part of the *NRF* with about 6-18 months before those 6 months already mentioned.

activities/exercises, designed for *VJTF(L)* forces and units, mainly aimed at the level of responsiveness assessment for shortly announced or even non-notified activities. These activities can refer to alerting headquarters, to deploying some elements/units or even the entire *VJTF(L)*. The confidentiality of planning and conducting these activities consists in the necessity of assessing the real capacity of reaction and/or deployment of the force.

The need for rapidly deploying the force (or its components) and for engaging in any military action (in compliance with political decisions) should not be limited to the *NRF* internal capacity (equipment, training, procedures). This requirement is closely linked to planning, operational and logistical support entities. Therefore, an eloquent example is represented by *NATO Force Integration Units – NFIUs*, currently in advanced stage of establishment in the Baltic States, Poland, Bulgaria and Romania. In addition to providing a visible and persistent presence of NATO command and control elements on the allied territory, in the context of possible type art. 5 allied actions, *NFIUs* will have the main responsibility for the direct support and rapid deployment²¹ of *VJTF* and of the other *NRF* elements to conduct certain operations and/or the exercises.

From the perspective of operational planning, for economic and financial efficiency, currently, at the level of NATO military authorities, in close coordination with allied nations and especially with those that have declared to be framework nations, an analysis is being conducted for the identification of solutions relating to some aspects that aim at:

➤ Is it appropriate and effective that the *VJTF(L)* forces should be concentrated in a single place or should they be stationed in national permanent deployment places? (we anticipate that, from a military perspective, the analysis shall concern at least aspects referring to the command and control continuity, the provision of the cohesion of combat troops, the participation in joint exercises or in hierarchically ordered ones, the possible deployment on the European Allied countries territory etc.).

➤ For achieving the objectives related to providing a *VJTF(L)* rapid response capacity in a very short period of time, is it necessary that some elements of the *VJTF(L)* command-control should be more rapidly deployed than the subordinated units?

➤ What are the costs for the allocation, maintenance and (possibly) the deployment of the forces assigned to the *NRF* and what may be budgeted from common Allied funding?

²¹ *RSOMI Assurance-Reception, Staging, Onward Movement, Integration/Reception, Deployment, Continuation of Movement and Integration of Forces.*

➤ Is the present decision-making process, at the political and the military level, optimised so that it can rapidly take action in case of possible deployment and engagement of the *NRF* in real action?

*

Russia's actions against Ukraine and its military or of some other nature activities²² carried out in Europe or in its vicinity, as well as the threats of terrorist groups in the region of the Middle East and North Africa have generated for the Alliance exceptional measures, which have been identified and assessed in a relatively short period of time. All these measures have been adopted at different levels of Allied political and military decision-making in order to maintain security in the Euro-Atlantic space, but, especially to protect NATO member states against any possible aggressive intent on the part of Russia.

In the new approach, *NRF* is designed to function as an entity that can easily adapt to the operational requirements that refer to the challenges to the security of the Alliance. *NRF* missions are still centred on the principle “*any mission, anywhere*”, so that, in the current context of international security, they can successfully provide practical and visual assurance of the Allies and can convey a clear message of cohesion, strength and determination of NATO to promote deterrence and to assure collective defence. The missions that *NRF* can perform, the chain of command and decision for deploying and/or engaging forces clearly reveal that the nature of *NRF* is mainly defensive, the main role being of deterrence assurance for any actions of a possible aggressor.

The *NRF* represents the main military instrument of the Alliance, which can provide a rapid military response, within or outside the collective defence. Compared with the old architecture and composition of the *NRF*, the current one is more flexible, more rapidly deployable and more numerous. We can promote and support the idea that the current “*operational scene*” is complex, dynamic and quite unpredictable, where rapid reaction forces have a crucial role, and the general bond is characterised by the need for mainly expeditionary forces – “*to ensure that we (NATO) have the right forces, in the right place, at the right time*”²³.

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²² See *hybrid warfare*.

²³ The statement of NATO Secretary General at the meeting of Defence Ministers from NATO Member States, Brussels, 5 February 2015.

HOST NATION SUPPORT IN THE CONTEXT OF NATO ADAPTATION PROCESS

Lieutenant Colonel Cristian CEAUȘU

The author discusses the HNS concept in the context of NATO adaptation process, showing that it has to clearly state the actions of civil and military authorities to plan and sustain NATO forces so that a rapid response can be guaranteed since the early stages of a threat to security. Therefore, the armed forces along with other state institutions and the society have to conduct defence activities to support the allied forces arrival and deployment. They require immediate situational awareness, rapid decision-making and a comprehensive approach, i.e. the use of both military and civil resources. In case of a threat to national security, the national defence tasks are implemented under the guidelines provided by certain national political leaders, and the following capabilities are guaranteed by the armed forces: warning system; self-defence capabilities; and the host nation support system.

Keywords: *Host Nation Support; NATO Response Force; logistics support; Reception, Staging and Onward Movement*

Introduction

The Alliance has recently enhanced the operational capability of *NATO Response Force (NRF)* by developing force packages that should be able to move rapidly and respond to potential challenges and threats. As part of it, the development of a *Very High Readiness Joint Task Force (VJTF)* has been agreed upon. This is a new Allied joint force that will be able to deploy within a few days to respond to challenges that arise, particularly at the periphery of NATO's territory. The intention is also to establish an appropriate command and control presence and some in-place force enablers on the territories of eastern Allies at all times, with contributions from NATO nations on a rotational basis.

NATO's goal is to improve the ability to quickly and effectively reinforce eastern Allies, including by preparing infrastructure, prepositioning equipment and supplies, and designating specific bases. Adequate *Host Nation Support (HNS)* will be critical in this respect.

While contracted Logistics Support Solutions are often used to replace missing Host Nation

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Support for deployed operations, *HNS* remains the main logistics support source for Article 5 operations. During the *Cold War*, *HNS* was pre-planned and available based on multinational agreements and national legislation. After the end of the *Cold War* and despite the eastern expansion of NATO, the shift to deployed operations outside NATO soil has entailed that the preparatory measures to establish suitable *HNS* mechanisms on the territory of the new NATO member nations have not received the same attention like during earlier phases of the Alliance.

By taking into account recent and potential changes in the European security environment the thesis is to analyse the future role of *HNS* at today's NATO eastern border. The thesis shall identify ways how to improve NATO's logistics readiness and sustainability in case of emerging Article 5 operations, especially by evaluating the use of contracted logistics support solutions complementing *HNS*.

Generalities

HNS requires, based on agreed definition, civil and military assistance rendered in peace, crisis and conflict by a *Host Nation (HN)* to allied forces and organisations which are located on, operating in or transiting through the HN's territory.

The *HNS* spectrum consists of the following areas:

- a) military support by;
 - promoting and ensuring the legislation framework for obtaining the competent national authorities approval, for *HNS* multinational agreement endorsement, and the necessary provisions for *HNS* implementation;
 - ensuring *HNS* Point of Contact and assistance;
 - providing the coordination and cooperation between military and civilian areas, at national level (intra and intergovernmental) and multinational, including the *HNS* liaison;
 - facilitating access to the local resources, services and commodities through the forces/from military sources: infrastructure, logistics support, medical assistance, CIS, force protection etc.;
 - freedom of movement and crossing borders coordination and assistance;
 - *Reception, Staging and Onward Movement (RSOM)* support;
 - field procurement assistance;
- b) civil support by:
 - ensuring the legal framework;
 - providing assistance on different areas such as: legal, economic, financial, transportation, health, security, urgency situation support, mortuary services, CIS, environment protection etc.;
 - assuring national (intra and intergovernmental) and multinational level cooperation, including the *HNS* liaison;

- facilitating access to the local resources, services and commodities, depending on the public authorities competence level;
- *RSOM* support;
- field procurement assistance.

The necessary HNS resources for collective defence operations sustainment should be provided in a broader spectrum, based on:

- national interests;
- provisions of multinational technical agreements and treaties;
- applicable provisions of national legislation;
- current possibilities and capabilities.

Based on NATO's agreed definition of logistics – the science of planning and carrying out the movement and maintenance of forces –, logistics covers the following areas:

- design and development, acquisition, storage, transport, distribution, maintenance, evacuation and disposal of materiel;
- transport of personnel;
- acquisition, construction, maintenance, operation and disposition of facilities;
- acquisition of services;
- medical and health service support.

As a general principle, it can be stated that logistics, as an operational enabler, performs two functions:

1. effective logistics enables a NATO force to project and sustain military power over extended lines of communication into a distant operational area;
2. logistics can create non-kinetic operational effects throughout the whole spectrum of missions, particularly in operations that heavily depend on logistics capabilities.

It is agreed that nations and NATO have a collective responsibility for logistics, including the logistics support of NATO's multinational operations. The principle of collective responsibility is the focal point and it is based on the idea that both NATO and participating countries are responsible for the logistic support of NATO's multinational operations. While the Alliance is responsible for coordinating and prioritising the provision of logistic support to deployed NATO forces, each state is responsible for providing the required logistic resources to own forces – individually or through cooperative arrangements.

Moreover, it is agreed that many previous and current NATO operations have been supported by effective, but mostly independent, often uncoordinated, and unnecessarily duplicative national support capabilities. Such support has resulted in significant equipment, financial and manpower inefficiencies.

A good example of standard logistics support was the NATO operation in Bosnia and Herzegovina where 60,000 troops were deployed and supplied nationally by road, rail, ships and aircraft over relatively short lines of communication. While the force was able to rely on some host nation support – civil and military assistance from neighbouring nations and even Bosnia and Herzegovina itself – it relied heavily on national support elements with redundant logistic support capabilities, reducing the overall efficiency and effectiveness of the overall force.

As a general rule, we can state that most military operations today are joint or are potentially joint in nature. This fact has significant logistical implications and all sustainment solutions must therefore appreciate the complexities of the joint dimension.

Multinational solutions could be used wherever possible to provide simple and effective support to further optimise and reduce the logistic footprint. Multinational logistic solutions offer nations real potential for resource savings. According to NATO doctrine there are three types of multinational logistics:

- pre-planned mutual support, Host Nation Support, and contractor support to operations that are arranged bilaterally or multilaterally by NATO and/or nations;
- a nation formally undertakes to provide support or services to all or part of the multinational force, but under national command.
- one or more nations formally undertake to serve all or part of the multinational force under control of the multinational Commander, such as *Multinational Integrated Logistic Units (MILUs)*.

Background

Taking into account the evolution of the situation at NATO's eastern border, the *HNS* related to the Alliance member countries in that area is now considered more important than a few years ago. *HNS* is a key element in case an international force may be deployed on NATO soil, and its possible shortfalls need to be considered and analysed in order to minimise their negative consequences.

Under Article 5 operations, each host nation has specified responsibilities for assisting in the coordination and sustainment of NATO forces, reinforcing and prepositioning forces included. *HNS* arrangements for Article 5 operations are normally prearranged and agreed under a standing NATO *HNS* agreement.

HNS offers the opportunity to optimise the logistic footprint and to increase its agility and enhance its effectiveness. The following aspects are considered key *HNS* elements:

- (1) facilities, including A/SPODs, basing of forces and areas for reception, marshalling, staging, integration;

- (2) port handling facilities;
- (3) supply (e.g. fuel and water) and services;
- (4) acquisition of materials and services;
- (5) maintenance and repair;
- (6) engineer resources/construction materials and services;
- (7) civilian labour force;
- (8) medical facilities and services;
- (9) security;
- (10) movement control.

During the *Cold War*, the concept of *HNS* was a key element in NATO logistics and had a very detailed planning developed in advance of any potential serious threat. The objective was to be prepared in order to implement a quick reaction in case of a sudden conflict derived from a military action taken by the Soviet Union. On that moment the eastern border of the Alliance was practically established along the German border. This situation entailed relatively short lines of communications for the forces that were prepositioned, *APODs/SPODs*, as well as a *HNS* structure clearly established and able to provide the necessary support to a significant allied force in a short time.

By mid 1990s the general idea was that the vision of a united Europe was no longer just a vision. It was generally accepted that, as the process of European integration deepened and widened, our continent would definitely overcome the remnants of its erstwhile division. Therefore the project of managing security would have to confront with a set of entirely new challenges, for which the Alliance should be prepared. This change had serious consequences for *HNS* concept inside NATO. Since the new challenges should be faced far from NATO territory, *HNS* would be no longer required (at least as it had been previously known).

However, the evolution of the security environment has proved that this vision is no longer valid. Even though it was broadly agreed that future conflicts would take place far from NATO territory, the current conflict between Russia and Ukraine, as well as Russian behaviour towards Georgia and the Republic of Moldova have proved that the Alliance must keep attention to its own territory and more specifically to the security of its eastern border.

Challenges

The main challenges of this new situation, from the logisticians' point of view, derive from the displacement of NATO eastern border, which is now about 1,300 km away from the previous one. This situation has the following consequences:

- longer distance to be covered by the forces deployed to reinforce the border, if necessary. This would obviously complicate the required logistic support;

- shortfalls in *HNS* capacity of the nations that are the front line of a possible NATO deployment.

Legal Framework

The *HNS* concept, in NATO adaptation process terms, has to provide guidelines to clearly state the authorities (civil and military) for planning and sustainment of NATO forces for a guaranteed rapid response, in early stages. Therefore, the forces together with other state institutions, local governments, and society must perform defence activities in support of the arrival and deployment of allied forces. This requires an immediate situational awareness, rapid decision-making and a comprehensive approach, i.e. the use of both military and civil resources. In case of a threat to national security, national defence tasks are implemented under the guidelines of national political leadership, and the following capabilities are guaranteed by the forces:

- a warning system;
- a combination of military and non-military, i.e. preventive measures (political, economic, diplomatic and security measures);
- self-defence capabilities and
- a host nation support system for rapid arrival and deployment of allied forces.

Infrastructure

Under the *NATO Security Investment Programme (NSIP)*, NATO finances the establishment of major infrastructure elements within NATO countries when such infrastructure is necessary for NATO defence purposes and is beyond the needs of the country in which it is located.

As examples of such infrastructure elements could be mentioned airfields, fuel pipelines, fuel storage facilities, major communications and information systems etc.

The main aspects that should be taken into consideration when analysing this possibility are as follows:

- the long time required for the infrastructures and equipment to enter in service;
- the possibility that current security risks last for a long time;
- the importance of the required *HNS* infrastructure and equipment that should be in place in advance in case of a deployment of NATO forces.

Even though the responsibility for identifying and defining the military requirements for all infrastructure projects lies with the military chain of command, most of the infrastructure and equipment to meet the *HNS* requirements

should be acquired via agreements with private contractors. So, in addition to the financial responsibilities, the contractual aspects should be taken into account. More specifically, some key elements would be:

- the capacity of the technical and contractual structures, taking into account the experience in international bidding processes;
- the national contractual regulations constrains that could cause significant delays.

Moreover, the effective delivery of infrastructure projects requires appropriately qualified staff to manage the procurement and implementation of the projects.

Services and Commodities

In case of a hypothetical NATO deployment into the eastern part of Alliance, a potential lack of energy sources should be taken into consideration. In this scenario, contractual agreements with other potential suppliers should be concluded in a very short period of time, in order to avoid shortages of these critical assets.

From the military point of view, the availability of assets and contractors and the early identification of alternate solutions are key to succeed and will have an inherent dependence on *HNS* and contractor solutions.

The situation in which the *HN* could not provide fuels, gas or electricity as required should be considered a probable scenario in the short/medium term. In this case NATO should be able to arrange contractual support to ensure the required supply.

Therefore this situation could be faced in a similar way as NATO forces potential deployments in scenarios out of NATO borders. Contractual instruments ensuring the rapid establishment of a resilient fuel supply chain are considered a valid option for the timely provision of required fuels.

Due to recent events NATO has agreed that the Allies located at NATO's periphery could be reinforced for deterrence and collective defence. In order to get ready for this possible reinforcement, some equipment and supplies should be prepositioned in specific bases. That would speed up deployments in case of a crisis.

Equipment and supplies that NATO could preposition might include:

- deployable camp sets, office equipment and furniture;
- supporting air assets especially the ones required by fighter aircraft;
- shore based logistic assets for naval forces;
- medical treatment facilities;
- ammunition storage facilities.

Some of the mentioned equipment and supplies could be taken from NATO nations' inventories, if some of them agree to take this burden. However, if this is not considered a valid option, most of the equipment and supplies could be available via contractual agreements with private contractors.

The utilisation of contracted logistics support solutions should be considered from the outset of planning during the initial phases of the logistic operational planning process. The contracted logistics support solutions would have some advantages as follows:

- availability of the required assets during a long period of time;
- reduction of the logistic pressure on the nations, whose assets could be engaged in other exercises/operations;
- avoidance of any possible shortages, due to other requirements.

Conclusions

In the context of the international security environment accelerated evolution, NATO has taken further steps to reconfigure the strategic-military defence and deterrence posture, focused on strengthening solidarity and reaffirming collective defence commitment.

The new allied conceptual and operational developments are based on enhancing the armed forces ability to conduct major and small-scale joint operations as well as collective defence and/or crisis response expeditionary operations, at strategic distance, having robust, mobile and deployable forces and providing them with effective logistic support.

The logistic support provided to recent multinational operations has pointed out the responsiveness in crisis situations by reducing the periods necessary to deploy and integrate forces into the operational areas, located at large distance and characterised by poor or insufficient resources and logistic support services.

In this context, the planning, coordination and provision of host nation support becomes a key element to implement NATO readiness action plan measures, especially in terms of reception, staging and onward movement.



INTEROPERABILITY BETWEEN NATO AND PARTNER STATES IN THE POST-ISAF PERIOD – Present and Perspective –

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With the 2010 Strategic Concept, NATO adopted a “comprehensive approach” aimed at the full range of missions, from security cooperation, crisis prevention and management to humanitarian operations and high-intensity war, both within NATO and especially outside “NATO borders”. In this context, the authors consider that achieving interoperability is a constant at all levels, both within NATO and in terms of relations with partner countries, due to the need to ensure the conditions for action regardless of the entity involved and the specific joint mission accomplished. Moreover, they consider that, currently, within the Alliance, following the launch of Smart Defence and Connected Forces initiatives, interoperability is the key element that supports their implementation.

Keywords: *interoperability; partnership; STANAG; Connected Forces Initiative*

Introduction

To begin with, we would like to present a definition of *interoperability*, accepted and used by the North Atlantic Alliance, as well as a brief overview of the components and mechanisms that contribute to its achievement.

With the *2010 Strategic Concept*¹, NATO adopted a “*comprehensive approach*” aimed at the full range of missions, from security cooperation, crisis prevention and management to humanitarian operations and high-intensity war, both within NATO member states and especially outside “*NATO borders*” by participating member and partner states (sharing the same interests and fundamental values). In this context, we consider that achieving interoperability is a constant at all levels, both within NATO and in terms of relations with partner countries, due to the need to ensure the conditions for action regardless of the entity

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¹ *NATO Strategic Concept – “Active Engagement, Modern Defence”*, adopted during the NATO Summit 2010, Lisbon, Portugal.

involved and the specific joint mission accomplished. Moreover, we consider that, currently, within the Alliance, following the launch of *Smart Defence* and *Connected Forces* initiatives, interoperability is the key element that supports their implementation.

NATO Glossary of Terms and Definitions² defines *interoperability* as “*the ability of the forces of two or more nations to train, exercise, and operate effectively together in the execution of assigned missions and tasks*”. In this context, it may be inferred that when mentioning several nations allied states may be also included.

NATO Interoperability Policy³ defines the concept as: *the ability to act together coherently, effectively and efficiently to achieve Allied **tactical, operational and strategic** objectives*. Specifically, it supports forces, units/subunits and operating/combat systems to act together, allowing for sharing specific doctrines and procedures as well as infrastructure by using common communication methods. In principle, *interoperability* reduces duplication of effort, facilitates the achievement of a package of resources, and produces synergy at the level of the 28 allies and of partners when appropriate.

At **strategic** level, interoperability is one of the essential factors contributing to the creation of a coalition of forces, thereby demonstrating the coalition members desire to act together against common threats as long as necessary. At this level, *interoperability* is focused on harmonising the global visions of the members, strategies, doctrines and force structures.

At **operational** and **tactical** levels, interoperability refers mainly to how interoperable issues agreed at political and strategic levels, as well as technologies, work together to support allied and partner states, members of a coalition, in conducting crisis management, creating the environment to achieve the set objectives, and, we can say, winning the war. Technological interoperability refers to the existence of a common interface between organisations (nations) and systems, focusing on information and communications systems, involving their technical capabilities, being thus reflected in the compatibility of the various systems in the inventory of participating states. In general, the benefits of achieving interoperability at operational and tactical levels are represented by the interchange of the coalition forces and units/subunits.

Interoperability does not mean that allied or partner states should have or purchase common military equipment. What is very important is the ability to use the equipment by sharing facilities, thus being capable of interacting, connecting,

² *NATO Glossary of Terms and Definitions, NATO AAP-06.*

³ See http://www.nato.int/cps/en/natohq/topics_84112.htm, retrieved on 7 June 2015.

communicating, and exchanging information and services with similar equipment from other states inventory.

Given the above mentioned aspects and considering the Allies agreed documents, the components and mechanisms that allow for achieving military interoperability can be deduced. Thus interoperability essential components are⁴: **technical component** (hardware systems, equipment, and weapons systems), **procedural component** (doctrines, techniques, tactics, procedures) and **human component** (represented by the use of agreed terminology, training, education etc.). On the other hand, the **mechanisms** that support achieving interoperability are: effective implementation of allied agreed standards (STANAGs), joint training, participation in NATO/multinational exercises, application of NATO policy related to lessons learned, conduct of demonstrations and tests.

The Evolution of Interoperability between NATO and Partner States

NATO is a political-military alliance that was initially established to meet the collective defence goal, regardless of where the threat came from. Once the current *strategic concept* was adopted, two new main missions (*core tasks*) were added to the Alliance – *security through cooperation and partnerships* and *crisis management*, which are put into practice through the partnership network developed by the Alliance as well as through the cooperation relations established with many other countries around the world. One of the main objectives is to ensure peace and security not only for own members, but also regionally and internationally, without having to engage in military actions. According to the *NATO Strategic Concept 2010*, partnerships with third countries “*can make a concrete contribution to enhancing international security, to defending the values on which our Alliance is based, to NATO’s operations, and to preparing interested nations for membership of NATO*”. NATO will undertake “*to prevent and manage*” crises prone to escalate into conflicts, “*to stabilise post-conflict situations and help reconstruction*”.

Moreover, NATO’s partnerships, which began to be developed since the ’90s, were open to all, including the Russian Federation, with which was developed a distinct partnership (NATO – Russia Council). There were developed distinct partnerships with Georgia (NATO – Georgia Commission) and Ukraine (NATO – Ukraine Commission). Currently, in NATO, besides the already mentioned

⁴ See http://www.nato.int/cps/en/natohq/topics_84112.htm, retrieved on 7 June 2015.

distinct partnerships, there are other regional partnership and cooperation formats, such as the *Euro-Atlantic Partnership Council (EAPC)*, which includes European and Eurasian partners, the *Mediterranean Dialogue (MD)*, or the partnership with the Gulf countries, *Istanbul Cooperation Initiative (ICI)*, and bilateral cooperation relations achieved through individual specific programmes⁵. Partnerships play a vital role in promoting international peace and security, being a key element of NATO policy – *Security through Cooperation*. The Alliance develops partnerships, maintains the dialogue and cooperates at different levels of intensity with about forty countries, making the family of allies and partners to count one-third of the UN member states. In these partnerships, interoperability has a primordial place, especially if NATO decides to act in other theatres, where success in meeting the set objectives largely depends on the collaboration with the involved partner countries.

In our opinion, a significant example related to the inclusion of interoperability in the Alliance partnerships is the *Partnership for Peace (PFP)* programme, established in 1994, which includes a wide range of cooperation areas (e.g. defence, defence reform etc.). A major outcome of the Euro-Atlantic Partnership Council success is the fact that it became the model and provided the tools for NATO Partnerships with the Mediterranean Dialogue countries, the Gulf states participating in the Istanbul Cooperation Initiative and many other countries, including Afghanistan, Pakistan and Japan.

Interoperability has become a priority in all forms of NATO partnership specific documents within the agreed bilateral cooperation between the Alliance and each partner state (e.g. *PFP Planning and Review Process – PARP* etc.), with the main objective to support the member states efforts to strengthen and extend their peace and stability. Including interoperability, while making full use of flexible formats, supports the further development of practical cooperation with partners, in the operational context as well, and the increase in the partners involvement in training, education and exercises, implicitly in *NATO Response Force – NRF*.

Achieving interoperability is a constant necessity at all levels within the Alliance, because of the need to ensure the conditions to act in cooperation with allies, regardless of the entity involved and the specific joint mission accomplished. In NATO member states it is achieved by implementing agreed standards. As for the relations with partner states, achieving a high level of interoperability is a crucial factor considering the joint participation in NATO-led operations/missions.

⁵ *Partners across the Globe – PatG*, and *Contact Countries – CC*.

A concrete way to achieve it, developed in NATO, from a purely military perspective, is represented by the initiatives in education and training, supporting non-NATO countries to reform defence structures so that their armed forces can become interoperable with allied ones.

Currently, NATO is engaged in operations and missions on three continents, from crisis response operations to training missions and humanitarian disaster relief. The military forces of NATO member states have reached a high level of interoperability as a result of decades of joint planning, participation in joint training and exercises. Recently, the Allies have demonstrated in practice the level of interoperability achieved through participating in NATO-led operations and missions in the Balkans (*KFOR*, *SFOR*), the Mediterranean Sea (*Operation ACTIVE ENDEAVOUR*), Libya (*Operation UNIFIED PROTECTOR*), and Afghanistan (*ISAF* and *Resolute Support Mission – RSM*). Moreover, these operations have supported NATO partner states to improve and develop interoperability with NATO.

Perspectives on Interoperability between NATO and Partner States in Post-ISAF Period

Operation *International Security Assistance Force (ISAF)* led and conducted by NATO from 2003 through 2014 was the largest in the history of the North Atlantic Alliance, considering that, at a certain moment, over 50 allied and partner countries were involved.

Strictly from the interoperability perspective, we consider that the *ISAF* is the best example, in terms of both the benefits arising from achieving a high level of interoperability between NATO and partner states and the need to maintain the achieved level.

Maintaining and even developing the achieved level of interoperability between NATO and partner countries, especially in the context in which the Alliance has slowed operational tempo once the *ISAF* operation ended, is a priority for NATO. Even before the completion of *ISAF*, to support this goal, NATO Secretary General, at Munich Security Conference 2011, launched the *Connected Forces Initiative (CFI)*, which briefly serves maintaining the forces ability to operate together in future NATO operations. Under this initiative, an important role is the involvement of the partner states.

Currently, the Alliance conducts a number of initiatives and programmes, from implementing bilaterally agreed areas of cooperation between NATO

and each partner found, as previously mentioned, in the signed agreements, up to achieving, maintaining and developing interoperability among Allies and partners.

In the *Chicago Summit Declaration* adopted by the Heads of State and Government participating in the meeting of the North Atlantic Council in Chicago, on 20 May 2012, it is mentioned that: *“The Alliance’s recent operational experiences also show that the ability of NATO forces to act together seamlessly and rapidly is critical to success. We will, therefore, ensure that the Alliance’s forces remain well connected through expanded education, training and exercises. In line with the Alliance’s commitment to transparency, and in the expectation of reciprocity, these activities are open for partner participation and observation on a case-by-case basis. In this context, we attach particular importance to next year’s “Steadfast Jazz” exercise for the NATO Response Force which, along with other exercises, will contribute to the ability of NATO forces to operate together anywhere on Alliance territory and in wider crisis management operations”.*

Part of the *CFI*, *NATO Response Force* represents the main tool for the member states forces interoperability capability certification, and the best test of the Alliance’s ability to face any future challenges to the member states security. Moreover, we consider that *NRF* is the most visible instrument for the certification of interoperability capabilities between member and partner states.

As a result of the operational experience gained by NATO, of the changes in the security environment caused by the fight against terrorism and current missions, such as *RSM* (preceded by *ISAF*), it became necessary for partners to go beyond achieving minimum interoperability and reach a higher stage of integration. Some NATO exercises are open for partners, and partners can potentially contribute to supplement the *NRF*, which highlights the importance of the military capability measuring and assessment system, in compliance with the new policy of the Alliance, as a guarantee that NATO and partners can work together to the level required by such an operation.

Subsequently, the Alliance has revised *NATO Education, Training, Exercises and Evaluation – ETEE Policy* in order to support the implementation of the *CFI*, which, especially in terms of relations NATO – partner countries, strengthens their participation in the North Atlantic Alliance exercises and training and education facilities, an essential aspect in maintaining and developing interoperability between the Alliance and partners.

In this article, we would also like to mention another programme developed by the Alliance, initially open only for PfP member states, and later, following the decision of *NATO Military Authorities (NMA)*, extended to *MD* and *ICI*, supporting

the goals and improving cooperation interoperability. This programme is the *Operational Capabilities Concept Evaluation and Feedback (OCC E&F⁶)*. It is the main tool used in relations with partner countries to create and train the land, air and naval forces, as well as their special operations forces according to NATO standards. It is designed as a process structured on a realistic examination of each activity and/or capability in compliance with appropriate standards and criteria set by the Alliance (*ACO Forces Standards*).

Considering the lessons learned and the practical experience gained during the operations in the Balkans, *OCC E&F* seeks to *improve interoperability and enhance the operational capabilities of partner forces*, thus creating conditions for their participation in non-Art. 5, NATO-led *Crisis Response Operations (CRO)*. Moreover, some partner states use this programme as a tool at strategic level, adopted in the transformation of the armed forces. Last but not least, *OCC E&F* has significantly contributed to increasing the number of partner countries that have participated in missions and operations led by NATO, as well as in the NRF.

The aim of the evaluation and feedback process is to improve the interoperability and operational efficiency of forces, confirming indirectly the validity and reliability of training systems, procedures, programmes and objectives. It is important to understand that the evaluation and feedback process is concluded when the response is received from the assessed.

OCC E&F is designed on two levels. *Level 1* focuses on assessing the interoperability of structures, equipment, training and education, and *Level 2* on assessing the military efficiency of capabilities and the capacity to execute the mission. It is an essential part of the military dimension of NATO's partnerships and a valuable tool to improve interoperability and capabilities at all levels.

It is imperative to mention that the possible application of a partner state to participate in the *NRF* entails adopting *OCC E&F* by the particular state military authorities. Thus, although the decision to participate in the NRF is for each partner, it is the Alliance that makes the final decision regarding their participation in non Art. 5 crisis response operations.

In order to achieve and especially maintain an optimal level of interoperability, it was launched, at the NATO Summit held in Wales in September 2014, the *Partnership Interoperability Initiative*, having the *Interoperability Platform* as a concrete way of working. It is a new initiative to support strengthening interoperability with all partners in order to enhance the Alliance's ability to conduct

⁶ See <http://www.nato.int/pfp/docu/d990615e.htm>

post-ISAF operations. The new initiative provides increased capacity to cooperate with partners to counter security threats by: interrelating all existing interoperability mechanisms and programmes; supporting partners that wish to become interoperable; providing partners that significantly contribute to the Alliance with increased opportunities; developing, maintaining, diversifying and increasing a pool of forces and capabilities belonging to partner states, which are certified and ready to contribute to future NATO operations or to the *NRF*.

Given the above presented aspects, we consider that, in light of the developments regarding interoperability between NATO and partner countries, there are several initiatives and programmes in the Alliance that contribute to meeting this goal in the future. *An important aspect is the willingness of partner states to request and subsequently participate with as many forces and capabilities within them*, perhaps the only mechanism that supports the concrete implementation and development of interoperability between allied forces and partner countries.

The Alliance can build on the foundation of experience and expertise gained in training and educating armed and security forces of partner countries in the context of the various partnerships and cooperation, using a well-established and unique array of structures and institutions that belong to NATO bases, both allies and partners. The main objective remains the same, to help the countries concerned to bring their military forces to an as high as possible level of interoperability with those of the allies. Other possible ways could include assisting those countries in the fight against terrorism and the modernisation of their defence structures.

In conclusion, we will try to briefly present possible ways to support the implementation and development of interoperability between the Alliance and Partners, some of them presented during the *Strategic Military Partners Conference 2015 (SMPC-2015)*⁷ on 8-10 June 2015, in Georgia, conference organised by Supreme Allied Commander Transformation (*SACT*) as follows:

- encouraging the participation of Partners in NATO exercises, which are catalysts to achieve interoperability, connectivity and engagement between NATO and Partners;
- opening as many as possible NATO exercises to partners, within the *Military Training and Education Programme (MTEP)*, according to NATO policy and procedures in this area;
- setting interoperability targets for each partner state, member of the Interoperability Platform;

⁷ See <http://www.nato.int/act/smpe.htm>

- coordinating the efforts specific to the *Partnership Interoperability Initiative* with the matters set out in the *Defence Capacity Building Initiative* (launched within the NATO Summit held in Wales), for the partner states that are part of both initiatives;
- adoption by all partners of the *Operational Capabilities Concept Evaluation and Feedback (OCC E&F)*;
- involvement of partner countries contributing to NATO operations/ missions in developing *Operational Plans (OPLAN)*, early in the decision-making process and subsequently in the *Periodic Mission Reviews (PMR)*. A recent breakthrough in this regard was the initiation of regular meetings of the Military Committee with contributing states;
- increased involvement of partners in education, training and exercises, including in relation to the *NATO Response Force*.

Looking ahead, taking into account the current security context, represented by the multitude and, especially, the diversity of security threats, and considering the core values shared between NATO and partner countries, a level of interoperability becomes necessary. Thus, it is not risky to predict that the Alliance will face new demands for cooperation and support regarding interoperability, coming from partner countries, both in the context of intensifying efforts in its various partnerships and as part of future operations and missions conducted by NATO. Preparing the Alliance for such activities will require further transformation within NATO and progress in the way NATO cooperates both with partner countries and with the UN, EU, OSCE.



RUSSIA

– Between Predictable and Surprising –

Brigadier General Dr Vasile ROMAN

Based on old and recent historical events, the author intends to find some ways to predict what Russia will do, in connection with the actions it currently conducts near its borders or beyond. Among the assumptions made in this context, the following can be mentioned: Russia will seek to reinforce the areas that ensure access to the sea; it will also seek to divide Europe (at least in terms of the union decision) because it has found in history that it is possible and beneficial; it will maintain the frozen conflicts in Ukraine, Moldova and Georgia on the assumption (otherwise clearly defined by any negotiation for membership) that none of these countries will join NATO or the EU if peace treaties with neighbouring countries are not signed. In conclusion, it is shown that Russia's actions are not new in the world history, but they surprise us because they come from the Russian Federation, which we otherwise see through the eyes of democracy.

Keywords: *Copenhagen School; Heartland; globalisation; Maskirovka; strategy*

Introduction

The end of the *Cold War* (25 years have passed and it is still a reference) created the perception that the world would be more relaxed, more collaborative and less confrontational.

The United States of America, remaining the only superpower on the world stage, was challenged to become an “*international institution*” able, as a model, to bring democracy and market economy as a form of organisation and, as a military power, to deter wars, wherever they may break out.

Moreover, the dissolution of the Union of Soviet Socialist Republics (USSR) and of the Warsaw Pact raised the question whether the North Atlantic Treaty Organisation (NATO) should continue to exist and there were many voices affirming that if there was unipolarity then certainly only the United Nations (UN) was needed as a guarantor of peace.

The subsequent events, marked in particular by the first Gulf War, the conflicts in the former Yugoslavia, the wars in Afghanistan, Iraq, Libya,

North Africa and Syria have confirmed that those who were sceptical about peace were right. Humankind remains in the area of violence otherwise explained by the fact that welfare is often acquired and guaranteed by force.

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Meanwhile, analysts, particularly those who embraced the Copenhagen School ideas, tried to provide the concept of *security* with other nuances, in a package of five dimensions: political, economic, military, social and environmental. The goal was clear: to reduce the importance of the military dimension that characterised the *Cold War* period and to address security as a concept in which states might change their perception of threats by developments in the operating environment and changed practices.

NATO rallied to the new approach in 1991, considering (perhaps given the fact that it is a political-military organisation) that Barry Buzan, Ole Waever, Bjorn Muller and Jaap de Wilde (representatives of this school), through the vision of security in five dimensions, highlight the social aspects of security and the independent identity and functional integrity of states. Moreover, NATO understands the new challenges (especially those in the Balkans) and the need for them to be addressed holistically.

Under such circumstances, the permanent dialogue between NATO and the Russian Federation was established, the USA and the European states (the European Union – EU) being open to it. During that period, the Russian Federation was in a process of affirming as a regional actor and of implementing a new domestic order.

The historical and social events (NATO and EU enlargement) were based on the new approach to security with a main focus on international cooperation and not confrontation. All those aspects were seen as the result of a dialogue and a new way of Russia in connection to the Western world. The signs were misleading because the double game between the players from the East and the West has always been to the detriment of Westerners.

The financial crisis in 2007-2011 (perhaps not completed yet), the fluctuating price of energy resources (gas and oil), Russia's radically changed behaviour in Georgia, the annexation of Crimea, the conflict in Ukraine and, more recently, Russia's military presence in Syria have led us to believe that Western and Eastern perceptions differ when it comes to security. The question is "*Why?*" Perhaps the answer could come from an empirical analysis of the historical behaviour of Russia in balancing/unbalancing the system of international relations.

I. Security as a Dimension of the State Existence – Russia Historical Perspective

Without seeking to embrace one of the methods of analysis of the behaviour of actors in international relations, I consider that a review of historical events and the behaviour of Russia and an analysis of its perception of "*containment*"

or the threat of aggression at the border are absolutely necessary. The history of Russia may explain, to some extent, the current mode of action starting from the idea that, although the context is different, Russia's geography and human nature have not changed.

The emergence and development of the "*First Russia*" would not have been conceivable without the decisive *role of the trade route between the Baltic and the Black Sea*, moving forward, to Byzantium, Baghdad or Greece. The main advantage of this trade route resides in the fact that it is water transport – using the Dnieper – and the isthmus between the Baltic and the Black Sea, about 1000 kilometres, does not have important natural obstacles¹. The development of Novgorod and Kiev trade centres was more based on the idea of territoriality, on the mainland, on the land control than on the one of developing ports and the exit to the two seas.

Hence the idea that Russia was and remains a country centred more on the idea of controlling the land and less on the one of being present in the area of seas and oceans.

The birth of the second Russia occurred in the 13th century, under more strained circumstances than those in which the first Russia was established. It took the form of the fight against the Mongols². The liberalism determined by the commercial relations disappeared, its place being taken by the idea of mastering what had been developed in time. Being born in fighting and through fighting the Russian state was first based on *authoritarian centralism*, affirming its desire for *conquest and expansion*.

Analysing, ante factum, the psychosocial behaviour of the Russian people and its leaders, we find that, since the 11th century, despotism and violence have been forms of manifestation accepted and used. Russia was not the only one violent state at that time. However, if we compare it with the West (and even with the Byzantine Empire), we find that in the West diplomacy remains a concern that prevails war. The explanation for such authoritarian behaviour can be provided by the fact that Russia's neighbours do not excel in the art of diplomacy (especially the Mongols).

Peter the Great was one of the personalities of Russia who, following the Western model, thought the future of Russia more connected to the ocean than to the mainland, the result being the establishment of St. Petersburg. It was situated by the sea, in the Neva estuary, 600 kilometres far from Moscow. Its value lied in ensuring access to the sea, having an advantageous position for trade. Peter the Great understood this aspect very well – and his judgment

¹ Paul Dobrescu, *Geopolitica*, Editura Comunicare.ro, București, 2003, p. 283.

² *Ibidem*, p. 285.

was more valuable, considering that it happened in the early modern era, when any delay in connecting Russia to the evolution of Europe would have been very costly³.

Geoffrey Parker states that *the massive movement of the political power from the geographical centre to the periphery expressed a strong belief in what Russia could have become*⁴.

The idea of Russia maritime power development did not conflict with the great maritime power that was the British Empire and with the future maritime power the USA would become.

Simultaneously, Russia reached the northern coast of the Azov Sea and developed the port in Odessa and the naval base in Sevastopol on the coast of the Black Sea, occupied Bessarabia (1812) to the Prut thus controlling the *entire isthmus connecting the Baltic to the Black Sea*⁵. This state seemed to be comfortable for Russia.

Another direction for Russia's expansion was the isthmus between the Black Sea and the Caspian Sea. The Caucasus proved more difficult to conquer. A mostly mountainous area, inhabited by people that were different in terms of ethnic structure and religion, the Caucasus resisted steadfastly and it was only in the 19th century that Russia exercised control over the region⁶.

It is understandable that Russia wants and manages to dominate these areas, but we should consider the message (and we will discover it in the 21st century) that the leaders want to convey to both the conquered ones and those with whom they come into conflict of interests.

The expansion legitimacy varied from challenging to the need to protect the borders by creating a sanitary cordon, going even to the idea that the Slavic-speaking populations should be part of the same state.

Another form of expansion legitimacy is represented by the *messianic idea*. Muscovite Russia pretended to be the successor of Kyivan Russia (from which it could inherit the "soul") and of the Byzantine Empire (from which it inherited the orthodox faith). The church was not a rival but a supporter of the state in its attempts to expand and protect "*all the Russians*", which nurtured the state with the conviction that through its expansion it could meet a "*divine mission*". Thus "*a perfect Caesar-Papism arose, the Church and the State becoming synonymous*" and the citizen considered himself "*an agent of Christendom reunification*"⁷.

³ *Ibidem*.

⁴ Geoffrey Parker, *The Geopolitics of Domination*, Routledge, London, 1981, p. 80.

⁵ Paul Dobrescu, *op. cit.*, p. 289.

⁶ *Ibidem*.

⁷ *Ibidem*, p. 291.

Having a religious origin and a content that is put on the ground of faith, Russian messianism had also another very important dimension, namely *Pan-Slav messianism*, which highlighted the role of Russians in protecting the Slavs outside Russian territory, especially those in the Balkans.

The Church became the tsars ally and instrument, requiring blind faith in their decisions, the same happening with the State (imperial court, institutional bureaucracy) which, for reasons pertaining first to independence, then to the support for expansion and, finally, to the control over such a large territory, became more powerful, distancing itself from the society, somehow “*commanding*” it to unconditional obedience⁸.

Accepted or not, this metamorphosis, church-state, combined with centralised-bureaucratic state, can explain in a simple way what might be called *Russian social behaviour* – that way of behaviour that seems incomprehensible to the West. Russia has undergone a fragmented process, which always started from the top down, without going into the deep layers of society. Maybe that is why it has not been concluded at any stage, each new moment of evolution taking a historical burdensome liability. Therefore, throughout Russian history, there can be outposts of modernity elements or areas that coexist with processes, institutions and attitudes lagging far behind. The indicators that measure the average performance have never advantaged Russia, because its strength has always come from the number, the massiveness⁹.

A brief overview of the two world wars shows the picture of a Russian people divided by fratricidal conflicts (Revolution of 1917) when a medieval society motivated by socialist ideas faced the Tsarist system that, by bureaucracy and conservatism, lost touch with reality. In the Second World War we find a Russia led by a dictator who, by horrors and crimes, managed to impose his will not only on Russia but also on the peoples near its borders.

Then there was the *Cold War* when the Russian people experienced different events as well as various degrees of social satisfaction. We want to acknowledge it or not, the Russian people were not ignorant about the regime imposed by the USSR on the states belonging to the communist bloc and enjoyed the well-being ensured by the status of “*Union citizens*”.

The end of the *Cold War* brings Russia into federal borders without it completely losing control over the former Soviet space (less Moldova, Georgia and the Baltic states). Russia’s attempts to develop the Independent States security complex and create an alternative to the European Union are attitudes that prove that, in the current global context, we witness a new behaviour of the actor

⁸ *Ibidem*.

⁹ Fernand Braudel, *Gramatica civilizațiilor*, Editura Meridiane, București, 1994, vol. 1, p. 249.

that is Russia. Such behaviour is oriented towards controlling energy resources and thus controlling the political space of the areas that have such resources.

The Caspian Sea, correlated with the Persian Gulf in what would be called the “*strategic energy ellipse*” of the planet, could become a common area that would concentrate 70% of the world oil and over 40% of the natural gas resources. Demographic growth and economic development in this area would make it the real pivot, the energy *Heartland* of the world. Who will control this region will have a strong say in the economic evolution of the future world¹⁰. This way, the actor that controls the Caspian Sea (Russia) is forced to leave the area of terrestrial powers and to become a state belonging to the category of maritime powers (US, UK etc.).

Traditionally, Russia has had a monopoly on the *Heartland* influence. Thus, during the *Cold War*, it developed (or supported temporarily) relations with Egypt, Syria, Iran (when it came into conflict with the USA) and led a bloody war (in order to control proximity) with Afghanistan.

Such relationships were concrete forms of entering the area of the seas and oceans, the USSR thus responding to the containment policy promoted by the USA (1947) on the initiative of President Truman.

Then, as well as now, Russia is interested in having access to two seas: the Caspian Sea and the Mediterranean Sea.

The Caspian Sea is an inland, landlocked, sea, being the nodal point between Europe and Asia – i.e. Eurasia, and the Mediterranean Sea ensures the access to the warmer oceans.

From the geopolitical perspective, Russia has very well understood the *strategic importance of pipelines* to transport hydrocarbons from the Caspian Sea. When it comes to a land as Central Asia, a somehow isolated region, having few connections with the outside, pipes are like roads for land. More than that, Russia interprets the Caspian Sea in the manner of a “*connecting bridge*” with other states in the East (Syria, Iran, Iraq).

II. A Review of History in the Context of Globalisation

In terms of their nature and dynamics, war, combat and strategy have not changed significantly over two centuries. That is why the writings of Sun Tzu in China of 400 BC and those of Clausewitz in 1820 remain relevant, even essential, for the current education in the field of strategy. The strategist task is the same today

¹⁰ Paul Dobrescu, *op. cit.*, p. 305.

as it was in the 1800s and entails the use of force or threat of force for political ends. Despite continuous technological progress, strategy is as difficult an attempt now as it was in the past. Moreover, themes such as: dialogue between continuity and discontinuity, complex relation between war and peace, and peace and war, often tense relations between soldiers and politicians, and the link between war and society have not decreased in strategic relevance over time. Independent security communities, each with their own reasons related to fear, honour and interest, according to Thucydides, are ultimately doomed to succeed in a world that can be harsh and dangerous. The continuation of this essential condition suggests that the future of humanity will probably resemble the past as far as important aspects are concerned. Details will be different, but perhaps the dominant narrative will be painfully familiar¹¹.

In this regard, I consider we should analyse the Russian Federation behaviour as a regional actor (even though it wished to be a global actor).

For a short radiography, I will present an analysis conducted by the US Army College in 2008. *Russia, starting in 2008 (although it is not a beginning but rather a continuation of the events in Moldova-Transnistria and Kaliningrad), has clearly proved that it does not accept the idea of developing within own borders but it wishes to impose its sphere of influence.*

In this regard, the continuity of the relations with Syria, the unilateral approach to the relations with Ukraine, the permanent pressure on the conflict in Libya and the continuous criticism towards the Arab Spring should be considered.

Moreover, we cannot evade the fact that Russia (especially after Putin's rise to power) has developed an arsenal "to sleep the senses" intended against NATO and the EU to create the room for manoeuvre that is necessary for strengthening its position in the global game.

The regime in Russia is strong because it is a combination of democracy (the population is consulted and participates in the democratic electoral process), autocracy¹² (involvement of the President in the destruction of Yukos is an already famous case) and tsarism (the way, that became reality, in which Putin established the next President and Russia's policy for the next four years).

This type of policy provides two major advantages: Russian resources will continue to be used as "weapons" and economic and diplomatic policies will be planned in the long term.

¹¹ Colin Gray, *Războiul, pacea și relațiile internaționale*, Editura Polirom, București, 2010, p. 320.

¹² Craig Nation, *US Interests in the New Eurasia*, November 2007, see <http://www.strategicstudiesinstitute.army.mil/pdf/PUB829.pdf>

We can thus compare China's policies planned for the next 50 years, the US and the EU ones, which are generally planned for four years, and those of Russia, which, based on Putin's plan, will continue for 25 years (Putin x 2 – Medvedev – Putin x 2). During this 25-year period, Russia will attempt to develop and appropriately capitalise on the opportunities in the relations with the EU, China and Iran, and will treat the USA as it has treated it so far.

The relations with Asian countries are another element that makes Russia a strong state. The reality is that Russia is not interested in the fact that human rights are not respected or that some countries do not enjoy a good image in the world as long as they provide business opportunities in the military area.

Russia's policy on resources seems to be one area where the saying "divide and rule" is very well applied. The first element that confirmed the assumption was the statement by Medvedev in 2007 that Gazprom had to be assimilated into a Ministry of Energy to attract other states in this business area (it translates into a significant threat to European countries, as they are not sufficiently united to create an alternative oil/gas pipeline). The fact that Ukraine's request to be accepted into the NATO enlargement process was postponed, following Germany's proposal, is clear evidence that gas and oil dictate policies in Europe. South-Stream pipeline is another element that demonstrates the intelligent approach to policies in resources, as two European states (Bulgaria and Hungary) signed, together with Serbia, an agreement to give Russia freedom to export oil and gas in Western Europe (the European Commission conditions and pressure delayed but did not put an end to the project). Here, Russia speculated the EU weak and misdirected policy in its relation with Serbia. The EU as well as the US policy is a short-term and a little bit misleading one, to be honest. Instead of perceiving Serbia as part of the EU in the next ten years and of implementing appropriate policies, the European states are more interested in the recognition of Kosovo as well as in other less interesting issues". This type of behaviour is exploited by Russia, which develops a real network of pipelines in the Balkans and makes its presence acknowledged with civilian-military capabilities in the emergency situations centre in Nis.

"Russia's association with the Central Asian Cooperation Organisation (Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan) is an important political influence element. In this way, Russia tries to control the flow of resources and use the transit fees to develop infrastructure. The fact that, recently, these countries have urged Russia to renegotiate the gas price should be a strategic moment for their reconsideration. Russia has two alternatives: to increase the price for buyers (Europeans) or to reduce its own benefits (unlikely). In relation to both sides, Russia cannot be but successful, whereas Europe does not have other supply sources and the Caucasus states do not have other transport infrastructure available.

The relations with two small states, Georgia and Moldova, represent another strength exploited by Russia. These states are not important in economic or political terms, but they clearly have a significant strategic value. For this reason, Russia maintains forward military bases and threatens these states with the support for secessionist tendencies within their territory. Georgia's policy is one close to the USA and NATO, but South Ossetia and Abkhazia are still pressure elements used by Russia. If Georgia were to materialise its intention to become a member of NATO, Russia would be ready to recognise the independence of South Ossetia and Abkhazia (they did so, after the war with Georgia, in 2008). The same approach is also employed in the case of Moldova, the goal being a little bit different. If Moldova left Russia's sphere of influence, the forward military base on its territory (a point from which power is projected against NATO) would be lost. Moreover, a country like Moldova, out of control, could easily reunite with Romania, case in which the EU border would be too close to Russia. Such discriminatory behaviour is based on the mistakes made by Europe and the USA in the case of Kosovo. The recognition of Kosovo's independence provided Russia with the opportunity to get along Serbia against the EU simultaneously with "legalising" such approach in relation to South Ossetia, Abkhazia and Transnistria.

The US policy in the Black Sea and the Caucasus is inconsistent and creates a favourable environment for Russia. The US weak reaction to the decision of Russia to withdraw from the Treaty of Conventional Forces in Europe gave it a new impetus. There have been only two initiatives of the USA to limit the growing influence of Russia. The first is represented by the forward bases in Romania and Bulgaria, and the second is the support for the application of Ukraine and Georgia to adopt the Membership Action Plan (MAP).

However, NATO summit confirmed the enormous difference between words and reality and the fact that the US policy towards Russia depends on circumstances. The fact that the USA could not persuade Germany and France to support Ukraine and Georgia accession to MAP showed that America did not convey a powerful enough message during the bilateral meetings in Washington, in 2007, with Chancellor Merkel and President Sarkozy. Inviting Ukraine and Georgia in MAP would not have meant inviting them to join NATO at the next summit. The status could have been maintained for more than four years (Romania remained in MAP from 1998 to 2004). This way, America should have conveyed a powerful message that there were only two alternatives for Russia: to cooperate with NATO, the EU and the USA or to be isolated within own borders.

The meeting between Presidents Bush, Putin and Medvedev in Sochi showed that the USA did not have a consolidated strategy on Russia. The USA promoted a policy of proximity and opportunity "I'll give you something if you give me something in exchange". The USA accepted the pressures from Russia not to allow Ukraine

and Georgia to accede to MAP, as President Bush believed that Russia would easily accept the placement of missile defence system in Eastern Europe. Therefore, the US policy resulted in another failure. It is difficult to understand how weak America seems to be and how strong Russia tries to be.

*We should recognise that it is not sufficient, as far as foreign policy is concerned, only to criticise Russia's behaviour or to build multiple scenarios regarding its future. These inconsistent approaches to Russia, these little misunderstandings Moscow-Paris, Moscow-Berlin and Moscow-Washington are nothing more than a helping hand to Russia. We should accept that it is not Russia's fault that its policy is an aggressive one, with a touch of cold war, as the conditions necessary for such behaviour to get manifest are created by us, Europeans and Americans*¹³.

This type of behaviour, which I described in 2008, predicted the way Russia sketched the world in which it was to act, because the continuous presence, for 25 years, of a person as the ruler of the state makes us accept that strategies will be long-term ones and the important decisions at the state level will be taken in a relatively short period of time, but with significant effects in the future.

III. Ambiguity Strategy

The analyses in the previous chapters show that Russia seeks ways to reposition itself both in the region and in the world. Russia has understood that it should achieve its objectives step by step, avoiding great challenges, using ambiguity, deception and disinformation to counter the West rapid response. It was also the situation in Crimea, where, despite evidence, Putin denied the fact that the "little green men" were his soldiers until the completion of the region annexation. Meanwhile, Russian mass-media propagated Putin's version as the capitals of most states requested Ukraine to have a moderate reaction. Through this approach, Putin acts inside the decision cycle of NATO member states, fact that provides him with a high level of flexibility in maintaining the initiative¹⁴. It is not anything new, because the concept of *Maskirovka*¹⁵

¹³ Vasile Roman, *Rusia multumește NATO pentru succesul din Eurasia, Studiu despre Eurasia*, USA WC, 2008.

¹⁴ Douglas Mastriano, *Project 1704 – Strategy of Ambiguity*, US Army War College, p. 66, see <http://www.strategicstudiesinstitute.army.mil/pdffiles/PUB1274.pdf>, retrieved on 22.10.2015.

¹⁵ *Maskirovka* – a manipulation technique, taught in schools in Moscow and the countries belonging to the communist bloc. The term was used for the first time in Russia in 1959, following the reorganisation of the KGB by Alexander Selepin on the order of Khrushchev, and meant "exclusively capitalist practices aimed at the popular masses enslavement". The term was also used by the Americans with the meaning of "deliberate leakage of misleading information". The French used the concept starting in 1974 defining it as "the use of mass media techniques to hide or disguise facts". See <http://romeocrismaru.blogspot.ro/2010/10/manipulare-prin-demonizare.html> (editor's note).

has been well mastered and practised by Russia throughout its history, especially during the Second World War and then in the *Cold War* period.

“*Ambiguity strategy*”, employed by the Russians, has certain elements that are presented as follows:

- Consolidation of political power and the use of nationalism in order to maintain internal support¹⁶. This course of action relies on the Russian people mindset as well as on a previous preparation conducted by the Putin regime (see the link with Serbia and the involvement in the war in Yugoslavia).
- Capital accumulation from long-term information operations campaigns. These campaigns are used to export to the rest of Europe the version of Moscow regarding certain events, targeting Russian diaspora. The regime has understood very well how computer technology and the media can be elements employed to influence the social dimension both internally and especially externally.
- Use of subversive activities in order to generate instability in areas inhabited by ethnic Russians. Conducting a continuous information operations campaign results in creating all the conditions that are necessary to manipulate dissatisfied ethnic Russian population in any region that Putin may find interesting¹⁷. The method worked in Transnistria, South Ossetia, Abkhazia (it may be employed in the Baltic states) and, more recently, in Crimea and eastern Ukraine (it may work in the countries of former Yugoslavia), and it seems to extend into the Middle East, where the target is not ethnic Russian population, but the population of Iraq, Syria and other countries, being inoculated the idea that the old (historical) relationships between states can and must be developed.
- Deployment of massive conventional forces along the border to deter the actions against separatists¹⁸. We saw it in 2008, before the war in Georgia (we saw it in the war in Transnistria), we noticed it in eastern Ukraine, and we find it perpetuated in other areas of the world (considering the beginning of the relationship with Syria – 2011 and, then, the facts in 2015 – pressure on the International Coalition in order to seize the initiative).
- Use the levers of ambiguity in order to maintain strategic flexibility. Deception and ambiguity are key components of the Russian approach and Putin uses them in almost all aspects of his strategy. Therefore, Putin remains one step ahead NATO decision-making process and rapidly

¹⁶ *Ibidem*, p. 67.

¹⁷ *Ibidem*.

¹⁸ *Ibidem*.

adapts his actions to keep the Alliance imbalanced¹⁹. Russia's rapid decisions are surprising. However, they cannot (due to rapidity) put NATO in inferiority; even though here the decision-making process takes a longer period of time, the effects are more powerful.

- Violation of international borders and support for pro-Russian insurgency. As the Ukrainian armed forces launched the offensive to eliminate the rebels in eastern Ukraine, the Russian armed forces were able to provide support to their comrades. These “volunteers” provided armoured assets, artillery, and air defence installations blocking offensive Ukrainian actions²⁰. All Russia's declarations sought to explain that no regular forces were present and, moreover, the volunteers feelings could not be controlled. Mention should be made that the same type of explanations were also provided in relation to Transnistria and Georgia.
- Occupation of an area to achieve a limited strategic objective. If there had been a definite international response to Moscow, Putin could have withdrawn the support for separatists, denying any involvement in the situation and waiting for a more convenient moment to try again. This is the problem the Western world is concerned about – *How far will Putin go with forceful actions?* No answer has been provided to this question but we can look (in history of course) for the degree of involvement, the time interval and, moreover, the factors that lead to the continuation or cessation of such actions.

Instead of Conclusions

Based on historical events (old and recent), most of us want to find the way to predict what Russia will do, in connection with the actions it currently conducts in Syria or it plans to conduct in Iraq and perhaps in Afghanistan.

The answers are hard to find and in this regard we can make some assumptions based on history. The first assumption is that Russia will seek to reinforce the areas that ensure access to the sea (and it did so by annexing Crimea), considering its position in the Black Sea providing access to the Mediterranean Sea, using the port facilities in Syria (perhaps new ones in Cyprus), seeking to develop relations with any regime (whether democratic or less democratic and using any tools: political, military, economic or social).

Another assumption comes from the alternatives to Europe, namely the development of (economic or security) communities to legitimise own actions (community consent is always needed to legitimise any regional or global action).

¹⁹ *Ibidem*.

²⁰ *Ibidem*, p. 68.

Russia will also seek to divide Europe (at least in terms of the union decision) because it has found in history that it is possible and beneficial. Russia will cultivate antagonism between European states, be they central or eastern, and, moreover, it will seek to determine the West to have different opinions from the East when it comes to threats to or vulnerabilities within Europe.

Another direction for Russia's actions will be that of acquisitions in Europe. Russia is aware that the *third world war* is related to control over the economy (in particular over the exploitation, transport and distribution of energy) and takes action in this respect. A good example is the acquisition, by exchanging shares between German and Russian energy companies, of huge liquefied gas storage facilities.

Last but not least, Russia will maintain the frozen conflicts in Ukraine, Moldova and Georgia on the assumption (otherwise clearly defined by any negotiation for membership) that none of these countries will join NATO or the EU if peace treaties with neighbouring countries are not signed.

By this attitude, Russia ensures its buffer zone (sanitary cordons) and escapes the anguish that, in the event of conflict, the road to Moscow is unprotected; moreover, it knows that it remains a powerful player in the Black Sea (by Crimea being annexed and Georgia not being a NATO member country).

The question is whether Russia is able and willing to provoke a war in Europe? Without pretending a prophet I believe that Russia (in particular, Putin and the political class) wants to keep hot every point where they project power (economic, political or military) having a dual purpose: defensive – to avoid the encirclement obsession and offensive – to show the people that the current regime will not make the same mistake in the *Cold War* period – creation of a military arsenal used at small scale and having a low degree of effectiveness.

Russia states that it neither conducts a *hybrid war* nor seeks a conflict with the USA and the EU, but interprets and applies in a particular manner (according to its specifics) the Copenhagen School concept – multidimensional approach to security by adjusting, depending on time and space, the five major sectors: political (aggressive rhetoric), economic (energy resources), military (military support for certain regimes), social (refugee crisis) and environmental (concerns for the Arctic area).

Most of the acts and actions are not new in the world history, but they surprise us because they come from the Russian Federation, which we otherwise see through the eyes of democracy.

English version by
 *Diana Cristiana LUPU*

ABOUT MILITARY TRANSFORMATION

– A PLEDGE FOR THE HQ SACT –

Colonel Dr Daniel PETRESCU

The current crisis and security events have increased the importance of the Allied Command Transformation –ACT as a NATO strategic headquarters, underlining the need for military transformation and revitalising the strategic planning process. Under these circumstances, an enhanced and more active national posture in the relationship with the ACT remains essential in achieving the following goals: (1) leading the military transformation and capability development; (2) enhancing operational commanders' ability to lead future operations in accordance with the level of ambition; (3) supporting the allied effort to influence the security environment; (4) strengthening the national resilience, in connection with strengthening the allied resilience.

Keywords: *transformation; adaptation; strategic HQ; Connected Forces Initiative; NATO Defence Planning Process; command; Alliance*

At strategic level, the military command of the Alliance is exercised through the *Allied Command Transformation (HQ SACT)* and the *Allied Command Operations (ACO/SHAPE)* – two commands subordinated to the *Military Committee (MC)* and to *NATO Headquarters (NATO HQ)*. While *ACO* commands and controls current NATO operations, *HQ SACT* acts for the enhancement of military capabilities and training, military effectiveness and interoperability of *NATO Command Structure (NCS)* and *NATO Force Structure (NFS)*. The two strategic commands are responsible to the *MC* for directing and conducting Alliance's military operations, within their assigned areas of competency and responsibility.

Twelve years after its establishment, *HQ SACT* is still insufficiently known and presented beyond the *NATO Command Structure* and the community of subject matter experts working in Capitals, in the strategic planning domain¹.

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¹ An Internet search using the ACT and ACO key words revealed a significant disparity in the number of returns regarding the two strategic commands, and in the mentions dedicated to the activity of the two strategic commanders (*SACT* and *SACEUR*) – on 6 November 2015, such a Google search returned 10 references to *SACT* in the first 10 pages, as opposed to 34 references to *SACEUR* in the first 5 pages.

Moreover, transformation vocabulary seems to be losing ground, while words as *adaptation* and *reassurance* are getting momentum, becoming increasingly present in official NATO press releases and internal debates². At military level, *Readiness Action Plan's (RAP)*³ implementation, reassurance and adaptation measures, becoming the focus of the current Alliance planning, feed a tendency that increases the importance given to commands in charge of leading current operations.

HQ SACT's Chief of Staff admits the insufficient notoriety of this headquarters, writing in the preface of an excellent paper published early this year: "(...) *many nations have continued to express a desire for the development of a generic reference document which might serve to increase awareness about ACT and which, more widely, might complement the broader effort of achieving a shared and common understanding of the key objectives of transformation*"⁴.

In this paper, under the title "*What is Transformation. An Introduction to ACT*", the *Transformation Network Branch (TNB)* team defines the main concepts, raises awareness about *ACT* activity and projects, and presents the toolbox this headquarters uses in order to carry out the missions assigned by the *North Atlantic Council (NAC)*.

Are all of the above indications for a decreasing role of the *HQ SACT* as a NATO strategic command? Is military transformation still relevant for the Alliance? And, within the context characterised by the unfolding crises, what national expectations can we have from the NATO HQ in charge of coordinating the transformation process?

This article suggests some answers to the questions above, building an argument that supports the following thesis: recent developments in the security environment have not diminished but increased the necessity of military transformation, consolidating the *HQ SACT's* role within the NATO Command Structure. As a result, a more active national approach in dealing with the *ACT* continues to be essential for the fulfilment of the set strategic objectives. Another purpose of the article is to raise awareness about this command and the national liaison and representation activities related to it.

² Wales Summit Declaration mentioned the word transformation only once, somehow with an indirect meaning – see relevant documents of the NATO Summit 2014, online, available at <http://www.natolibguides.info/summit>, retrieved on 6 November 2015.

³ *NATO Readiness Action Plan*, as agreed during the NATO Summit 2014.

⁴ Lieutenant General Phil Jones, ACT Chief of Staff, Foreword to *What is Transformation. An Introduction to Allied Command Transformation*, p. i. This paper is available online at http://www.ieee.es/Galerias/fichero/OtrasPublicaciones/Internacional/2015/NATO_Introduction_AlliedCommand_Transformation_Jan2015.pdf.

Before building the argument in support of the increased importance of the *HQ SACT*, a short historical review of the events would be beneficial. *HQ SACT*'s establishment was decided during the Prague Summit (2002), as proposed by the NATO Secretary General Lord George Robertson, and by the American Secretary of Defense, Hon. Donald Rumsfeld⁵. *HQ SACT* was established in 2003, in Norfolk, Virginia, USA, and has continued to be the only NATO permanent command outside Europe (the only NATO HQ in North America) since then.

Through the approved terms of reference⁶, the North Atlantic Council assigned the HQ the mission to contribute to the defence of peace, security and territorial integrity of the Alliance's member states by leading the transformation process of military structures, forces, capabilities and doctrines, at strategic level, in order to increase the military effectiveness of NATO⁷.

The goals, activities, and direction of transformation have been successively influenced by the highest level decisions taken by NATO nations. According to the information presented by the *TNB* team in the mentioned paper, during the first period of *ACT* functioning (from its establishment to the time of Lisbon Summit, 2010, when *NATO Strategic Concept* was adopted), allied nations were mainly focused on technological research and the *high-tech* development of forces, considering that information technology would lead to the creation of more capable and interoperable military capabilities⁸. As such, *HQ SACT* directed the C2 Systems' development, promoted interoperability, aiming at building *high-end* capabilities (mission network, Counter Improvised Explosive Devices – C-IED, precision weapons, and strategic lift)⁹.

After the approval of the *New Strategic Concept*, while nations became more perceptive about the limits of technology, *HQ SACT*'s focus shifted towards promoting a more balanced vision of transformation, to include, in addition to the attention set on capabilities, focusing on the unity of doctrine development, training the force structure, educating personnel, and long term planning as well¹⁰. This is the time when the *NATO Defence Planning Process (NDPP)* was enhanced, when human capital and creative thinking were becoming both ends and means in promoting military transformation¹¹.

⁵ *ACT*'s online presentation, available at <http://www.act.nato.int/headquarters-supreme-allied-commander-transformation>, retrieved on 6 November 2015.

⁶ The last review of the Terms of Reference (TOR) was completed in 2014.

⁷ *ACT*'s mission as available at <http://www.act.nato.int/mission>, retrieved on 10 November 2015.

⁸ In *What Is Transformation. An Introduction to ACT*, *op. cit.*

⁹ *Ibidem.*

¹⁰ *Ibidem.*

¹¹ *Ibidem.*

The decisions reached at the NATO Summit in Chicago (2012) led to new initiatives, increasing the value and importance of every domain assigned to the *HQ SACT* in its terms of reference – partnerships, *Smart Defence (SD)*, *Connected Forces Initiative (CFI)*, education, training and exercises¹².

In effect, the conceptual developments and successive decisions taken by the Alliance have directly determined the path of evolution for both *HQ SACT* and the military structures established in its area. During the time period 2003-2009, the *Supreme Allied Commander Transformation (SACT)* job was held by American General Officers, who acted also as commanders of the *United States Joint Force Command (US JFC)*. Admiral Edmund P. Giambastiani (US Navy – 2002-2005), General Lance L. Smith (US Air Force – 2005-2007), and General James N. Mattis (US Marine Corps – 2007-2009) were in command of ACT. Since 2009, *SACT* job was assigned to French Generals, as follows: General Stephan Abrial (Air Force, 2009-2012), General Jean-Paul Palomeros (Air Force, 2012- 2015), and the current *SACT*, General Denis Mercier (French Air Force), in command since 30 September 2015¹³.

This command went through several reorganisations and received, in December 2012, a new responsibility to direct the NATO collective training and exercises. In August 2011, the *US JFC* was disbanded, and some of its responsibilities were transferred to the *Joint Staff J7/Suffolk*. NATO *Centres of Excellence* (coordinated by the *HQ SACT*) have witnessed an incredible development (in Norfolk, the *Combined Joint Operations from the Sea Centre of Excellence – CJOS COE* was established in 2006).

As a result, the ways the Alliance progressed, highest level decisions (heads of state and government), crises and challenges the member states had to face, the security environment and even the economic, political and social context have determined, in time, major changes of the allied command structure and, implicitly, of the *ACT*.

All in all, under the circumstances described as a permanent connection between the *ACT* and the allied evolutions, why this perception of insufficient notoriety that *HQ SACT* holds? Several approaches could lead to some possible explanations to this question.

The first approach is given by the time necessary to delineate and focus the activity of the *HQ SACT*, considering the wide range of assigned domains (ranging from NATO defence planning process – *NDPP* to partnerships, from strategic

¹² *Ibidem.*

¹³ For a more detailed evolution of the *ACT*, see <http://www.act.nato.int/history-of-allied-command-transformation>.

foresight – “Futures” projects to the DOTMLPFI¹⁴ spectre of capability building). COS ACT acknowledges this perspective: “When Allied Command Transformation (ACT) was established in 2003, much effort was expended in articulating the *raison d’être* for what was often a relatively narrowly understood organisation and mission”¹⁵.

Military transformation has constituted, since its inception, a process equally complex and generating different understanding for different people involved. In effect, an understandable need to provide the necessary time in determining the mission and to make evident the plus value this HQ brings for the NCS has influenced the perception on the ACT.

Another approach refers to the fact that, naturally, current operations always divert most of the attention of any audience. It goes without saying, when referring to the interest manifested in NATO operations in the Balkans, ISAF, Ocean Shield, NTM-I (NATO Training Mission – Iraq). HQ SACT positioned itself in support of each of these operations. To mention only the ISAF, for example, HQ SACT contributed directly (*ISAF Mission Network*), or indirectly, through its subordinated commands (*Joint Force Training Centre – JFTC* in charge of pre-mission training, *Joint Analysis and Lessons Learned Centre – JALLC* in gathering and analysing the lessons learned). These contributions have been easily overshadowed by other processes such as changes in strategy, force generation, periodic mission reviews, operation plans, and issues of collateral damage and so on, which have been way more visible in debates about NATO operations.

Finally, the third approach is given by the major political significance of some of the HQ SACT’s initiatives (partnerships, *Defence Capacity Building Initiative – DCB* to be mentioned here). Public launch of those initiatives was done at the highest level (most often during summits), which drew the attention of the media and the public opinion to echelons above ACT. Once agreed by the heads of state and government, HQ SACT was issued the task to coordinate their implementation, a complex process, but developed with less public scrutiny, and less media presence.

These approaches are far from providing all the explanations regarding the current perception of both nations and public opinions on ACT. Some other reasons might also hold true, such as inadequate attention provided by the ACT to strategic communication or even internal communication, its location across the Atlantic Ocean, far from the centre of the European media attention, or the insufficient usage of the results of the strategic foresight of this HQ.

¹⁴ Doctrine, Organisation, Training, Material, Leadership, Personnel, Facilities, Interoperability.

¹⁵ LTG Phil Jones, *op. cit.*, p. i.

To take the last reason only, in terms of strategic foresight, might lead to believe that *HQ SACT* has missed the opportunity to grab the headlines since it missed the opportunity to correctly predict current crises and events unfolding in the European security environment. On the other hand, would it be right to hold the breakout of the current crises in Ukraine, Syria or Libya against the *ACT* strategic foresight activity? We believe that *ACT* could not have accurately and timely predicted these crises, since this HQ is not a specialised intelligence structure, designed to permanently survey and analyse changes and indicators in the area of interest. *ACT*'s strategic foresight analysis is oriented towards longer perspective trends and evolutions.

Moreover, could the current crises have been accurately and timely predicted? One may find many conflicting opinions on this issue, and seeking an answer to this question is beyond the purpose of our article. The less known truth is that a significant part of the analysis currently generated within the Alliance is fed by some initial studies and food for thought papers proposed by the *ACT*, before the current crises manifested.

We believe that, for their impact on NATO, the current crises have led to an enhanced role of this strategic command. As one of their first unintended consequences, these crises have revitalised the Alliance's strategic planning. Even before the Ukrainian crisis, NATO was in a process of adopting a new posture, shifting from an operational engagement posture (Afghanistan) towards a readiness posture, a contingency approach that requests flexible, robust, interoperable and operation-ready forces¹⁶. This process has been accelerated recently. In this process, *ACT* is perfectly positioned to analyse the trends in the security environment, to envisage response options for future challenges, propose the necessary capabilities and lead their development.

ACT's role in presenting *Bi-SC*¹⁷ analysis and its contribution to the Allied planning has increased. In the very important field of the last summit's decisions implementation, we are witnessing an intensified collaboration between the *ACT* and *ACO* (*Bi-SC* collaboration). All pieces of military advice submitted to the *NAC* or to the *MC* in the process of operationalising the summit decisions have been products of the *Bi-SC* collaboration. And, for a consistent part of the analysis, *ACT* has the coordinating role.

A second significant effect is how Russian actions in Ukraine and the whole instability arch created in the NATO southern flank decisively influenced

¹⁶ Foreword to *What is Transformation*, *op. cit.*, p. iii.

¹⁷ *Bi Strategic Commands* – activity carried out in common by the two strategic commands, *ACT* and *ACO*.

the NATO Summit agenda in 2014. Given its assigned task, to “*prepare the Alliance for facing future challenges*”¹⁸, the Allied Command Transformation contributed to the summit’s agenda providing *Strategic Military Advice* on a wide range of current NATO concerns. In the debate preceding the summit, *ACT* introduced major strategic engagement themes that were reflected in the final decisions of the summit¹⁹.

There is one essential conclusion that can be drawn by analysing the project portfolio of this HQ, before and after the Wales Summit. *ACT* projects promoted for the previous summit (Chicago, 2012) retained validity (*Connected Forces Initiative* – *CFI* being a good example). Moreover, these initiatives have become instrumental in implementing NATO Summit 2014 decisions, contributing to operationalising the *RAP* and building new *Capability Packages (CP)*. The most significant here are “*Futures*” projects, cyber defence initiatives, maritime security, partnerships and collective security.

As part of the *CFI*, nations have supported and endorsed *ACT*’s proposals regarding NATO training, education and exercises, partners’ engagement and technological aspects of the *CFI*. Among the “*Futures*” projects engineered by the *ACT*, the *Strategic Foresight Analysis (SFA)* is currently used in configuring the security trends, while the *Framework for Future Alliance Operations (FFAO)* has become an intrinsic part of the *NATO Defence Planning Process*. *ACT*’s proposals on cyber defence contribute to the enhancement of NATO policy in this area, feeding the debate regarding assistance provided to the allies, exchange of information and good practices.

In terms of maritime security, the work done in the *ACT* has underlined the role of naval forces in providing the necessary NATO responsiveness to new security challenges, determining the way NATO’s naval power is to be projected. These concepts open the road towards future approaches regarding NATO’s training and exercises policy in the maritime domain, as well as towards a more efficient cooperation between NATO and the EU in the maritime security field. Promoting partnerships at the same time, *ACT* emphasises the importance of cooperation with non-NATO countries, the role of the *Security Capacity Building*, as well as the need for support to the “*unique and essential*” NATO-EU partnership.

¹⁸ *ACT*’s presentation, online, available at <http://www.act.nato.int/mission>, retrieved on 9 November 2015.

¹⁹ The most important are the *NATO Defence Planning Process (NDPP)*, Transatlantic Bond, *Federated Mission Network (FMN) Concept*, interoperability and standardisation, *Defence Capacity Building (DCB)*, *Smart Defence (SD)*, Lessons learned in 20 years of NATO operations.

In the current circumstances, when a new *NDPP* cycle is initiated, the *ACT* is found in lead of the second step, to determine capability requirements. This adds to the significance of the many projects launched by the *ACT* (*SFA*, *FFAO*, *SD*, *CFI*).

Last but not least, *ACT* subordinates important entities in the NATO command structure, such as the *Joint Warfare Centre* (*JWC*, Stavanger, Norway), the *Joint Force Training Centre* (*JFTC*, in Bydgoszcz, Poland), the *Joint Analysis and Lessons Learned Centre* (*JALLC*, in Monsanto, Portugal). It maintains a close cooperation with the Pentagon, the US military institutions in the area, as well as the NATO accredited centres of excellence, academia and different think tanks in Europe and North America²⁰.

As far as the second part of our argument, related to the vocabulary of transformation, is concerned, a deeper analysis would reveal the fact that the absence of the word *transformation* in the last summit's documents is only apparent. It might be true that the expression *military transformation* is briefly mentioned in only one phrase of the Declaration by the Heads of State and Government, but the NATO Summit 2014 was not a summit about transformation. It was a summit about NATO solidarity, which reinvigorated Article 5. Reassurance measures are obviously and naturally considered, given the concerns expressed by the Eastern allies. By comparison, we can mention that the previous summit approved the NATO Forces 2020 project, which continues to remain a relevant and powerful transformational tool for the Alliance²¹.

Moreover, we believe it should not be a mistake to extend the meaning of the concept of *transformation*, to encompass other measures too. It is because, ultimately, reassurance measures are nothing but a particularity of transformation, to include a short term answer to a real threat. In the long run, the Alliance must go beyond adaptation and *RAP* implementation, and the *ACT* should support it. Even if it involves *RAP*, military adaptation goes beyond this plan, including the pledge for defence resources and investments, the strong engagement to eliminate critical capabilities shortfalls, to counter hybrid strategy as well as to ensure cyber defence. All of these are domains where *ACT* is qualified to lead.

While it explains the increasing role of the *ACT* as a strategic command, the argument above is also a pledge for an effective and strong national relationship

²⁰ *ACT's* presentation, *op. cit.*

²¹ See relevant documents of the Chicago Summit, 2012, to include the *Declaration by the Heads of State and Government*, available at http://www.nato.int/cps/en/natolive/official_texts_87593.htm?mode=press+release, and also the *Declaration on Defence Capabilities. Towards NATO Forces 2020*, available at http://www.nato.int/cps/en/natolive/official_texts_87594.htm, retrieved on 6 November 2015.

with this HQ. The core is the premise that this relationship is essential in fulfilling some national objectives. What does it mean?

Firstly, achieving the objectives of the recently approved National Security Strategy²² means strategic planning developed in accordance with national security interests, adapted to the context of allied evolutions. *ACT* is perfectly positioned to support Romania in achieving at least four strategic objectives: (1) to lead the military transformation and capability development; (2) to increase the capacity of operational commanders to conduct future military operations according to the level of ambition; (3) to support the allied effort in influencing the security environment; (4) to strengthen the national resilience, within the process of increasing the resilience of the Alliance²³.

The first objective can be achieved through a close cooperation with the *ACT* in the *NDPP* process, in coordinating the NATO *Security Investment Programmes (NSIP)*, and by making use of the *ACT* relationship with industry, its role in training and education, strategic communication and comprehensive approach. The second objective implies coordination of the national training and exercises with the *NCS&NFS* collective training led by the *ACT*, promotion of the interoperability initiatives and coordination of the lessons learned process. The support for the allied effort of influencing the security environment means, in fact, coordinated strategic analysis, continued cooperation with academia, development of partnerships and support in implementing the *Defence Capacity Building Initiative (DCB)*.

Increasing national resilience²⁴ is, perhaps, a new focus area, well justified by the current security environment. It means optimising the decision-making processes, promoting the comprehensive approach at both national and allied levels, and maintaining a strong transatlantic bond.

²² *Romania's National Defence Strategy for the period 2015-2018*, online, available at <http://www.presidency.ro/static/Strategia%20Nationala%20de%20Aparare%20a%20Tarii.pdf>, retrieved on 9 November 2015.

²³ These are also strategic objectives for the *ACT*. For further details see the *ACT paper*, online, available at <http://www.act.nato.int/images/stories/brochure.pdf>, retrieved on 6 November 2015.

²⁴ Resilience is a concept relatively new, which requires supplementary explanations. Without getting into details that exceed the purpose of this article, we can make an analogy with the DEX definition – *Resilience – the characteristic of a metal and alloy to resist shocks*, and suggest a military definition for resilience – the characteristic of a military force to absorb the first strike while retaining enough resources to strike back decisively. Expanding this thinking to a nation's level, resilience could be interpreted as the ability of a state's institutions to react, within a comprehensive approach, to resist the destabilising pressures coming from a hybrid strategy. Resilience concept needs further explorations. For more opinions on NATO resilience see also the Atlantic Council, *The New NATO Strategy – Generation Stability*, online, available at http://www.atlanticcouncil.org/images/publications/NATOs_new_strategy_web.pdf, retrieved on 9 November 2015.

Romania presents SACT with suggestions and comments in the process of developing the *Bi-SC* analysis, and must continue to do that. *ACT* is the main path for getting projects included in the commonly funded capability packages (*NSIP*), and also the path to increasing visibility of the national force training efforts, by linking NATO and national exercises. Current national contribution to NATO partnerships, where Romania has assumed the host nation role for some of the *ACT* directed activities, is also a way of increased coordination. In return, *ACT* could provide country and mobile training teams, in support of the General Staff, to help explore planning domains and prepare the personnel working in these domains (i.e. concept development and experimentation, centres of excellence – CD&E, COE).

From a practical perspective, increased effort in cooperation with the *ACT* leads to enhanced quality strategic planning, better regulation of some important areas, such as lessons learned, concept development and experimentation, strategic thinking and planning, designing of a domestic defence planning process (that adopts and internalises the *NDPP* requirements).

Towards these goals, the *National Liaison Representation (NLR ACT)*, as an entity established in Norfolk, may assume a facilitating role. *NLR ACT*'s competencies mirror the *ACT*'s fields of work, and so it contributes to achieving a direct communication among *ACT*, General Staff, MOD's structures and component commands of the Romanian Armed Forces (SMCFA), as well as providing information to national authorities in the field of NATO transformation. This office is also in charge of maintaining effective relationships with *ACT* as NATO entity, *Joint Staff J7/USA*) and *CJOS COE*, of presenting and supporting the national views and proposals, and of informing the *ACT* about the Romanian Armed Forces' transformation goals and the way they are being achieved²⁵.

To conclude, *ACT*'s view about transformation as the *golden thread that unites our past with present and the future*²⁶ becomes now more important than ever. And so does the following advice: "*We must assess, learn from, and capitalise on our past, and we must constantly adapt in order to ensure the success of current operations. We must also help to prepare for an uncertain future through a candid assessment of our strengths and shortfalls, a strong commitment to fulfil our agreed level of ambition, and the development of a shared sense of the future*"²⁷.

²⁵ *Romanian Government's Decision 769 from 14 May 2004 regarding the establishment of the National Liaison Representation Office to the Allied Command Transformation*, as published in the *Monitorul Oficial* no. 469 from 25 May 2004. See also *RNL ACT's presentation*, online, available at <http://smg.mapn.ro/reprezentante/rcat.php>.

²⁶ LTG Phil Jones, *op. cit.*, p. i.

²⁷ *Ibidem*.

We can achieve all of the above only by strengthening our cooperation with the *HQ SACT*. Eventually, the essential return of this cooperation will be consolidation of Romania's strategic posture within NATO.

Abbreviations List

ACO (SHAPE)	Allied Command Operations (Supreme Headquarters Allied Powers Europe)
ACT	Allied Command Transformation
Bi-SC	Bi Strategic Commands
CD&E	Concept Development and Experimentation
CFI	Connected Forces Initiative
CJOS COE	Combined Joint Operations from the Sea Centre of Excellence
COE	Centre of Excellence
COS ACT	Chief of Staff, Allied Command Transformation
CP	Capability Package
DCB	Defence Capacity Building
DOTMLPFI	Doctrine, Organisation, Training, Materiel, Leadership, Personnel, Facilities, Interoperability
FFAO	Framework for Future Alliance Operations
ISAF	International Security Assistance Force Afghanistan
JALLC	Joint Allied Lessons Learned Centre
JFT	Joint Force Trainer
JFTC	Joint Force Training Centre
JWC	Joint Warfare Centre
MC	Military Committee
NAC	North Atlantic Council
NATO HQ	North Atlantic Treaty Organisation Headquarters
NCS	NATO Command Structure
NDPP	NATO Defence Planning Process
NFS	NATO Force Structure
NSIP	NATO Security Investment Programmes
NTM-I	NATO Training Mission – Iraq
RAP	Readiness Action Plan
NLR ACT	National Liaison Representation – Allied Command Transformation
SACT	Supreme Allied Commander Transformation
SD	Smart Defence
SFA	Strategic Foresight Analysis
SMCFA	National Component Commanders (Army, Air Force, Navy)
SMG	Romanian General Staff
TNB	Transformation Network Branch
US JFC	United States Joint Force Command

LEADERSHIP AND THE MILITARY ORGANISATION

Brigadier General (r.) Dr Petru TOADER

The author discusses the topic of leadership in the context of the military organisation. Assuming that leadership is a reciprocal, transactional and transformational process, the author shows that the role of the leader in the command and control process continues to be essential. However, the way authority is exercised should be adapted to the current reality, considering that combat actions pertain to tactical level more than to operational or strategic ones. It is not about diluting command and control or about renouncing the basic responsibilities of the leader, but about their proper hierarchical distribution. Therefore, it is required to change the mentality related to leadership, by decentralising command: at strategic level – clear objectives, at tactical level – more freedom of action. That is why those appointed to military organisations command should be both commanders and leaders.

Keywords: *leadership; military organisation; command and control; lessons learned*

Motto:

“Leadership is a matter of intelligence, trustworthiness, humaneness, courage, and discipline ... Reliance on intelligence alone results in rebelliousness. Exercise of humaneness alone results in weakness. Fixation on trust results in folly. Dependence on the strength of courage results in violence. Excessive discipline and sternness in command result in cruelty. When one has all five virtues together, each appropriate to its function, then one can be a leader”.

Sun Tzu

“There are three kinds of intelligence: one kind understands things for itself, the other appreciates what others can understand, the third understands neither for itself nor through others. This first kind is excellent, the second good, and the third kind useless”.

Machiavelli

When we use the term *leadership*, we usually relate it to the term *drive*. *Leadership* is a word of Anglo-Saxon origin, which means *path* or *way forward* requiring the ability to decide the direction: identifying the next step and then taking others with you!

Leadership is more than the command given by the legal authority or the management

competences. Command refers to hierarchy, order, using plans, structures, monitoring results. Command entails authority, accountability and the duty to take action. It is the authority a person is invested with to lead, direct, coordinate and control a military structure in all its dimensions and it operates through hierarchy,

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which gives the particular person power and control capacity. Authority represents the right and liberty to use the power a commander is invested with. Responsibility is individual. It can be shared with others but it does not diminish the obligation to be personally accountable, as the leader is in a position of authority, namely the power recognised by those on whom the leader exercises legitimate authority. Therefore, the authority and responsibility to make decisions can be delegated by the commander to his subordinates, according to their specific activity areas, but the commander has overall responsibility for the entire structure. There are three types of authority:

- *position-related authority*: one has a superior position in a social or organisational hierarchy and authority over the actions of the others, within well-established limits;
- *personality-related authority*: a subjective type of authority some persons have (charisma);
- *knowledge-related authority*: derives from the technical or professional knowledge (one who knows has authority).

The only fact that a person is in a position of authority does not mean that person is automatically a leader. One can be appointed commander but if that person is more preoccupied with managing the organisation structures as well as with “*technical*” issues than with subordinates, he/she is not a leader until the appointment is not ratified in the hearts and minds of subordinates.

People do not follow titles but people; the title/position does not make one a leader. One cannot be a leader if he/she is not followed by other people. There is a direct relation between *leadership* and the ability to influence people’s behaviour.

Leadership is not a job, but a way of being. Military leaders should consider themselves the representatives of a profession, not the members of an association whose main goal is to take care of them. When a subordinate decides if he/she respects someone as a leader, he/she does not consider the legal authority one has as a commander but observes one’s action to know who that person really is. He/She uses observation to decide if one is an honourable and trustworthy leader or a person who serves himself/herself and uses authority wrongly to be considered successful and promoted.

Being a commander only, without being also a leader, means relying exclusively on a traditional conception, namely upside down management, which may result in barriers between the decision-makers and the persons that must put the adopted decisions into practice, in limiting the collaboration possibilities as well as the participation in different groups or bodies within an organisation or institution.

The way human relationships are managed makes the difference between the manager and the leader. A powerful leader who does not have the qualities required for a commander may generate chaos, and a powerful commander who does not have the qualities required for a leader may drive the organisation into crisis situations.

Why are leadership qualities necessary when a commander is legally invested with authority, which gives him/her power and control capacity?

Although the military leader does his/her job by imposing certain standards and not by being charismatic and charming, and the leader is decisive, effective, emotionless, confident, he/she should consider three essential elements of leadership: *group*, *influence* and *goal*.

Taking into account these elements, interaction between people generates: intersubjective relations (communication, knowledge, affection, subordination, dependency); group phenomena (cooperation, competition, conflict, solidarity, cohesion, subgroup); collective mental structures (attitudes, opinions, mentalities, prejudices), which positively or negatively influence the group activity or outcomes.

Significant challenges related to the military leader and the military organisational environment can be identified as follows:

- *conflict and ambiguity*;
- *job challenge*;
- *importance and variety of tasks*;
- *leader facilitation and support*;
- *work group cooperation*;
- *friendliness and warmth*;
- *professional and organisational esprit*;
- *job standards*;
- *work satisfaction* (defined, in turn, by the following sub-factors: participation in decision-making; autonomy, power and control; relationships with co-workers; relationships with subordinates; relationships with superiors; wage and benefits).

The essence of *leadership* is not the leader, the work done by only one person. It can be defined as the *interaction* between the people involved in a process (both leaders and subordinates), as the *collaboration* between the members of the group.

Therefore, the role of the one who leads should be defined by the following aspects:

- the approach based on *qualities*/what a leader should be;
- the approach based on the *situation*/what a leader should know;
- the approach based on the *group* or *function*/what a leader should do.

Leadership styles are unequally productive, depending on the particularities of the situation in which they are put in practice: some styles are appropriate in certain situations, while other styles are appropriate in different situations; in the first phase, when the group knits together, the authoritarian style can be more efficient than the participative one, while in another phase, when the group develops, when its members get to know each other and to cooperate, the participative style can be more efficient; the balanced leadership style, focused on both job duties and human issues, results in stimulating and motivating subordinates, boosting confidence, respecting rights and opinions, as well as in controlling whether the subordinate group or organisation objectives are met; the key to success is represented by the leader flexibility and mobility: problems cannot be resolved by moving leaders from one group to another to ensure the correspondence between the leadership style and the particularities of a situation.

Therefore, there can be:

- 1) valuable leaders, having good intentions and a positive leadership style;
- 2) valuable leaders who, because they have no style, are unsupported and disapproved by subordinates;
- 3) mediocre or incapable leaders who, because they have style, are accepted and supported by subordinates;
- 4) mediocre leaders who, because they have no style, are totally rejected by subordinates.

Military organisations can be paralysed because of own leadership mechanisms as follows:

- maintenance of an authoritarian system (of command and control), based on a rigid hierarchy, incapable of reacting to changes, which may result in establishing an uncomfortable environment, based on stress, incertitude and hopelessness, in diminishing the actional capacity and the identification with the organisation objectives;
- leaders are increasingly preoccupied with identifying more effective mechanisms for the work organisation, planning and evaluation, without developing the voluntary commitment of the organisation members to meeting the set objectives;
- focus is set on transactional leadership, which simply means an advantageous exchange, based on negotiation, being a contractual relationship in which money is offered in exchange of the job done; beyond transaction, there is no reciprocal commitment to meeting the objectives;
- vagueness in defining the command and control system results in the existence of some structures having parallel duties as well as in excessive and ineffective control;

- improper hierarchical distribution of the basic responsibilities of the command team, depending on the level on which command is exercised, may result in insufficiently prepared decisions, which do not allow the necessary coherence and sufficient time for preparation and execution;
- multiple policies, procedures, regulations and rules as well as excessive control paralyse creativity and initiative.

The role of the leader in the command and control process continues to be essential. However, the way authority is exercised should be adapted to the current reality, considering that combat actions (especially those specific to crisis management) pertain to tactical level more than to operational or strategic ones.

It is not about diluting command and control or about renouncing the basic responsibilities of the leader, but about their proper hierarchical distribution, depending on the level they are exercised. In this regard, General Frederick Kroesen, veteran of the World War and of the Korean War, wrote in *Army Magazine*, in 2010: *“In Vietnam, many low-level commanders were subject to a hornet’s nest of helicopters carrying higher commanders calling for information, offering advice, and generally interfering with what squad leaders and platoon leaders and company commanders were trying to do”*.

Such permanent interference did nothing but diminishing the combat capacity and reducing the low-level commanders opportunities to develop their decision-making ability under pressure. Therefore, it is required to change the mentality related to *leadership*, which is based on coercive and authoritarian principles, by decentralising command: at strategic level – clear objectives, at tactical level – more freedom of action; delegation of authority up to the lowest levels stimulates accountability, initiative and creativity.

That is why those appointed to military organisations command should be both commanders and leaders. It entails:

- creating a vision of the desired result, a hope around which people can gather, as well as strategies (leader);
- ability to assess people and risks, as well as to find the right people to implement the strategies – showing people they are capable of meeting the goal as well as the way, without doing their job (leader);
- understanding the concept, mission, priorities and allocating resources (commander);
- exercising authority in order to decide upon a course of action, transmitting intentions to the subordinates, directing them to implement, planning, organising, commanding and controlling the subordinates efforts, continually reassessing the situation (commander);

- implementing decisions by both command levers (commander) and inspiration (leader);
- implementation networks through well-organised hierarchical structures (commander) – a complex correlation network (leader);
- ability to “read”, de-dramatise, settle problems, to empathise in order to better understand and guide other people (leader) – delegation of authority to achieve the vision (leader);
- having the sense of urgency – changes on the spot and rapidly, remaining able to arbitrate (leader);
- varying style and behaving differently depending on the situation, being able to discern the moments when it is appropriate to be permissive or, on the contrary, authoritative, when there is a threat that has to be faced (leader);
- alternating listening, tolerance and authority without compromise, combining participation, consensus and authoritarian decisions on important problems (leader).

Leadership is a *reciprocal, transactional and transformational process*, entailing influence and interaction, through which an individual or group succeeds in determining the other members of the group to voluntarily contribute to achieving the group tasks and objectives, for certain periods of time, and in a particular organisational context, conceptualised in terms of costs and benefits. *Military leadership* represents the projection of the leader personality and character, the mixture of personal example, persuasion and constraint to determine people to do what you require them to do. It means exercising the influence of an authority that seeks to mould the behaviour of other people (individuals or groups). Moreover, it ensures the ability and power to gather people and orient them towards a common goal, based on the character of the leader who inspires trust; it is the result of the interaction within an organisation – being distributed between different members of a team, depending on the aptitudes, motivations, and actions, so that each individual can capitalise on personal qualities when required.

Briefly, it can be defined as: the art of influencing a group of people to implement a certain course of action, the art of controlling them, of managing them, as well as of obtaining the best results, personal management being an important part of leadership.

A leader personifies those qualities and traits that are typical to the group he/she belongs to – the qualities and traits that are typical to a performer in his/her area, but subordinates should see that the leader is like them but also different (better) in essential aspects: self-confidence and enthusiasm; ability to make decisions and initiative; courage to accept responsibility; determination;

calmness in crisis situations; sense of duty, loyalty, sense of justice, personal example, physical fitness; human element – courage before defeat, inspiration in moments of apathy, mental clarity in moments of confusion.

It is improbable that the leader who dominates and encourages a group towards a goal that is not agreed by the group to keep *leadership*.

Transformational leader focuses on the human resource and influences competences, personality traits, motivations; centres on structuring, managing and transforming the situation, and has a well-established position in the relationship with subordinates. Such leaders firstly use the *psychological contract* to create the *affective commitment*.

The mentioned characteristics can be synthesised in the following rules:

➤ *survival begins with understanding the environment in which you operate and use resources*: identify your competitors; examine external conditions; examine the leaders and the system; identify the mission level; assess cohesion and own power; compare to your competitors; look for friends; prevent unnecessary conflicts; seize opportunities; eliminate uncertainties; determine restrictions; minimise errors; minimise challenges;

➤ *be an expert in your job*: mastering the knowledge and procedures is a necessity in both functional and ethical terms for the success of a mission, and those who are subordinated to such a leader are less at risk than if the leader has questionable competence; moreover, expertise is a necessity for the leaders at tactical and operational levels because they come into direct contact with the methods and techniques of their own specialty; at higher echelons, specialised competence is less important, as here there are necessary the knowledge and skills that have strategic value, related to the functioning of the systems and the organisation as a whole as well as to its relations with the society in which it exists;

➤ *put yourself in the shoes and mind of those you try to understand* – develop your ability to see what your subordinates want, when they want it, and what prevents them from obtaining what they want;

➤ *get to know your subordinates and take care of them* – create a human environment: we should know the human nature and it is very important for us to really care for the people around us; leadership is based on knowing the human nature, that is why each individual should be known in terms of personality, temperament, strengths and weaknesses, education, friends, the kind of life previously led; to be listened to, empathise with those you talk to; convince people that they are part of an organisation that takes care of them;

➤ *develop the ability to inspire others to obey voluntarily*, which entails providing people with the intellectual and moral strength to take risks or to persevere despite the danger, obstacles and fear; a commander who does not spend at least 50%

of the time managing people and among people is not a good leader; do not attempt to lead people by only controlling them, but by sharing the burden, providing the subordinates with the opportunity to come up with new ideas, and by implementing the feedback culture;

➤ *do not raise your voice*, as authority is not a problem of decibels; *adapt your emotions* to those of the subordinates and create an emotional atmosphere among the members of the team, so that its activity can be more effective;

➤ *prepare people to seize opportunities not to take action in order to avoid making mistakes*;

➤ *establish a correct organisational structure* if you want things go well: strike a balance between the whole and the parts: the whole does not have to do what the parts can very well do for themselves; leadership abilities cannot get materialised in action without an effective organisational structure and a chain of command able to meet its initiatives; weak leaders and recalcitrant subordinates trigger reciprocal mistrust, as they are not motivated for the common cause or their personal interests are too different to serve the same goals;

➤ *present the right idea at the right time to the right people*: perfect timing depending on the context is essential for a leader; it entails the ability and skills to generate the environment in which the most valuable people can capitalise on their aptitudes, remaining committed to the goals of the organisation, coordinating and integrating their efforts;

➤ *identify and be responsible for the group training needs*: it entails the ability to teach the others to perceive a situation as it really is to respond properly, namely to act to meet the organisation goals – establish: accountability limits – Who is accountable for what?; limits related to duties – Who does what?; limits related to interests – What are we interested in?; limits related to identity – Who is like us and who is different?

➤ *dare to be nonconformist*: encourage people to think outside the box, to experiment and to take risks;

➤ *be accountable for own decisions*: leadership is exercised in the front line, before everybody: search for methods to guide your organisation; when things do not go well, as it surely happens, do not blame others; analyse the situation, take action, and face another challenge;

➤ *be a good model for your subordinates*: they should not only hear but also see what they have to do; the best type of *leadership* is personal example; “*Let us do it*” is a better command than “*Go*”; people observe their leaders, they pay attention to the inconsistencies between their actions and declarations, that is why a honest review of a decision does not undermine the leader authority and credibility: the effective leader should have the ability to show how he is and what the values

in which he/she believes are, as he/she depends on the people availability to capitalise on their abilities and skills in the interest of the organisation;

➤ *communicate the possible effects of your decisions to the team* so that the members of the team can assume, in turn, the success/failure – irresolute leaders cause hesitation, lack of trust, confusion; danger arises when the leader overestimates the power of own vision, presupposes that individual vision is so logical and convincing that each individual should accept it and work to meet it – such attitude entails that contradictory opinions are inappropriate, and the leader vision and strategy are promoted aggressively, which may result in failing to align the people with the leader strategy and vision;

➤ *be ready to assume failure* when it is the result of your risky decisions; it is better to assume responsibility when things do not go well than to lay the blame on others, a situation when the leader ability to persuade would be outrun by the people refusal to follow him/her;

➤ *do not let problems unresolved*: involve the team in analysing the factors that have led to failure as well as in correcting the situation, capitalise on opinions, encourage risk taking, support the ideas of the team, support the effort of the members qualified for different problems;

➤ *use the team in accordance with its capabilities*; any team or unit has capabilities and limits, and the commander should know what unrealistic or impossible tasks are;

➤ *create teams*: organisational structure should be in accordance with the group character and capabilities; achieving objective organisational integrity depends on achieving subjective organisational unity – unification cannot be achieved by simply imposing it, but by the leadership moral and intellectual character; commanders should equally motivate the members of a group to make them act in harmony; if some of them are very enthusiastic while others are cynical and recalcitrant, the group energy cannot be focused properly and released efficiently;

➤ *develop selective amnesia* – do not let the excellent opinion of yourself get too close to the position you fill so that if the position collapses the opinion of yourself gets low implicitly;

➤ *capitalise on own failures* – failed promotions, unchallenging jobs, personal traumas, in order to analyse yourself; courage and sense of humour are two key virtues; the leader self-confidence should stem from the realistic knowledge of own strengths and weaknesses, from the availability to receive feedback, now matter how uncomfortable such an experience can be;

➤ *stay in touch with real life* – people who work on site are closest to the problem and that is why true wisdom is there; do not forget old friends as they keep you abreast of what happens “outside”;

➤ *share power with other people* – plans do not accomplish actual work, people are those who do the physical work; be polite and kind to the people around as their devotion can be immense; be careful and firm with collaborators, beware of those who believe they can do your job better – if there are such people it is a sign that you are not at the top;

➤ *look for ways to help the organisation develop*, and when things do not go well do not look for someone to blame for it, look for solutions; the leader should guide the others in planning problems resolution as well as in creating opportunities, helping people to see alternative ways to achieve the desired results and suggesting the way best directions can be assessed;

➤ *learn when you should ignore advisers* – experts often provide more pieces of information than judgement; consult with those who know the situation as not all voices should be considered equal; the ability to have intelligent and efficient discussions gets lower as the number of people who take part in a discussion gets higher;

➤ *beware of your personal feelings* as they alter correct analysis; take time to be quiet and meditate; be Cartesian but do not neglect the irrational power; subject to over-information and over-misinformation, we often reason in terms of pre-digested emotions; the essence of *leadership*, the centre of gravity of any tactical action is the situational adaptation; the ability to adapt to changes allows the leader to remain unperturbed amid chaotic changes, the actions and measures taken by the leader being an objective response to the existing situation; uninfluenced by subjective feelings and by time pressure, the leader can focus mental energy on essential tasks, without being affected by the surrounding agitation;

➤ *be as independent as you can*, as the more desires and needs you have the more you depend on them; be in good physical and mental shape, have nerves of steel or better pretend you have none;

➤ *take breaks and relax*;

➤ *it is vital to know when you should renounce* – do not get anchored in fixed ideas, fight when you should fight but be rational and retreat when necessary.

Each group and organisation has own specific, distinct, personality and culture. Groups and organisations are unique, but they share three categories of common requirements pertaining to the *task*, *team* and *individual*.

Leadership exists at three main levels (according to John Adair): *strategic*, *operational* and *team* – the secret is excellence in *leadership* at all three levels; that is why the strategic leader duty is to develop *leadership* at all levels – the existence of a strategic leader who acts alone is not a solution to the problem:

- *team leader*: the leader of a team consisting of 10-20 people having clearly defined tasks – team leadership;

- *operational leader*: the leader of one of the main components of the organisation, who subordinates several team leaders – being a leader of leaders;
- *strategic leader*: the leader of the entire organisation, who personally directs several operational leaders – being responsible for the entire organisation.

A person can become a strategic leader after being a team leader and then an operational leader – a person does not cease to be a team or operational leader when he/she becomes a strategic leader, as the particular person has to be able to think strategically of what should be done, to establish a team at the top of the organisation, as well as to provide tactical advice regarding the way of action. Any organisation successful functioning depends on the existence of effective leaders at the three *leadership* levels:

- it is useless to have a good strategic leader if the organisation is not effective at the team and operational level;
- none of the levels is superior in terms of importance – they differ in terms of responsibility but they are equal in terms of their value.

If we analyse *leadership* without considering integrity, then the term *leader* becomes valueless, and a culture that does not value integrity in practice is a hostile environment for the training of true leaders. Such type of culture generates non-leaders or toxic leaders, who do not relate to any standard of excellence.

When the process by which military leaders are appointed and maintained in the position misses integrity, losses extend beyond the local effects of their activity, and the power of military leaders to achieve tasks effectively begins to weaken.

Lesson learned: when standards are not maintained rigorously and lack of performance is allowed at the leader level, the effect is the use of only part of the organisation's potential, as well as the atrophy of the leadership capacities. The result is that ineffective leaders eliminate the good ones, and mediocrity is institutionalised very fast.

If you want to get maximum results in your work, avoid, when possible, the situations below, characteristic of a problematic leader who: blames other people; has no team spirit; feels safe and happy; does not understand people; is not organised; gets often angry; assumes no risk; has a defensive and uncertain attitude; has no imagination; remains inflexible; opposes change.

*

Leadership Lessons Dating Back to Ancient Times

1. Pillars of good leadership – Sun Bin: “*Knowledge, trust inspiration, loyalty, humaneness, righteousness, courage, bravery and strictness*”.

Commanders shortcomings and weaknesses: *“the fact that they consider themselves capable of doing what they are incapable of doing, arrogance, ambition, greed, impulsiveness, sluggishness, cowardice, weakness, lack of self-confidence, indecision, inconsistency, laziness, addiction to vices, selfishness, disobedience”*.

Sun Tzu – five dangers for military leaders: *“Five dangerous faults that may affect a general: recklessness, which leads to destruction; cowardice, which leads to capture; a hasty temper, which can be provoked by insults; a delicacy of honour which is sensitive to shame; over-solicitude for his men, which exposes him to worry and trouble. When an army is overthrown and its leader slain, the cause will surely be found among these five dangerous faults”*.

Sun Tzu – *“To lead an army, first, responsibilities have to be assigned to commanders and their deputies and the strength of different formations has to be established. The best method, when one has subordinates, is to use the miser and the fool, the sage and the brave, and assign each the appropriate task. The brave can fight, the prudent can defend, the sage can provide advice. Therefore no gift is wasted”*.

2. Sun Bin – *“Be calm and serene, gentle and moderate. Be generous, not contentious; be openhearted and even-minded. Treat people correctly. Do not give arbitrary approval, yet do not refuse of mere contrariness. Arbitrary approval means loss of discipline, while refusal means shutting off. When you are flexible and calm, respectful and serious, strong yet yielding, tolerant yet firm, this is where the way arises; if you are lazy even when you see there is good to be done, when you are hesitant even though the time is right, if you persist in something knowing it is wrong, this is where the way halts. Look with the eyes of the whole world, and there is nothing you will not see. Listen with the ears of the whole world, and there is nothing you will not hear. Think with the minds of the whole land, and there will be nothing you do not know”*.

Sun Tzu – *“If officers are not severely trained, they will be anxious and hesitant on the battlefield; if generals do not have strong experience, they will surrender to the enemy”*.

3. Sun Tzu – *“It is the business of a general to be quiet and thus ensure depth in deliberation; impartial and upright, and thus keep a good management”*. *“Do not let anything to seduce you. To face confusion with self-confidence and noise with calmness means to master your heart”*.

Sun Tzu invites generals to listen to, to watch, to analyse, to weigh, to examine, to discern so that the warfare actions and tasks can be based on knowledge and not on the belief that desires are in compliance with reality, as well on hasty and thoughtless action.

4. Sun Tzu – *“If soldiers are punished before a personal attachment to the leadership is formed, they will not submit, and if they do not submit they are hard to employ”*.

If punishments are not executed after personal attachment has been established with the soldiers, then they cannot be employed. Therefore direct them through cultural arts, unify them through martial arts; this means certain victory”.

5. Sun Tzu – *“There are five causes that lead an army to failure. They are: flight, insubordination, collapse, disorganisation and rout. None of these disasters can be attributed to natural and geographical causes, but to the fault of the general. Terrain conditions being equal, if a force attacks one ten times its size, the result is flight. When the soldiers are strong and officers weak, the army is insubordinate. When the officers are valiant and the soldiers ineffective, the army will fall. When the higher officers are angry and insubordinate, and on encountering the enemy rush to battle on their own account from a feeling of resentment and the commander-in-chief is ignorant of their abilities, the result is collapse. When the general is incompetent and has little authority, when his troops are mismanaged, when the relationship between the officers and men is strained, and when the troops formations are slovenly, the result is disorganisation. When a general unable to estimate the enemy’s strength uses a small force to engage a larger one, the result is riot”.*

Sun Tzu – *“If a commander is wise, he can grasp the change of situation and act accordingly. If he is courageous, he win victories seizing the moment without hesitation. If he is fair, his subordinates know exactly what rewards and punishments they deserve. If he is good-natured, he respects his fellow men, understands their feelings and values their work and effort. If he is severe, his troops are disciplined, as they take fright and they are afraid of punishment”.*

6. Zhuge Liang – *“Do not turn your face from the loyal ones because of the stratagems of those who are sly but traitors. Do not sit before your soldiers sit, do not eat before your soldiers eat. Endure the same cold and heat as your soldiers; share your hardships and pleasures with them. Know sweetness and bitterness exactly as your soldiers know them; assume the same risks as they do. It is only then that your soldiers strive hard to make possible to destroy the enemy”.*

7. *“When the commander considers the one that is popular as valuable and the one that is unpopular valueless, then those who have many partisans progress and those who have few partisans fall behind. If it is true, scammers will be everywhere, leaving behind those valuable; loyal administrators will be removed for imaginary evil, while traitorous bureaucrats will assume ranks putting themselves in a false light”.*

English version by
 **Diana Cristiana LUPU**

FUSION OF DIGITAL ELEVATION MODELS OBTAINED FROM DIFFERENT DATA SOURCES

BEng Florentin BODA

The growth of military missions efficiency could be achieved by the integration of Geographic Information Systems in stage of AOI analyses. Whichever type of missions we talk about, all these applications are based on elevation data – Digital Terrain Model (DTM) or Digital Surface Model (DSM). The results of geospatial data analyses are better if the data used in processes are precise and current. It seems that a precise and current DEM (Digital Elevation Model) is a must when a wider range of applications should be covered. This paper proposes a fusion methodology between a DTM and a DSM that will reduce the costs for obtaining a more precise DTM, both type of models being products of the Military Topographic Directorate.

Keywords: *DTM; DSM; LiDAR; fusion*

1. Introduction

With the development of *Geographic Information Systems – GIS* appeared the need for precise geospatial data sets that could be used in most of the applications. The *Digital Elevation Models – DEMs* are a type of data with a special interdisciplinary character.

The important role of *DEMs* developed during the past twenty years has led to an interdisciplinary research theme. If, at the beginning of DEM, by interdisciplinary was meant the collaboration between photogrammetric engineers, civil engineers, mathematicians and IT specialists, nowadays, it is a domain that intersects the activities of a large number of different experts.

More precisely, *DEM* covers four major components as follows: *data acquisition, modelling, data management, and application development.*

However, they are not in a linear connection. For example, photogrammetry is a tool for data acquisition for terrain modelling; however, *DTM* is also applied to photogrammetry for the ortho-rectification of aerial photographs and satellite images.

In “*data acquisition*”, photogrammetry, surveying (including global positioning system – GPS surveying), remote sensing, and cartography

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(mainly digitisation of contour maps) are the main disciplines. For “*computation and modelling*” the main disciplines are photogrammetry, surveying, cartography, geography, computational geometry, computer graphics, and image processing. In “*data management and manipulation*”, spatial database technique, data coding and compression techniques, data structuring, and computer graphics are the main disciplines. In “*applications*”, all geosciences are involved, including surveying, photogrammetry, cartography, remote sensing, geography, geomorphology, civil engineering, mining engineering, geological engineering, landscape design, urban planning, environmental management, resources management, facility management, and so on.

Indeed, *DTM* has also found wide applications in military engineering such as flight simulation, extracting terrain profiles, battle simulation, tank route planning, visibility studies, slope calculating, missile and airplane navigations¹.

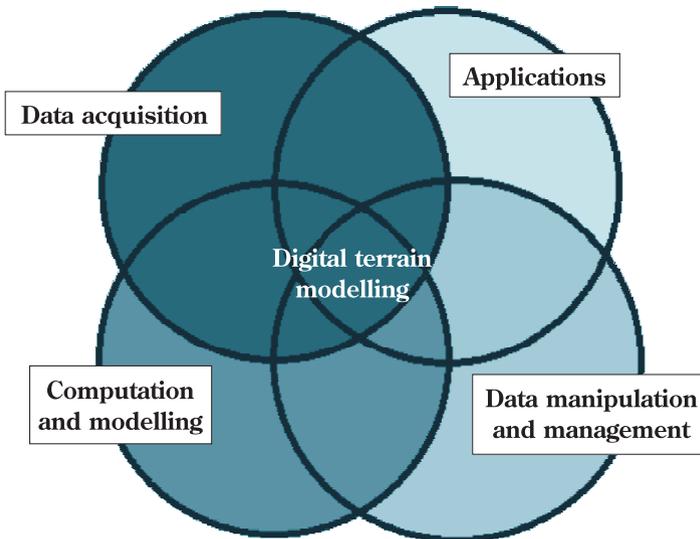


Figure 1: Relationships between digital terrain modelling and other disciplines²

By the continuous development of airborne sensors and geospatial data acquisition, it is now possible to have the same area of interest covered by multiple *DEMs*. Their characteristics depend on the type of data used to obtain the model. For example, they could describe the bare earth surface, or the surface of all natural and artificial elements that cover the earth surface, they could have

¹ Dr Zhilin Li, Dr Qing Zhu, Dr Christopher Gold, *Digital Terrain Modelling, Principles and Methodology*, CRC Press, the USA, 2005, see https://nguyenduyliemgis.files.wordpress.com/2014/11/digital-terrain-modeling-principles-and-methodology_2005.pdf

² *Ibidem*.

a good or bad resolution and so on. Besides *DEMs* obtained from airborne sensor data, earth surveying, cartographic materials or laser scanner data could be the source for obtaining a *DEM*.

Starting from the idea that the same area is covered with multiple sets of *DEMs* that have different characteristics but are complementary, researchers have proposed some types of fusion methodology, methods that could fill the gaps, improve the precision or bring the *DEM* up to date.

There are some techniques of fusion that have been developed in the past thirty years. Some of them use simple algorithms to fill the gaps or to calculate the weighted average of input data. This information is taken from height error maps, terrain derivatives or combinations thereof. More sophisticated techniques of *DEM* fusion involve the use of sparse representations, frequency domain filtering, self-consistency in the generation process, or multi-scale stochastic smoothing. In the next paragraphs there are short presentations of the recent methods of fusion, describing the most important advantages and disadvantages.

The easiest way to fuse two or more *DEMs* is to calculate an average of them. However, the result could not be so good. For example, if we take an elevation model with big errors and another one, precise, the result would be worse than the second model. The method could be improved by applying height weights for average calculation so the impact of each input data is controlled. Those weights are extracted from metadata or by using information from the heights maps obtained from the generation process.

A more complex method was proposed by H. Papasaika³. The weights were obtained from *a priori* information and from terrain derivatives extracted from the input *DEMs* (slope, aspect). Using the height weights, the two *DEMs* were fused by bringing in coincidence the elevation model which is less precise with the precise one.

Based on previous research by the authors, Papasaika *et al* proposed and tested the use of sparse representation theory in *DEM* fusion. For this method, the area of interest is segmented into overlapping patches of grid cells⁴. Dictionaries of patches (i.e. unique combinations of terrain shape) are created from higher accuracy *DEMs* in training areas. Error weights calculated from the slope and roughness of the input *DEMs* are also used in the fusion. The model is optimised to globally minimise the difference in expected elevations and the input *DEMs*.

³ H. Papasaika, E. Kokiopoulou, E. Baltsavias, K. Schindler, D. Kressner, *Fusion of Digital Elevation Models Using Sparse Representation, Photogrammetric Image Analysis*, Lect. Notes Comput. Sc. 6952, Springer, Berlin, Heidelberg, 2011, pp. 171-184.

⁴ C.E. Fuss, *Digital Elevation Model Generation and Fusion*, Master Thesis in Geography, University of Guelph, Ontario, Canada, 2013.

Another method of *DEMs* fusions is frequency domain filtering, which was proposed for the first time by Honikel⁵, in 1998, and the most important papers were published by Crosetto⁶ and Aragues in 2000 and Karkee et al⁷ in 2008. The basis of this technique is that the lower frequency portion of one *DEM* (i.e. coarser terrain features) can be isolated and merged with the higher frequency portion of another *DEM* (i.e. finer terrain features) of the same area. Frequency domain filtering involves four main steps: converting the *DEMs* into the frequency domain; applying a low or high pass filter to the appropriate *DEM*; adding the two desired *DEM* portions; converting the resultant data back to the spatial domain. Honikel tested this method on *InSAR DEM* generated from *ERS* imagery, and on a stereo-photogrammetric *DEM* generated from *SPOT* imagery. Another technique of *DEM* fusion is specific to *DEMs* generated from stereo-photogrammetry technique. In this method two *DEMs* are generated from the same pair of images by switching the reference and target roles for elevation extraction. If the elevation estimates at the same cell location differ by greater than a threshold distance the estimates are not accepted. The threshold is determined by fitting all disparities between the elevations of the *DEM* pairs to a Gaussian distribution, and threshold is a user specified number of standard deviations from the mean of the distribution.

A multi-scale Kalman smoothing filter was used by K. Slatton *et al*⁸ to fuse *InSAR DEMs* of different resolutions. The *multi-scale Kalman filter* was employed because it considers the stochastic variability in parameters being optimal with respect to the minimal mean squared error involved in the *DEM* fusion model. In the Slatton *et al* study, one low resolution *InSAR DEM* derived from *ERS1/2* imagery was fused with three higher resolution *InSAR DEMs* generated from *TOPSAR* imagery. The resultant fused *DEM* of the *ERS DEM* fusion with the first *TOPSAR DEM* was then fused with a second *TOPSAR DEM*, and that resultant *DEM* was fused with a third *TOPSAR DEM*. The results showed that the mean height uncertainty decreased with each additional *DEM* that was added to the fusion process.

⁵ M. Honikel, *Fusion of Optical and Radar Digital Elevation Models in the Spatial Frequency Domain*, Workshop on retrieval of Bio- and Geo-Physical Parameters from SAR Data for Land Applications, ESA-ESTEC, 21-23 October 1998.

⁶ M. Crosetto, S. Tarantola, A. Saltelli, *Sensitivity and Uncertainty Analysis in Spatial Modelling Based on GIS*, Agric. Ecosys. Environ, 2000, 81 (1), pp. 71-79.

⁷ Manoj Karkee, Brian L. Steward and Samsuzana Abd Aziz, *Improving Quality of Public Domain Digital Elevation Models through Data Fusion*, Biosystems Engineering, 101 (3):293 (305), 2008.

⁸ K. Slatton, S. Teng, M. Crawford, *Multiscale Fusion of InSAR Data for Hydrological Applications*, in Symposium on Terrain Analysis for Water Resources Applications, 2002.

As mentioned at the beginning of the paper there are several possibilities of geospatial data acquisition to generate *DEMs*. Each method has advantages and limitations regarding the applicability of the characteristics of topography and land cover, technical requirements for processing, costs etc. Some are used exclusively to collect altimetry data, others can be used for other purposes.

The existence of multiple data sets that cover the same area has increased interest to use their redundancy patterns to reduce errors.

As shown in the previous synthesis, we can say that the fusion techniques presented are able to improve accuracy and to obtain a complete *DEM* for areas with high coverage.

As for the situation of Romania, it should be considered the amount of data available for the country in order to propose such a fusion method.

2. Description of Data and DEMs Generation Method

This article aims to present a methodology fusion of digital elevation models or data available for the whole country. This theme has a major economically impact because the costs of acquisition and different properties of geospatial data due to acquisition sensors. Thus, for example, costs could be reduced with a fusion method in comparison to covering the area of interest only with *LiDAR* sensors, and results could improve in terms of generating a digital elevation model of the terrain using photogrammetric data.

In Romania there is a lack of highly accurate digital elevation models and updated data. But there are areas such as basins of rivers, where were performed flights and were acquired *LiDAR* data, which have a very good accuracy for the digital model of altitude. However, data are not available because they are collected by private companies and the area they cover is a small fraction of the country. Also, the National Agency for Cadastre and Land Registration has provided the digital terrain model for much of the country, but only information about the density of the points not about precision is offered.

There are some *DTMs* with full country coverage generated worldwide and are free of charge but they can only be used in very small-scale applications. The only Romanian institution that generated a *DTM* for Romania's surface is the Military Topographic Directorate, and it is based on military topographic maps at 1: 25,000. The *DTM* has a low degree of applicability, as these maps have not been updated for more than 20 years, and accuracy does not meet the standards of most applications.

Also in the Military Topographic Directorate, as an indirect result of the project for obtaining orthophotomaps with national coverage, there are data from which can be obtained *DSM*, and for some areas even digital terrain model. For this situation the accuracy is superior to the above-mentioned models, and the time at which the data were obtained is in the range of up to three years. Moreover, these data are constantly updated, showing entries for the entire area of the country every three years.

As a conclusion, it can be obtained a *DTM* with satisfactory precision for most applications by merging the two types of digital models with minimal costs because data already exist.

To validate the methodology three types of data were used:

- *DTM* obtained from data collected on military topographic maps scale 1: 25,000;
- *DSM* obtained from photogrammetric data recorded with *ADS80* sensor;
- *DTM* generated from *LiDAR* data used as a reference model for testing the results.

For the model obtained from collected data from maps it was not used the *DTED2* existing one, but it was generated a new model using *TopotoRaster* tool, implemented in *ArcGIS* platform. It generates a model that is hydrologically correct and it takes into account most of the items that have been obtained through digitisation (altimetry data, but also morphological, such as rivers, sloping lines etc.). The effort to generate such a digital model for the whole territory is minimal because most input already exists. It has national coverage being gathered to obtain *DTED2* model.

DSM achieved from photogrammetric data is a direct result in the generation process of orthophotomaps. It is necessary for the ortho-rectification of aerial images. Because the area concerned has such a digital model, some of the costs are eliminated because crude recordings exist and have national coverage. The method for obtaining the digital surface model using this technology is to correlate the photogrammetric records. They are collected by the “pushbroom” sensor from *Leica* brand, model *ADS 80*. The result is to obtain a point cloud. This process is automatic followed by a semiautomatic correction process.

To validate the proposed methodology it is used a reference model for the same area, which is generated from *LiDAR* records. Comparing the three methods, the one presented above has the best precision. In *table 1* there are presented the values of precision of digital surface models that have been used in this study.

Data source used in the process of DEM generation	Precision of Digital Elevation Model (m)			
	Relative		Absolute	
	Horizontal	Vertical	Horizontal	Vertical
TM 1:25,000	-	-	10	5
Aerial Imagery	-	0.1	0.9	0.9
LiDAR	0.1	0.1	0.2	0.3

Table 1: Precision of Digital Elevation Model⁹

3. Fusion Methodology

The *DSM* obtained precision is satisfying (under 1 m), but the *DSM* could be used just for a limited number of applications because most of them would need a *DTM*. This model obtained from *TM* is not satisfying because of the lower precision, changes over time, and because the maps have not been updated for 25 years. Taking into consideration that there are available data to obtain *DSM* with national coverage, the proposal is to make a fusion between the two types of data mentioned before. In that way the areas that are covered by dense vegetation will be replaced with information representing the earth surface. It is a fact that the precision for the vegetation area or vegetation objects is not as good (for 85% from the surface, the absolute precision is under 3 m), but it is acceptable taking into consideration the costs for obtaining it.

The input data are:

- digital surface model;
- digital terrain model;
- *shapefile* format in which are stored the delimitations of *DSM* areas that must be replaced.

Stages:

- a) projecting the data in the same coordinate system;
- b) extracting data from *DSM* subject that defines the terrestrial and complementary areas to those of *DTM*;
- c) fusion of the models.

Depending on the input data, each digital model will have a coordinate system. For a correct result both models that participate in the fusion process should have the same spatial reference.

Areas that do not define the land surface will be delineated through polygons stored in a *shapefile* format. Based on them, areas with dense vegetation or other surfaces will be removed from *DSM*, and from the initial *DTM* will be drawn a pattern remained of the completion of *DSM*, with coverage varying from 10-20 metres, depending on the specific terrain or area.

⁹ Source: Military Topographic Directorate.

Since the accuracy and the source data from which were obtained the two models are different, it has been proposed a process of correcting a complementary pattern extracted from the *DTM*. Thus, the covered area is brought into coincidence, to give even a uniform improvement in accuracy directly proportional to the distance from the covered area.

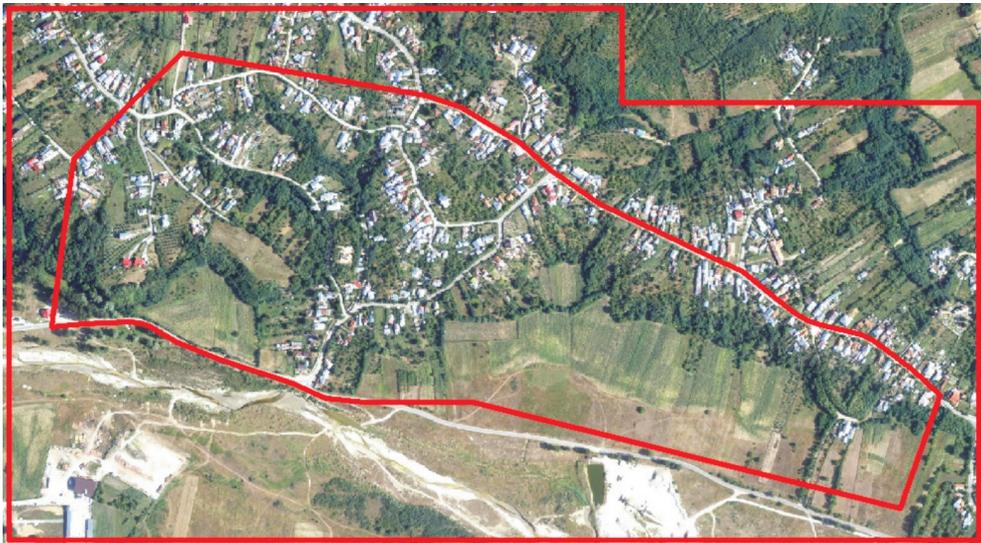
For this step, taking into consideration the overlapping area between the two models, the differences are calculated with a fixed rate point based on the complexity of the relief. Further, an interpolation correction surface is generated and complementary surfaces are brought into coincidence.

The last step of the fusion process consists in mosaicking the data sets, obtaining a digital terrain model for the entire area of interest.

4. Results

To test the proposed method, the fusion *DSM* obtained from photogrammetric data with *DTM* obtained from elevation data collected from topographic maps, the initial data were compared with the resulted digital model and with a third *DTM* obtained from *LiDAR* data. The latest technology is the most accurate, so the third model was chosen as a reference.

It was considered that the test area should contain both artificial and natural objects (vegetation, constructs etc.). The orthophotoplan from *figure 2* represents the area of interest. The polygon that covers almost the entire area represents



*Figure 2. The orthophotoplan of the area of interest*¹⁰

¹⁰ *Ibidem.*

the area for which was generated the digital model, and the irregular polygon inside represents the area of digital terrain model obtained after the merger process.

The same area is shown in *figure 3*, represented by topographic map at scale of 1: 25,000, which was also the source of collecting data that were used to generate the digital terrain model.

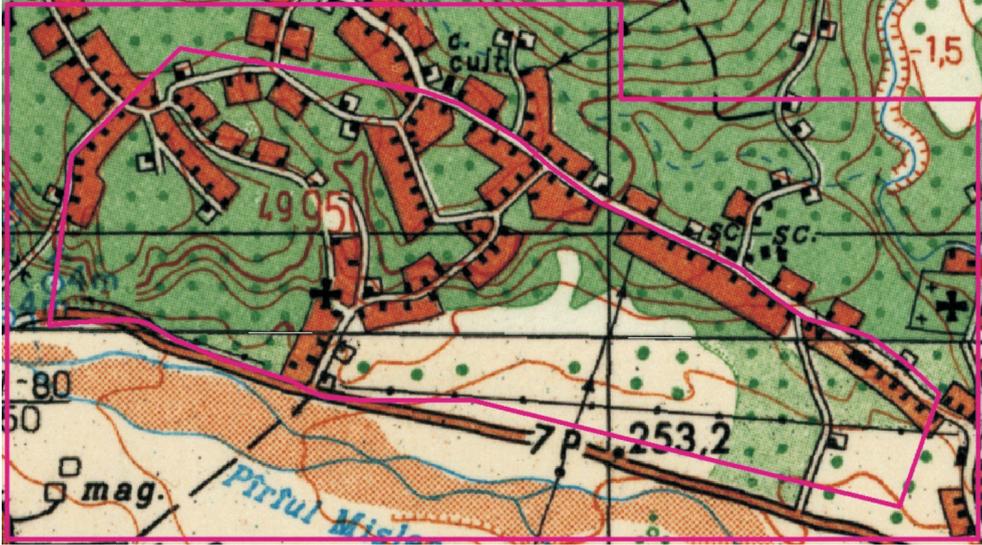
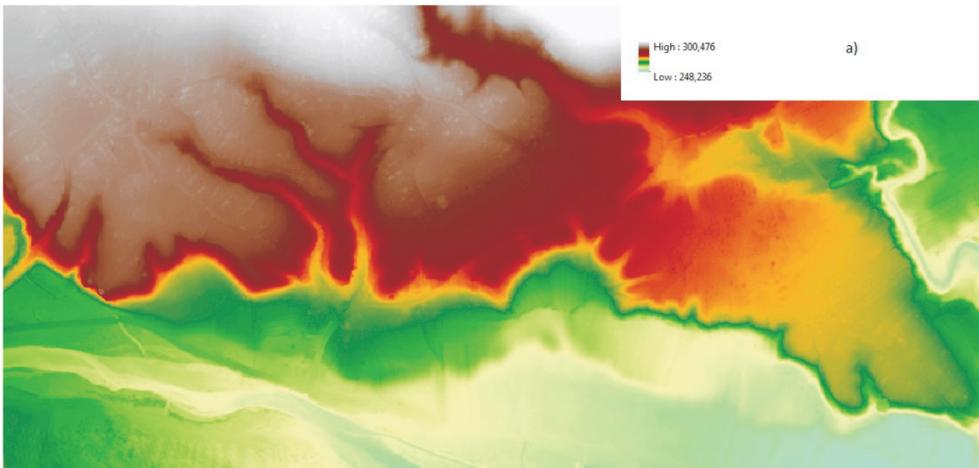


Figure 3. Extract of the area of interest from the topographic map 1: 25,000¹¹

In *figure 4* there are two digital terrain models, the reference one (a) and the one obtained from data collected from topographic maps (b). Representations were made using *ArcGIS platform 10.2.2*.



¹¹ *Ibidem.*

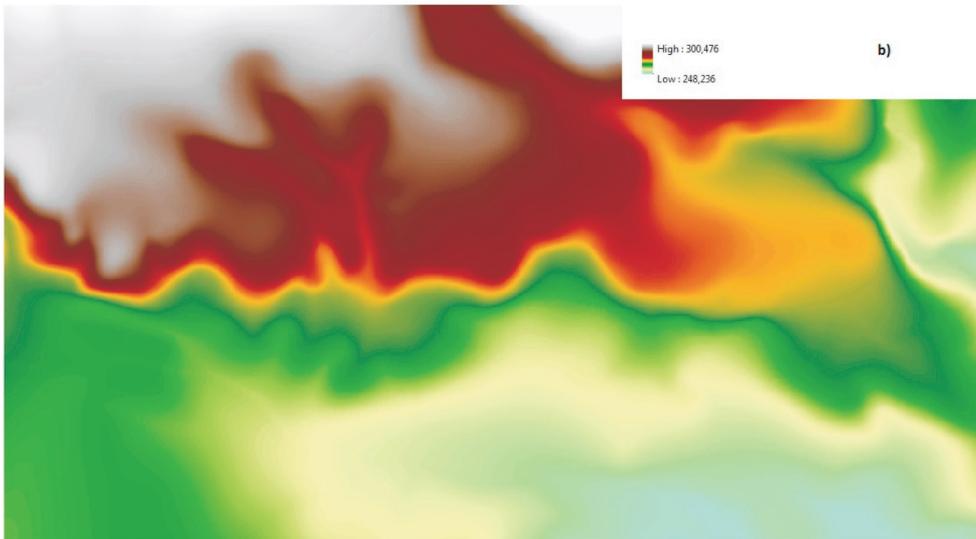


Figure 4: Representation of a digital terrain model.
 a) derived from LIDAR data.
 b) produced from data collected from the TM 1: 25,000¹²

Figure 5 represents the difference between the two models. DTM accuracy obtained from data collected from TM was estimated by comparing the DTM obtained from LIDAR data. Approximately 85% of the area has an absolute accuracy of about 3 meters.

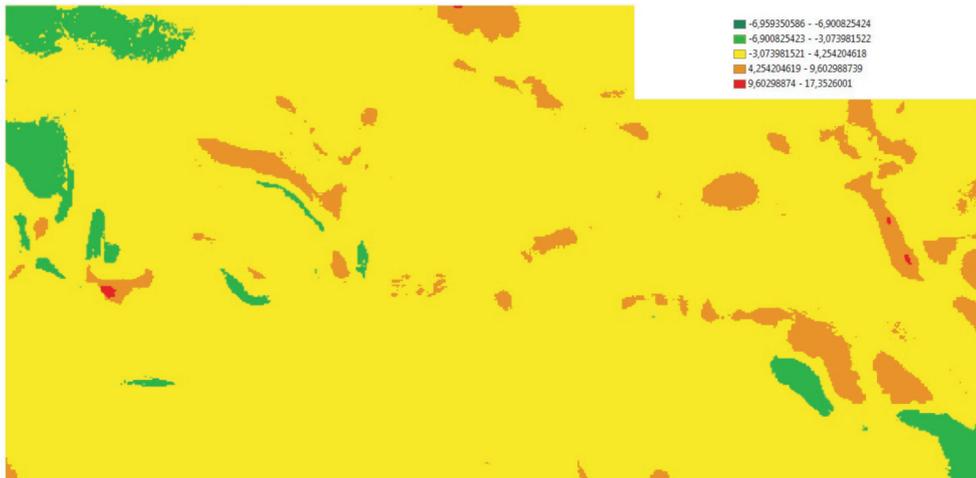


Figure 5: DTM estimation accuracy obtained from data collected by the HTM 1: 25,000 depending on the model derived from LIDAR data¹³

¹² *Ibidem.*

¹³ *Ibidem.*

The results were obtained using the available tools from *ArcGIS 10.2.2* platform. To calculate the differences between them *MINUS* tools were used, and the result is a raster file.

After applying the fusion process, complementary areas are in coincidence. As shown in *figure 5*, the precision of *DTM* has even been improved. Also, in *figures 7 and 8*, errors distribution to the reference *DTM* can be noticed. Histograms were obtained based on raster files shown in *figures 6 and 7*, using tools available within *ArcGIS platform, version 10.2.2*.

To be easier to observe the differences between the original data and the results after the fusion process, the same intervals were used for the heights classification in comparison to the reference *DTM*, and also for histograms.

The histogram in *figure 8* belongs to the corrected model for which we can see that both the distribution range of acceptable error and the maximum errors are shrinking.

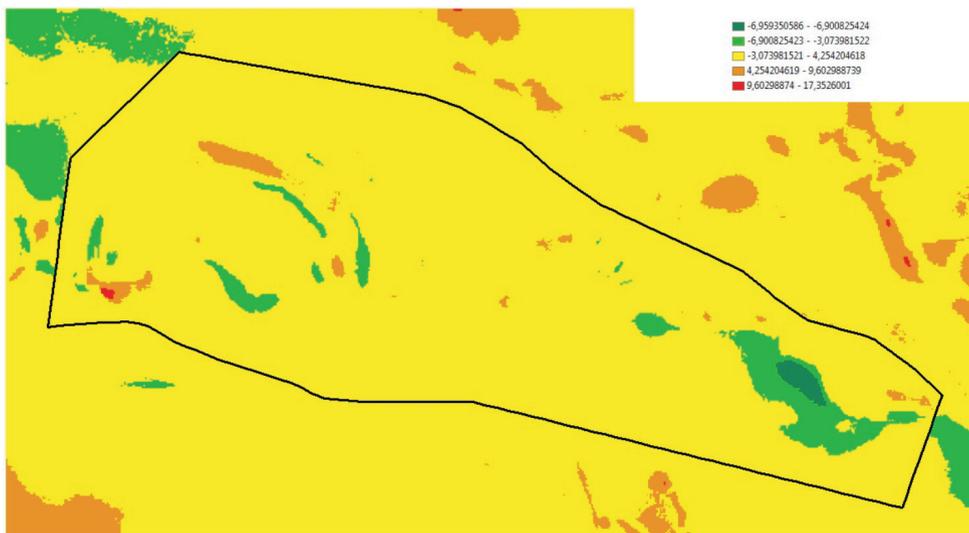


Figure 6: Estimation of the accuracy of the area of interest after the fusion process depending on reference¹⁴

5. Conclusions

New projects to obtain a digital elevation model for the entire country could be materialised with huge costs. It would be ideal that existing digital models or geospatial data should be used to extract a new *DEM* that meets the requirements of accuracy and actuality for most applications. The fusion method proposed

¹⁴ *Ibidem.*

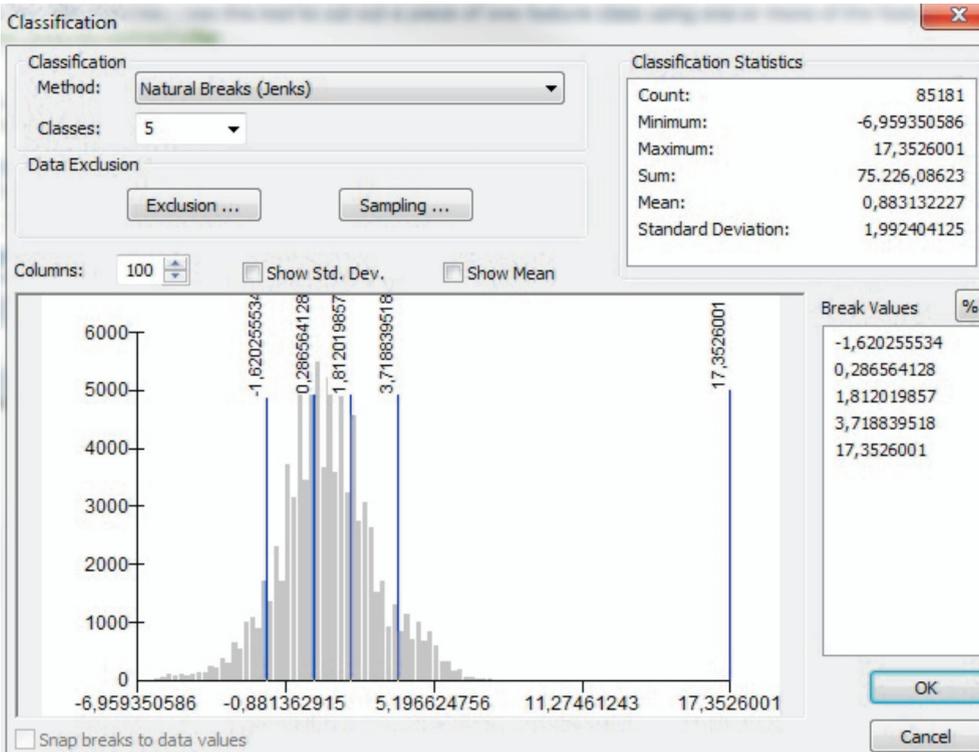


Figure 7: The histogram for the raster file representing the estimation of the area of interest accuracy prior to the fusion process¹⁵

is in line with the types of data available for Romania and the resources used are lower compared to the costs of collecting/editing a new set of data.

As it can be seen in *figure 6* and *figure 8*, where are presented the errors from the resulted model compared with the reference one, the precision of the resulted model is satisfying for most of the applications with regional or national coverage.

This type of approach, the fusion process of the *DEM*, is studied mostly in the countries that benefit from land cover with a variety of models, thus offering opportunities for studies and research in the field.

This article may be a beginning for Romania regarding the fusion process for digital elevations models, in the future being taken into consideration other types of data and fusion processes mentioned in the introduction.

¹⁵ *Ibidem.*

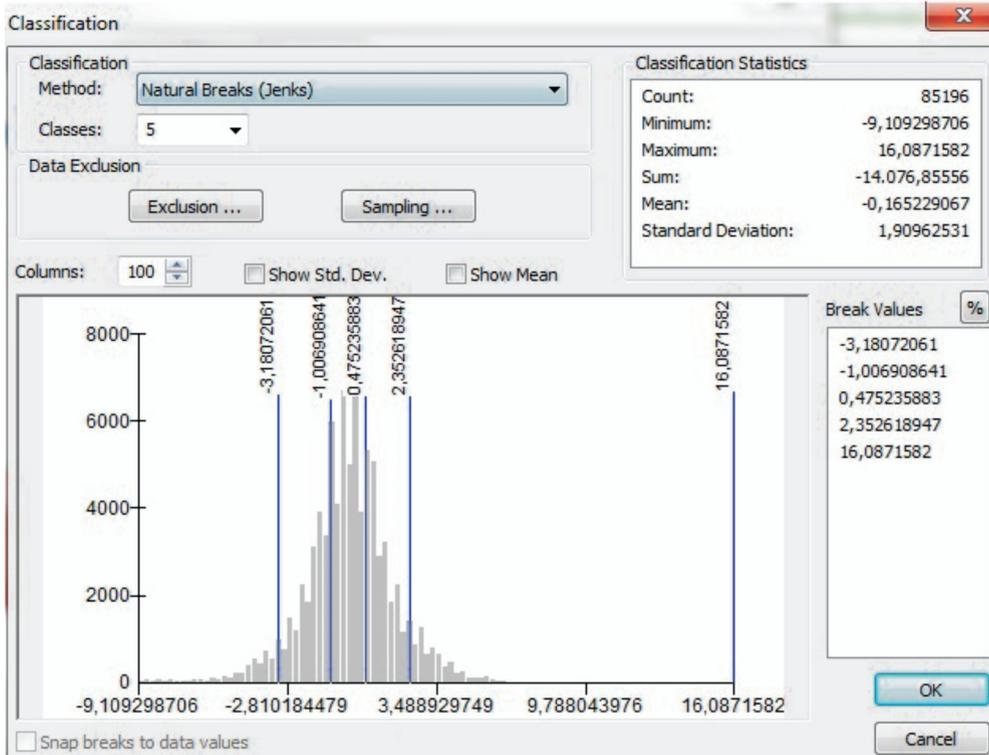


Figure 8: The histogram for the raster file representing the estimation of the accuracy of the area of interest after the fusion process¹⁶

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¹⁶ *Ibidem.*

MODERN METHODS FOR TREATING THE DISORDERS IN MILITARY AERONAUTICAL PERSONNEL — Laser Surgery Techniques in the Glottis Papillomatosis —

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The glottis papillomatosis is a benign type of tumour with a high potential for recurrence, extension and malignant degeneration, being the most common location of the disease at the level of the airways. The authors would like to share their experience of the preoperative management considering the clinical and paraclinical data, while at the same time evaluating the benefits of laser surgery and the postoperative follow-up with an immediate surgical approach to the first lesions to appear following surgery, the so-called “one step ahead of the tumour” approach.

Keywords: *glottis papillomatosis; laser surgery; malignant degeneration; HPV*

Introduction

The most frequent location of the respiratory papillomatosis is the glottis, the disease being caused by the infection with the *human papilloma virus (HPV)*, the most common types of which are *HPV 6* and *HPV 11*. The incidence of this disease is 4:100,000 in children and 1-2:100,000 in adults. The laryngeal papillomatosis has a high risk of malignant degeneration, the percentage being 1-7%, most frequently associated with the subtypes *HPV 11, HPV 16, HPV 18*¹.

The extensive and potentially malignant character of the disease requires an adequate therapeutic attitude.

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¹ M. Remacle, H.E. Eckel, *Surgery of Larynx and Trachea*, Springer, 2010, pp. 93-98; M.V. Kirtane, C.E.Souza, A.K.Bhattacharyya, N.K.Nerurkar, *Laryngology*, Thieme, 2014, pp. 219-221; M. Anico,

Materials and Methods

We have analysed multiple cases of glottis papillomatosis, following a preoperative diagnosis algorithm that includes clinical symptoms and paraclinical data: videoendoscopy, Narrow Band Imaging (NBI), imagistic examination like Computed Tomography (CT) or Magnetic Resonance Imaging (MRI), resection biopsies and postoperative follow-up.

❖ *Clinical diagnosis*

The most frequent symptom is persistent and progressive hoarseness that can be accompanied by nonproductive cough and foreign body sensation, which can progress to dyspnoea. Without a therapeutic intervention, the symptoms can lead to acute respiratory failure, requiring emergency tracheotomy².

❖ *Endoscopy*

In all patients with papillomatosis the complete endoscopic evaluation is mandatory in order to confirm or exclude the extralaryngeal extension of the disease, which is possible at the level of the pharynx, trachea or oesophagus³.

Macroscopically, the papillomas are exophytic (*figure 1*), pediculated or sessile pink-whitish tumours⁴ (*figure 2*).



Figure 1: Sessile papilloma of the left vocal fold

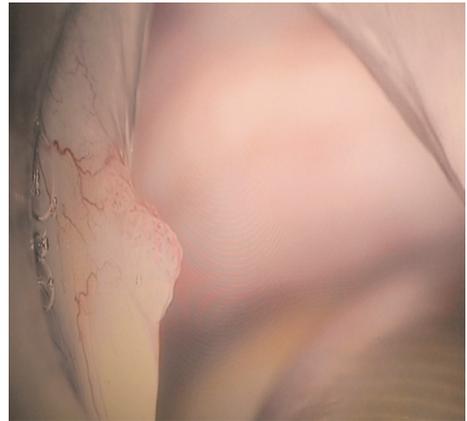


Figure 2: Pink-whitish sessile papilloma

M. Bernal-Sprekelsen, V. Bonkowsky, P. Bradley, S. Iurato, *Otorhinolaryngology, Head & Neck Surgery European Manual of Medicine*, Springer, 2009, pp. 488-491.

² M. Remacle, H.E. Eckel, *op. cit.*

³ R. Hainăroșie, V. Zainea, *Tehnici elementare de chirurgie cu laser CO2 în otorinolaringologie*, 2014, pp. 47-57.

⁴ M.V. Kirtane, C.E. Souza, A.K. Bhattacharyya, N.K. Nerurkar, *op. cit.*

❖ *NBI*

Narrow Band Imaging (NBI) represents a modern investigation tool. The endoscopic system uses filters that allow only certain wave lengths in the light to pass, the 540 nm wave length (green light) and the 415 nm one (blue light). These wave lengths have the advantage of penetrating the superficial structures of the epithelium. This type of examination increases the diagnostic power by allowing us to observe the architecture of the surface epithelium and the superficial vascular system, the veins appearing coloured in cyan and the capillaries in brown. *NBI* is extremely useful in observing the vascular abnormalities of the superficial epithelium, suggesting which areas raise the suspicion for dysplasia, metaplasia or precancerous state (*figure 3*) and revealing the limits for the resection biopsy.

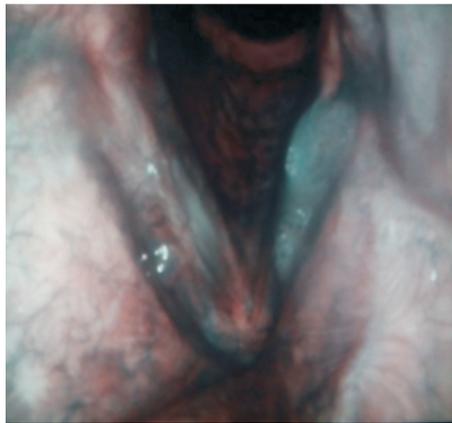


Figure 3: NBI examination of a left vocal fold papilloma

❖ *Imagistic examination*

The usual types of imagistic examination used are the computed tomography (CT) and the magnetic resonance imaging (MRI). These investigations provide information regarding the size of the tumour, the glottis and the preepiglottic and paraglottic spaces, being useful in establishing the benign or malignant character of the tumour.

❖ *Resection biopsy*

The nature of the glottis tumours may be suggested by paraclinical investigations, but the diagnosis is set only by biopsy. We consider useful to perform the biopsy by completely resecting the tumours if possible, the so called “*resection biopsy*”.

❖ *Laser surgery*

The physical functioning parameters of the CO2 laser are relatively simple. By using wave lengths of 10,600 nm the light is converted to thermal energy that is absorbed mainly by the water, which is the main substance in most tissues. That is why the tissue destruction obtained using the CO2 laser is at a molecular level. The power used for vaporising papillomas is 4-8W⁵.

The main purpose of the intervention is the total resection of the papillomas, the resection biopsy followed by the vaporisation of the insertion areas being aimed at conserving as much as possible the areas of normal epithelium and the vocal ligament. We should also try to avoid web forming on the anterior commissure (*figure 4*). When the lesion is located on the anterior commissure or close to it or in cases of prior interventions at this level, the risk of webbing is higher. In such cases we recommend radial sections (the *SHAPSHAY* technique) or star shaped. Another option is the “*keyhole*” technique, where the excision of the tissue has the shape of a keyhole. In cases of recurrent webs we can use a silicone stent⁶.

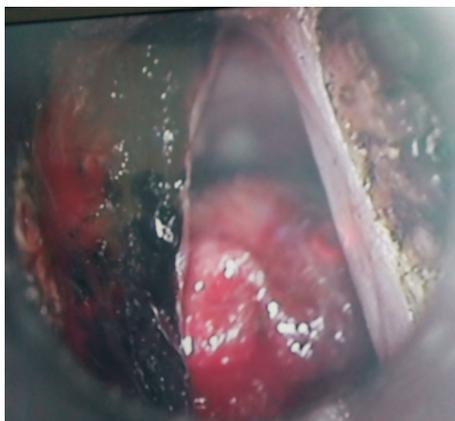


Figure 4: Postoperative image – we can notice the preservation of the anterior commissure and of the epithelium of the free margin of the vocal fold

The laser surgery has the advantages of minimum bleeding, a lower risk of damaging the vocal ligament and the advantage of sealing the vessels.

Considering the high risk of recurrence, the consistent postoperative follow-up should be as follows: every month for the first 6 months, every 3 months for the next half year and twice a year for the next 3 years. Laryngeal endoscopy

⁵ M. Remacle, H.E. Eckel, *op. cit.*; R. Hainăroşie, V. Zăinea, *op. cit.*; Clark A. Rosen, C. Blake Simpson, *Operative Techniques in Laryngology*, 2008, pp. 84-134.

⁶ R. Hainăroşie, V. Zăinea, *op. cit.*

and NBI have the advantage of being one step ahead of the exophytic tumours, allowing the surgeon to discover the changes in the surface epithelium and the vascular abnormalities that are suggestive for recurrence (*figure 5*).



Figure 5: 4 months after surgery, we can see surface changes of the left vocal fold and vascular abnormalities of the right vocal fold, requiring a surgical approach

Serial laser interventions performed as soon as these minimum changes can be observed have led to optimistic results with longer symptoms-free intervals.

Results

The standard treatment for glottis papillomatosis is a surgical one, but it can range from the use of cold instruments to CO₂ laser or the angiolytic laser using wave lengths between 500 and 600 nm, which are selectively absorbed by the haemoglobin, resulting in the coagulation of the vessel. We can also use adjuvant therapies, such as cidofovir or interferon⁷. The use of laser surgery has superior results when compared to cold instruments techniques.

The modern diagnosis means, such as the videoendoscopic examination, the contact endoscopy (*figure 6*) or NBI, offer a precise diagnosis of even minor lesions and a better method of postoperative follow-up, allowing us to evaluate the superficial vascular architecture and the uniformity of the cellular field, which plays a major role in establishing the best surgical strategy.

Certain cases require serial interventions and a multimodal therapy, with adjuvant treatment and combined techniques, involving both cold instruments and the laser.

⁷ M. Remacle, H.E. Eckel, *op. cit.*

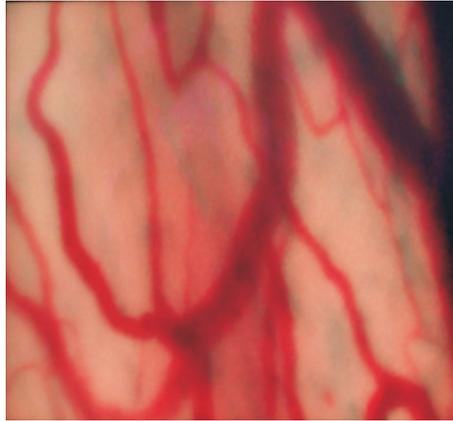


Figure 6: Videocontact endoscopy, revealing a change in the vascular architecture, the vessels being normally parallel to the free margin of the vocal fold

Conclusions

The persistent and progressive hoarseness that can be accompanied by nonproductive cough and foreign body sensation, which can progress to dyspnoea should make the patient see a medical specialist. The medical decisions can help the patient cure, thus preserving the aptitudes required by the specific job in the military.

The laser surgery, when used in an adequate way and combined with modern diagnostic tools, can lead to optimistic results when dealing with this disease, which has the risk of recurrence, extension and malignant turn-over.

The videoendoscopic postoperative examination of the patient is mandatory every 3 months. The use of NBI during the videoendoscopic examination will orient the surgeon about any papillomatous recurrence.

The use of intraoperative NBI allows us to identify the lesion and its limits and to totally resect it.



FROM GARMISCH TO BRUSSELS

Be Active! Ask Questions!

Alina PAPOI



**SECURITATE
CUNOASTERE** prin

*“Security through Knowledge
– Integrated/Educational Network for Training,
Counselling and Guiding Doctoral Students
for a Research Career in Security, Defence,
Public Order and National Security – SECNETEDU”*

Garmisch. A fantastical place in the Bavarian paradise. One can find it only by going there, in *Fantasia*, the world of Michael Ende. To walk the streets, to meet people, to breathe along with them, to admire the houses decorated with painted scenes, some inspired by fairy tales, others by religious motifs,



Alina Papoi – the General Staff, the Ministry of National Defence.

to stop somewhere, anywhere, to look around, to admire the mountains and exclaim: A neverending story. This is Garmisch. A story in which one wants to play a part. Or at least to come back there ...

Beyond the story, the reality is expressed through concrete actions. The scholarship that I along with more than 30 students at the Doctoral School within “Carol I” National Defence University won is a good example in this regard.

The project, named “*Security through Knowledge – Integrated/Educational Network for Training, Counselling and Guiding Doctoral Students for a Research Career in Security, Defence, Public Order and National Security – SECNETEDU*”, whose manager was *Captain (N) Professor Dr Ioan CRĂCIUN*, Chairman of the Defence Department within the National Defence College, provided us, the first year doctoral students, with the opportunity to pay two information and documentation visits, one in Germany and another in Belgium.

The first visit took place between 25 and 31 October 2015 at *George C. Marshall European Centre for Security Studies* in Garmisch-Partenkirchen. It was a busy, complex, exciting and effective week, under the auspices of the Research Seminar in International Security, hosted by the Marshall Centre.

I attended a series of debates, coordinated by *Dr Mathew Rhodes*, seminar moderator and Director of the Marshall Centre’s Central and South Eastern Europe



Source: www.secnetedu.ro

Non-Resident Programmes, and *Captain (N) Dr Ioan Crăciun*. Topical security issues were discussed. Among them I can mention security in the Black Sea region, proliferation of weapons of mass destruction, transnational crime and cyber security. During the debates, Romanian doctoral students expressed their views and improved their knowledge, which added value to the events and to the research work of each of us, I suppose. We will see it in the next two years ...



Source: www.secnetedu.ro

One of the key points of the activity was the presentation of the Marshall Centre goals, made by *Dr Robert Brannon*, Dean of the College of International and Security Studies. Besides the presentation, *Dr Brannon* conveyed a suggestive and eloquent message, which I consider motivating for all those present: ***“Be active. Ask questions!”***. At the end of the activity, we went to Dachau to visit the Second World War Nazi concentration camp.

Brussels. The city where the heart of the European Union beats stronger than in any other part of Europe: the *de facto* capital of the European Union as here are located the headquarters of the European Commission, the Council of the European Union, the North Atlantic Alliance. Moreover, as it is well known, part of the activity of the European Parliament is conducted here, besides the other two official headquarters in Luxemburg and Strasbourg.



The information and documentation visit we paid at the Euro-Atlantic security institutions in Brussels took place between 8 and 14 November 2015. The visit was intended for the doctoral students to understand the mechanisms employed by the European Union and the North Atlantic Alliance in managing regional and global security. To that end, we visited NATO Headquarters, where we had prolific



Source: www.secnetedu.ro

talks with *Lieutenant General Dr BEng Gheorghe Savu*, the Military Representative of Romania to NATO and the EU, as well as with other members of the delegation, on topics related to the common security and defence policy, the international relations in the current security context undergoing substantial transformations.

The activities of the CSDP (Common Security and Defence Policy) Seminar, organised by the European Security and Defence College, were coordinated by *Professor Dr Ion Roceanu* and *Mr Symeon Zambas*, ESDC Training Manager. There followed the visit to the European Parliament, the meetings with Vice-Chair of the Foreign Affairs Committee, *Ioan Mircea Pașcu*, as well as with members of the EU INTCEN (EU Intelligence and Situation Centre), EU SatCen (EU Satellite Centre), EEAS (European External Action Service) and IES (Institute for European Studies).



Source: www.secnetedu.ro

It was a special moment, maybe unique for many of us, those who visited the Euro-Atlantic institutions for the first time. I felt honoured to represent, on the one hand, the General Staff, on the other hand, the *Gândirea militară românească* journal, whose 2nd issue hosted a series of articles written by members of the Romanian Military Representation to NATO and the EU. Another moment of pride was also the fact that Lieutenant General Dr BEng Gheorghe Savu handed to us the Certificates of Attendance in the “*Common Security and Defence Policy*” Course, signed by the EU High Representative for Foreign Affairs and Security Policy, Federica Mogherini.

This way I would like to express my gratitude, for the project success and the provided opportunity, towards the Commandant and Rector of “*Carol I*”

National Defence University, *Brigadier General (AF) Professor Dr Florin Moiescu*, the project manager, *Captain (N) Professor Dr Ioan Crăciun*, the Deputy Commandant for Education, *Colonel Professor Dr Daniel Dumitru*, the Deputy Commandant for Scientific Research, *Colonel Professor Dr Ion Roceanu*, the expert in the organisation of scientific meetings, *Ana Maria Călina*, and towards the expert in communication for the media, promotion and public relations, *Captain Cristina Barna*, for kindness and for provided documentation.



*

From Garmisch to Brussels. Each route with its story, each visit with its history. I think that the two events also meant an exchange of ideas between us, colleagues, the moments we spent together being part of this stage in our lives – Doctoral School.

“Any true story is a neverending story”, as Michael Ende says, and one can reach *Fantasia* not only by reading but also by experiencing. I myself was in *Fantasia* ...

English version by
 *Diana Cristiana LUPU*

THE LOW OIL PRICE ENVIRONMENT: IMPLICATIONS FOR NATO

Michael RÜHLE
Julijus GRUBLIAUSKAS

The authors discuss the low oil price possible implications for NATO. Firstly, the causes of the oil price collapse are mentioned. The flat oil consumption, the massive increase in the US unconventional oil and gas production, and the lack of consensus within the OPEC are among them. Then, the prospects for a price rise are analysed. In this regard, it is shown that the economies of Russia and many other oil-producing countries will suffer financial losses. In this context, NATO will have to deal with several actors in the region whose geopolitical objectives are not only at odds with one another, but whose political agendas might also be increasingly determined by the need to cope with economic decline and domestic unrest – a development that would make them even less predictable.

Keywords: oil price; “P5+1 process”; petro-states; “fracking” industry; global stability

2014 will be remembered as the year in which Russia’s illegal annexation of Crimea and the advances of the so-called “Islamic State” were facing NATO, for the first time in its history, with major security challenges both to its East and South. But that same year also marked the beginning of yet another development that will seriously affect the security situation in NATO’s neighbourhood: the decline of the global oil price. Should this low oil price affect the stability of oil-producing countries, NATO may end up with a perfect storm right on its doorstep.

The Causes of the Oil Price Collapse

Over the past two years the two major oil price indices – Brent and WTI (West Texas Intermediate) – went from an average \$99 per barrel in 2014 to \$53 in 2015, and to \$28 in early 2016.

Michael Rühle and Julijus Grubliauskas work in the Energy Security Section of NATO’s Emerging Security Challenges Division. They express their personal views.

The article was originally featured in NATO Review, 4 February 2016, see <http://www.nato.int/docu/review/2016/Also-in-2016/low-oil-price-russia-environment-implications/EN/index.htm>



“Little green men” in Crimea after its illegal annexation to Russia in 2014.

This steep drop was the result of several factors: the flat oil consumption in countries of the Organisation for Economic Cooperation and Development; the slower-than-usual increase in China’s oil demand due to its cooling economy; the massive increase in the United States’ unconventional oil and gas production, which reduced US imports and made more oil available on the global market; Saudi Arabia’s decision to retain its record high production levels in order to defend its market share; and the lack of consensus within the Organisation of the Petroleum Exporting Countries (OPEC).

Saudi Arabia’s decision to retain its output levels may also have been motivated by additional considerations: to drive US unconventional oil and gas production out of business and to make Iran’s post-sanctions re-entry into the market more difficult.

However, due to technological advances, the US *“fracking”* industry turned out to be much more resilient than expected, allowing many US producers to innovate, enhance their production cost efficiency and stay in business even as the oil price went down. In fact, even if the price were to increase again, at least some producers with outdated oil sectors, such as Russia, Iran, and Venezuela, would still become less and less competitive – not least because a price increase would inevitably bring more *“unconventionals”* back into the market.

Prospects for a Price Rise

That the oil price will increase at least slightly is almost a foregone conclusion, as some producers are likely to finally curtail their production. A higher oil price will also make investments in the exploration of new oil and gas fields viable again – an important factor to avoid future scarcities and related price spikes.



Drilling rigs of a US shale company in Seguin, Texas. © REUTERS

But, for quite some time, the price is not likely to reach the \$100 or more that characterised the past decade. This means that the economies of Russia and many oil-producing countries in the Middle East, North Africa and Latin America might be forced to produce below their economic break-even point, i.e. they will suffer financial losses. Not surprisingly Algeria, Angola, Ecuador, Nigeria and Venezuela and other poorer states with high populations have been trying, albeit unsuccessfully, to persuade OPEC to cut production in order to prop up prices.

Consequences

For states that used to “buy off” their populations through generous subsidies, a continuing global oil glut could translate into political unrest.

The security dimensions of such a situation are obvious: for many oil-producing countries, a drop in the oil price below a certain level threatens to unravel the “social contract” between the regimes and their populations. For states that used to “buy off” their populations through generous subsidies, a continuing global oil glut could translate into political unrest.

Some analysts argue that the low oil price will help international stability, as it would force petro-states to focus on their domestic woes, allowing them fewer opportunities for pursuing assertive foreign policy agendas.

While this may be true for some countries, it is clearly not the case for others. The arch-rivals Iran and Saudi Arabia, for example, show no signs of ending their geopolitical competition due to domestic economic considerations. If anything, this competition is taking on an increasingly military dimension.

Nor does Russia's foreign policy behaviour follow economic rationality: as Russia is heading for a recession while still spending more on its military modernisation,



An investor looks at an electronic screen at a brokerage house in Hangzhou, Zhejiang province, 26 January 2016. Chinese shares had plunged more than 6 percent to 14-month lows after oil prices dropped again, reviving concerns about global growth. © REUTERS

one cannot discount the risk that the leadership will seek to divert attention by engaging in foreign policy adventurism.

New Alliances?

This leads to another security dimension of the low oil price: potential geopolitical shifts caused by new alliances.

One such emerging alliance is that between Russia and Iran. It is obvious that Russia will suffer once Iran's tremendous oil and gas reserves hit the market and further drive down the oil price. Still, Moscow has cooperated within the "P5+1 process" (the negotiations with Iran on its nuclear programme conducted by the UN Security Council's five permanent members, China, France, Russia, the United Kingdom and the United States – plus Germany) towards lifting the sanctions on Iran. It has also been doing business with Iran on a wide range of issues, from civilian nuclear power to arms sales.

The strategy of Russia vis-à-vis Iran appears to be to embrace rather than to compete with Tehran. By investing and exerting influence in Iran's energy sector, Moscow may seek to ensure that Iran's energy riches will not be exported in such a way as to directly compete with Russia. This strategy, which Moscow is also employing vis-à-vis some of its Central Asian neighbours, aims primarily at preventing these countries from independently exporting gas to Europe, which will remain Russia's primary market for the foreseeable future.



An oilfield worker walks next to pipelines at an industrial complex in the state of Anzoategui, Venezuela. In April 2015, Venezuela launched talks on a novel plan to blend the country's heavy crude with light oil from other OPEC allies, seeking to create a new variety that can compete against swelling US and Canadian supplies. The proposal, which would expand on a pilot scheme involving Algerian oil last year, envisions supplying refineries built for medium-grade crude rather than the light oil that has become plentiful as a result of the North American shale boom. © REUTERS

Another alliance could emerge between China and Iran. Already now China is Iran's largest trading partner, including in energy. For China, Iran could become an alternative to its growing energy dependency on Saudi Arabia. For Iran, in turn, China is a growing energy customer and potential investor. Tehran may also see Beijing as an "honest broker" in its difficult relationship with Saudi Arabia. Closer Sino-Iranian ties could be positive if China works for overall political stability and not just to advance its economic interests.

Implications for NATO

All NATO Allies are part of the coalition against the Islamic State of Iraq and the Levant (ISIL) in the Middle East. NATO is also seeking to enhance the stability and resilience of countries in the region by offering support for defence capacity building. This means that Allies are now engaged in a region where any political turmoil caused by a low oil price could affect them directly.

On the positive side, the low oil price has already dealt a heavy blow to ISIL's finances even before the coalition's air strikes against ISIL-operated refineries and fuel convoys deprived the terrorist group of an ever greater part of their revenues.

However, Iran and Saudi Arabia remain locked in a geopolitical, economic and religious rivalry, and both countries will need to produce oil at high levels to defend their market share and maintain revenues in order to satisfy their domestic



A row of Guided Bomb Unit 32s lie on a munitions assembly conveyor at Langley Air Force Base, Virginia, ready to be deployed to the US-led fight against Islamic State. © REUTERS

constituencies. Iraq suffers from the onslaught by ISIL, domestic tensions, and the low oil price (as does Libya). Russia's entry into the Syrian civil war has complicated the picture even more.

NATO will therefore have to deal with several actors in the region whose geopolitical objectives are not only at odds with one another, but whose political agendas might also be increasingly determined by the need to cope with economic decline and domestic unrest – a development that would make them even less predictable.

Moreover, instability brought about by “cheap oil” may result in an even heavier burden for a country like Jordan, which is already confronted with a massive refugee challenge. This, in turn, would put even more pressure on NATO to demonstrate the effectiveness of its regional stabilisation efforts.

From a NATO perspective, however, Russia clearly remains the most important security variable. With oil and gas exports accounting for over half of its budget revenues, the country is at a crossroads: the ruble has suffered a serious devaluation, the Central Bank's reserves are dwindling, and foreign investment has all but dried up.

How Will Russia React?

In theory, economic self-interest should tilt Moscow towards a more conciliatory policy vis-à-vis the West, notably to get the sanctions lifted that were imposed after the Crimea annexation, and to slow down European attempts to become more energy-independent from Russia.



Russia's Foreign Minister Sergei Lavrov (R) shows the way to his Italian counterpart Federica Mogherini during a meeting in Moscow 9 July 2014. © REUTERS

However, while statements by Russian leaders indicate that they are aware of the precarious state of their economy, it is far from certain whether this will compel them to adopt a cooperative stance. For the time being, at least, Russia prefers to stick with its anti-Western course: high-flying military modernisation plans, talk about an ambitious – yet unrealistic – “*strategic partnership*” with China, and nationalist rhetoric about the need to protect Russians abroad still dominate Russia’s foreign policy stance.

All this leaves one to wonder how Russia will react once the “*cheap oil*” recession really kicks in: will it acknowledge the challenge and face it head-on, by seeking to modernise and diversify its economy, or will it seek to distract its public by blaming the malign West for Russia’s ills? Moscow’s response will be a boon or a bane for European and, indeed, global stability.



NATO AND EUROPE'S REFUGEE AND MIGRANT CRISIS

Opinion Piece

by NATO Secretary General Jens Stoltenberg

They came on bicycles. Late last year, thousands of refugees – mostly from Syria – pedalled their way across a remote Arctic Circle border crossing from Russia to Norway.

They were taking advantage of a legal loophole which until recently allowed refugees on two wheels – not two legs – to enter my home country from the North.

In making the journey, they became part of a vast and continuing exodus.

The events of the last twelve months – the greatest migrant and refugee crisis since the Second World War – represent an immense human tragedy.

Last year, close to a million people risked their lives to find safety on European shores. Of those, almost 900,000 people risked the so-called Eastern Mediterranean route – that's more than the entire population of Amsterdam, and five times the number who made the same journey in 2014.

Enabled by criminal gangs, the flow of migrants and refugees is putting enormous pressure on the countries affected. So far this year, more than eight out of every ten refugees and migrants who have crossed from Turkey into Greece came from just three countries: Syria, Afghanistan and Iraq. Turkey, Jordan and Lebanon are already hosting millions of refugees.

NATO has been attempting to deal with the root causes of this instability for many years. Our longstanding mission in Afghanistan is helping to deny terrorists a safe haven. We have helped to build the 350,000 strong Afghan security forces, and continue to train, advise and assist them. We will soon begin to train Iraqi military officers. And we stand ready to provide AWACS planes to backfill the national capabilities of our allies, freeing up countries' own AWACS aircraft

The author is NATO Secretary General Jens Stoltenberg, a former prime minister of Norway. This opinion-editorial was published in newspapers belonging to LENA (Leading European Newspaper Alliance), see http://www.nato.int/cps/en/natohq/opinions_128645.htm, 26 February 2016.



for operations elsewhere. All 28 NATO allies are part of the Global Coalition against ISIL, and this will increase the coalition's ability to degrade and destroy the terrorist group.

Earlier this month, NATO also decided to provide support to the international efforts to stem illegal trafficking and illegal migration in the Aegean. Based on a proposal by our allies Germany, Greece and Turkey, the decision was taken practically overnight. Within the following 48 hours, we deployed a Standing Maritime Group to the Aegean. It currently includes ships from Canada, Germany, Greece and Turkey.

They will conduct reconnaissance, monitoring and surveillance activities to provide critical information to the Greek and Turkish coastguards and other relevant national authorities, as well as to the European Union's border agency Frontex. This will help them carry out their duties even more effectively, in order to help save lives and to deal with the illegal networks that traffic in human suffering. We have also decided to intensify intelligence, surveillance and reconnaissance along the Turkish-Syrian border.

NATO ships will not do the job of national coastguards in the Aegean. Their mission is not to stop or turn back those trying to cross into Europe. And this in no way represents a militarisation of the response to the crisis.

What NATO does will be in a support role. It will be conducted with full respect for national sovereignty and in close cooperation with relevant national authorities. Our added value is that we can facilitate closer cooperation and assist in greater exchange of information between Greece and Turkey, as both are NATO Allies, but only Greece is in the EU.

At the same time, NATO is working closer, and faster, than ever before with the EU. So NATO has a unique role to play as a platform for cooperation. This crisis affects us all, so we have to find common solutions.

If NATO vessels need to rescue people or boats at risk – something we have done many times in the Mediterranean in recent years – they will do so in full accordance with international law.

The obligation to help people in distress at sea is a general responsibility which applies to all vessels, regardless of whether they are part of a NATO or a national mission. In case of rescue at sea of persons coming via Turkey, they will be taken back to Turkey. In carrying out their tasks, our nations will abide by national and international law.

We do not underestimate the complexity of the challenge ahead. We understand that this crisis has been years in the making and that there is no quick fix. But to ignore the situation would be to ignore the values on which the Alliance itself is founded – and I am proud of NATO's efforts to help our allies and the EU to address one of the most pressing issues of our time.



THE 2014 GÂNDIREA MILITARĂ ROMÂNEASCĂ JOURNAL AWARDS

THE 17TH EDITION – 12 November 2015

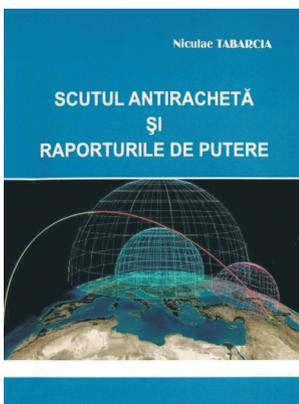
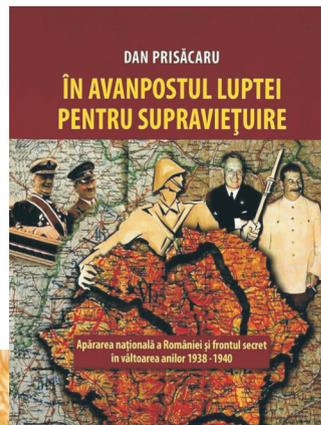
On 12 November 2015, at the Ministry of National Defence headquarters, the 17th edition of the *Gândirea militară românească Journal Awards* ceremony took place, once again part of the events dedicated to the General Staff Day. The *Journal Awards Selection, Evaluation and Nomination Commission*, chaired by Major General Dr Adrian Tonea, Deputy Chief of the General Staff and Chairman of the journal Editorial Board, had the mission to designate the winners out of the 41 books that participated in the competition, while thanking the members of the Commission for the objectivity and promptitude they demonstrated: Brigadier General Dr Ioan Mancu, General (r.) Dr Dan Ghica-Radu, Colonel Dr Olivian Stănică, Colonel Dr Iulian Martin and Colonel Dr Mircea Tănase.

The awards, for five different domains, were presented by the Chief of the General Staff, Lieutenant General Dr Nicolae-Ionel Ciucă.



Here are the laureates of the *Journal Awards* for this year:

- The Award “*Marshal Alexandru Averescu*”, for the *Military Art* domain, was presented to **Dan PRISĂCARU** for the book “*În avanpostul luptei pentru supraviețuire*”/“*In the Outpost of the Fight for Survival*”.



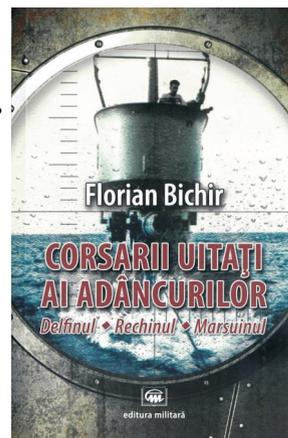
- The Award “*Division General Ștefan Fălcoianu*”, for the *Troops Organisation, Training, Command and Logistics* domain, was presented to **Niculae TABARCIA** for the book “*Scutul antirachetă și raporturile de putere*”/“*Missile Defence System and Power Relations*”.

- The Award “*Army Corps General Ioan Sichitiu*”, for the *Military Policy, Security and National and Collective Defence* domain, was presented to **Constantin MANOLACHE** for the book “*Euroarmata și apărarea României*”/ “*European Defence Forces and Romania’s Defence*”.

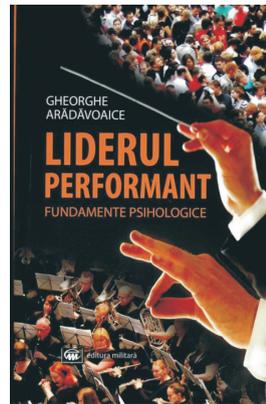


- The Award “*Brigadier General Constantin Hîrjeu*”, for the *Geopolitics and Geostrategy* domain, was presented to **Cristian BARNA** for the book “*România între prieteni și dușmani. Decupaje geopolitice și hărți imagologice*”/ “*Romania between Friends and Foes. Geopolitical Clippings and Imagological Maps*”.

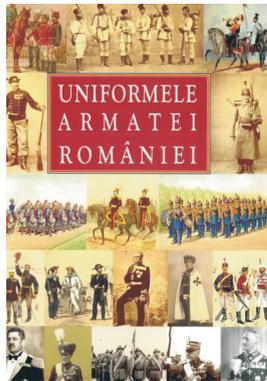
- The Award “*Lieutenant Colonel Mircea TOMESCU*”, for the *Military History* domain, was presented to **Florian BICHR** for the book “*Corsarii uitați ai adâncurilor. Delfinul. Rechinul. Marsuinul*”/ “*Forgotten Buccaneers of the Depths: the Dolphin, the Shark and the Porpoise*”.



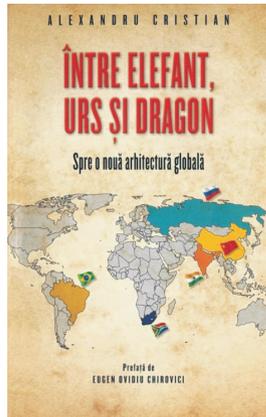
**Other nominees
for the Gândirea militară românească
Journal Awards were:**



For the Award “*Marshal Alexandru Averescu*”:
“*Sistemul de răspuns la terorism*”/“*Terrorism Response System*”,
authors **Gabriel OPREA, Ilie BOTOȘ, Vasile BOGDAN**,
and “*Liderul performant. Fundamente psihologice*”/“*Competitive Leader. Psychological Foundations*”,
author **Major General (r.) Dr Gheorghe ARĂDĂVOAICE**.



For the Award “*Division General Ștefan Fălcoianu*”:
“*Uniformele Armatei României*”/“*Uniforms in the Romanian Armed Forces*”,
coordinator **Lieutenant General Dr Cătălin ZISU**;
authors: **Brigadier General Magistrate Dr Gheorghe COSNEANU**,
Captain (N) Dr Marian MOȘNEAGU, **Horia Vladimir ȘERBĂNESCU**,
Lieutenant Colonel Gabriel PĂTRAȘCU, **Dr Teodora GIURGIU**,
Lucian DRĂGHICI,
and “*Mircea – Voievodul Velelor*”/“*Mircea – the Vessels Voivode*”,
authors **Marian MOȘNEAGU, Gabriel-Octavian NICOLAE**.



For the Award “Brigadier General Constantin Hîrjeu”:

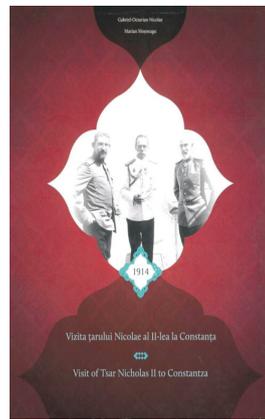
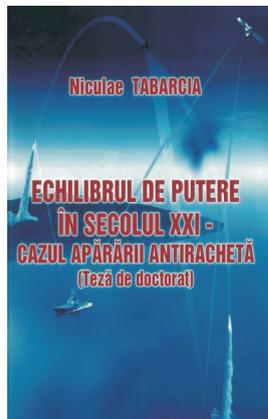
“Între elefant, urs și dragon. Spre o nouă arhitectură globală”/“Between the Elephant, Bear and Dragon. Towards a New Global Architecture”,

author **Alexandru CRISTIAN**,

and *“Orientul Mijlociu în tumultul schimbării. Episoade ale unei radiografii neterminate”/*

“The Middle East in the Turmoil of Change. Episodes of an Unfinished Radiography”,

author **Carmen RÎJNOVEANU**.

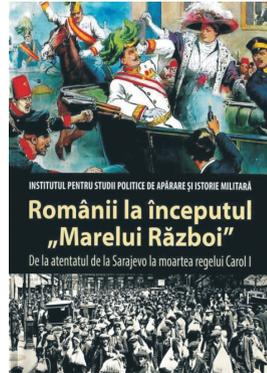


For the Award “Army Corps General Ioan Sichitiu”: *“Echilibrul de putere în secolul XXI. Cazul apărării antirachetă”/“Balance of Power in the 21st Century. The Case of Missile Defence”,*

author **Niculae TABARCIA**,

and *“Vizita țarului Nicolae al II-lea la Constanța”/“Tsar Nicolae II Visit to Constanța”,*

authors **Gabriel-Octavian NICOLAE, Marian MOȘNEAGU**.



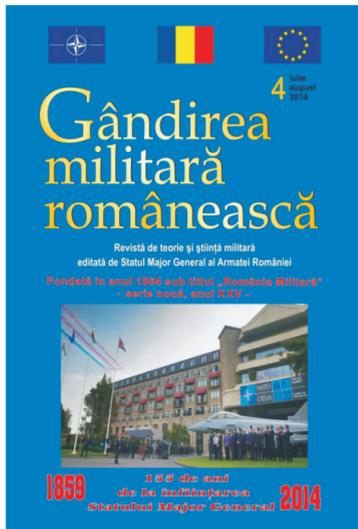
For the Award “*Lieutenant Colonel Mircea Tomescu*”:
“*Șefii Statului Major General. Enciclopedie*”/“*Chiefs of the General Staff. Encyclopaedia*”,
coordinator **Lieutenant General (r.) Dr Avram CĂTĂNICI**;
authors: **Captain (N) Dr Marian MOȘNEAGU, Lucian DRĂGHICI, Dr Manuel STĂNESCU, Dr Luminița GIURGIU, Dr Teodora GIURGIU, Adela-Cosmina LĂZĂRESCU, Dr Victor-Răzvan MARTIN, Dr Leontin STOICA, Raluca TUDOR, Dr Cornel ȚUCĂ**,
and “*Românii la începutul «Marelui Război». De la atentatul de la Sarajevo la moartea regelui Carol I*”/“*Romanians at the Onset of the «Great War». From the Assassination in Sarajevo to the Death of King Carol I*”,
coordinator **Major General (r.) Dr Mihail E. IONESCU**.



The Special Award

was presented to the following articles published
in *Gândirea militară românească* Journal in 2014:

➤ **“Paradoxul actual al puterii aeriene a NATO”/“The Current Paradox of NATO Air Power”, author Major General Dr Victor STRÎMBEANU.**



(*Gândirea militară românească* no. 4/2014,
pp. 116-126)

PARADOXUL ACTUAL AL PUTERII AERIENE A NATO*

General-maior dr. Victor STRÎMBEANU

Airpower is, on the one hand, an important pillar of the Alliance defence capabilities. On the other hand, in the author's opinion, NATO air power is in continuous decline. To detail, capabilities deficits continue to grow, which results in the Alliance vulnerability and exposure to the risk of not being able to adequately meet the security needs and the set level of ambition.

In addition, the future security environment analysis and prognosis lead to the conclusion that the Alliance will have to operate in a new environment, a complex and multidimensional one, across the full spectrum of objectives and missions, required by a new global balance of power.

Keywords: Security Council; air operations; lines of communications; security needs

de răspuns la acțiuni militare. Mai recent, în operațiile din Balcani, Irak, Afganistan, Libia, cuplată acum și cu puterea spațială, puterea aeriană a continuat să demonstreze valoarea fără egal și fără precedent prin caracteristicile sale implicite, viteză, perspectivă, precizie, omniprezență, independentă față de obstacolele terestre, acces, economie de forțe. În aprecierea specialiștilor, *NATO a fost, în primul rând, o Alianță a puterii aeriene.*

General-maior dr. Victor Strimbeanu – reprezentantul Statului Major General la Comandamentul Suprem al Forțelor Aliate din Europa (SHAPE), Ministerul Apărării Naționale, (2012).

* Concluzii ale studiului JAPCC, *Air Power – Future Vector*, 2014.

Introducere

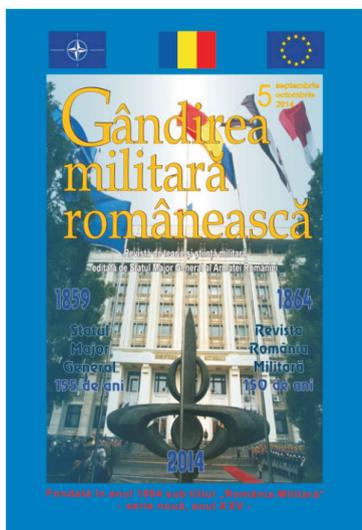
– termenii paradoxului

1. Rolul determinant al puterii aeriene

Puterea aeriană s-a dovedit a fi de *cea mai mare importanță pentru Alianță*, încă de la înființarea acesteia. Un pilon important al NATO în descurajarea agresiunii în timpul *războiului rece* a fost reprezentat de puterea, flexibilitatea și înalta calitate a forțelor sale aeriene, de sine-stătătoare sau din cadrul celorlalte categorii de forțe (terestre, navale). Aceste capacități cheie ale puterii aeriene sau bazat pe tehnica de ultimă generație, antrenament superior, interoperabilitate, experiență, toate acestea sprijinite și amplificate de o conducere fermă, suplă, printr-un sistem de comandă-control eficient, fiabil, redundant. Forțele Aeriene au fost *permanent în linia întâi de apărare* a spațiului aerian și a teritoriului Alianței. Periodic, Alianța a recurs la puterea aeriană ca la prima opțiune

> **“Marele Stat Major român în anul declanșării Primului Război Mondial”/**
“The Romanian Great General Staff in the Year of the Outbreak
of the First World War”, author Colonel (r.) Dr Ion GIURCĂ.

(Gândirea militară românească no. 5/2014,
pp. 11-34)



MARELE STAT MAJOR ROMÂN ÎN ANUL DECLANȘĂRII PRIMULUI RĂZBOI MONDIAL

Colonel (r.) dr. Ion GIURCĂ

In the summer of 1914, the Romanian Great General Staff had to prepare to pass a new test, in the context of the decision taken at the Crown Council meeting on 21 July/3 August 1914 and Romania's predictable entry into the war on the side of the Entente, as the vast majority of options were in that direction.

When the structure responsible for the armed forces organisation, planning and strategic command celebrates its 155th anniversary, the author analyses the situation of the Romanian Great General Staff in the context of the existing events and the measures it took in 1914 to prepare all the armed forces components and the territory for a possible action.

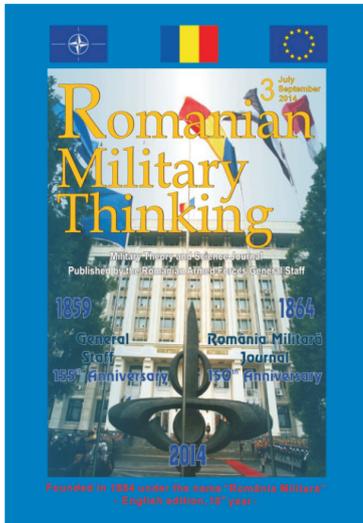
Keywords: the Franco-Prussian War; the Entente; independence; political alliances

În anul declanșării primei conflagrații mondiale, la 15/28 iulie 1914, prin agresiunea săvârșită de către Austro-Ungaria împotriva Serbiei, cu o justificare îndoielnică din punct de vedere politic, poate de înțeles sub aspect emoțional după asasinarea familiei princiere austriece, Marele Stat Major român se afla în cel de al 55-lea an al existenței sale, marcată de progrese cantitative și calitative sub aspectul organizării, încadrării și clarificării atribuțiilor, responsabilităților și stilului de muncă la nivelul întregii structuri, a secțiilor și birourilor din componere.

În cei 55 de ani de existență, structura la pace (Statul Major General, Marele Stat Major) și cea constituită la război (Marele Cartier General) își probase capacitatea de organizare, planificare și conducere a activităților și acțiunilor specifice celor două stări în care s-a aflat țara și armata, în perioadele apartenenței sau nu la sisteme de alianță politică și militară. Indiferent de aprecierile pozitive sau negative la adresa acestor structuri, unele obiective, altele vădit subiective, un lucru este cert și incontestabil. La marele examen al acestor structuri, care este războiul, atât în anii 1877-1878, cât și în 1913, Marele Cartier General și-a probat capacitatea de a-și îndeplini atribuțiile, conducând forțele din subordine la victorie, generând direct o situație favorabilă demersurilor factorului politic.

Colonel (r.) prof. univ.dr. Ion Giurcă – Universitatea *Hyperion* din București.

➤ **“Role of Fact-Finding Missions in Crisis Management”**, author Lieutenant Colonel Dr Iuliana-Simona ȚUȚUIANU.



(*Romanian Military Thinking* no. 3/2014, pp. 166-182)

ROLE OF FACT-FINDING MISSIONS IN CRISIS MANAGEMENT

Lieutenant Colonel Dr Iuliana-Simona ȚUȚUIANU

Introduction

History, as Richard Nixon said, depends on who is writing it. The challenge for human rights fact finders is firstly to ensure their independence. This is not just independence from strings attached by funding bodies, and freedom from their own nation's allegiances or sympathies, but as Professor Bassiouni points out, from the politically expedient findings desired by the UN bureaucracy or other sponsoring bodies¹. Allied to this overriding concern, fact finders must have sufficient expertise to know when witnesses have been coached by political groups to tell a particular story or whether they are motivated by a desire to achieve asylum or special treatment by exaggerating the horrors of their oppressor. Then, there are ethical constraints on interviews *in situ*, which might expose the witness to lethal reprisals. These and other problems of human rights fact finding are exacerbated in conflict situations where the consequences can be deadly and the stakes for the local government can be much higher. However crisis management

Fact finding is increasingly important both in and to crisis management. It can alert to potentially explosive situations; it can allocate responsibility, assist accountability and inform deterrent actions that may range from the imposition of sanctions to the referral to an international court prosecutor; it can even be the basis for humanitarian intervention. It can identify ways forward for peace-building and lessons that must be learned to prevent the recrudescence of conflicts in the future. But fact finding has been little studied and never theorised. This article argues that for fact-finding exercises to be worthy and credible they must comply with a number of protocols which draw upon ethics, law, and pragmatic best practice, so as to ensure that they come as close as possible to establishing the truth and thus providing a sure basis for the delivery of justice.

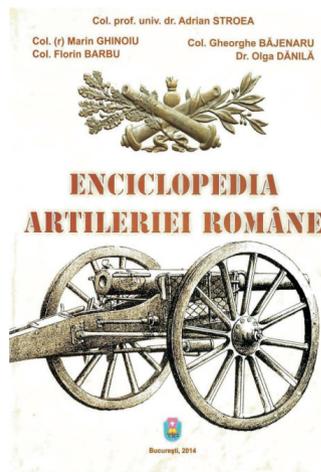
Keywords: *fact-finding mission; crisis management; human rights; ethics*

Lieutenant Colonel Dr Iuliana-Simona Țuțuianu – Senior Researcher and Chief of the Defence Strategies Office, the Romanian Institute for Political Studies of Defence and Military History.

¹M. Cherif Bassiouni, *Appraising UN Justice-Related Fact-Finding Missions*, in *Washington University Journal of Law & Policy*, 035, 2001, pp. 35-49, see <http://digitalcommons.law.wustl.edu/wujlp/vol5/iss1/6/>, retrieved on 12 August 2014.

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as well as to

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English version by
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Thank you, dear collaborators, for the word materialised in the pages of the journal of the General Staff!

Thank you for the fact that, together, we have written a page in the history of the Romanian Military Thinking!

Therefore, it is to each of You we express our gratitude and appreciation:

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*We thank you all – the collaborators and readers
of our journal alike, and we wish you happy holidays.
May you be healthy and loved!*

Happy New Year!

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Cover 3: *Multinational Exercise “BLACK SEA ROTATIONAL FORCE”, 5-8 October 2015, Vatra Dornei, Romania. Source: <http://www.forter.ro/ministerul-apararii-nationale/exercitiu-romano-americano-bulgar-in-masivul-rarau/2452>. Photo: Vlăduț COJOCARIU*



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