

Ministerul de Resbel

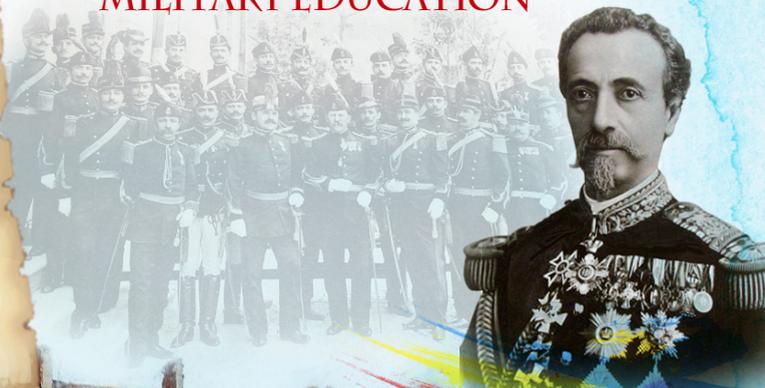
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Rege al Romaniei,
La toti de fata si viitori, sanatate:
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asupra serviciului de stat-major; asupra
raportului ministrului Nostra secretar
de Stat la departamentul de resbel sub
No. 14.498,

Am decretat si decretam:
Art.1. Se infiinteaza pe langa
marele stat-major o scola superioara
de resbel, destinata a forma
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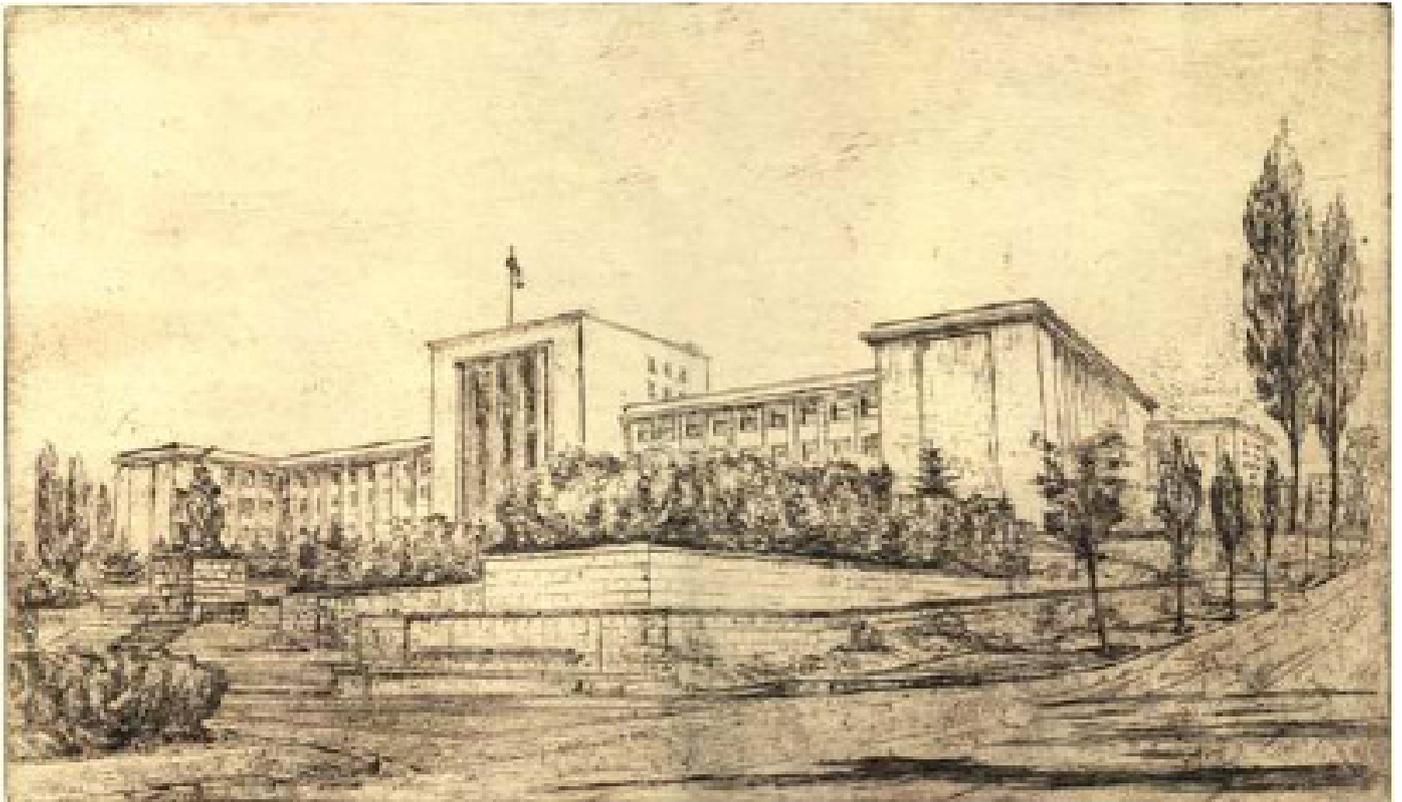
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CONTENT

SECURITY AND DEFENSE

- 7** **Mission command – an *auftragstaktik* model**
Cdor. (Navy), Cristian ABAIANIȚI, PhD Student
-
- 14** **Aspects regarding “Red team” and “Red teaming”**
Lt.Col. Adv.Instr. Cătălin CHIRIAC, PhD Student
-
- 19** **Modern surface-to-air missile systems – national/Norwegian Advanced Surface-to-Air Missile System (NASAMS)**
Maj. instr.sup. Gelu ȚANU
MG (ret.) Prof. Florian RĂPAN, PhD
-
- 25** **Operational art – essential component of naval doctrine**
Cdor. (Navy) Cristian ABAIANIȚI, PhD Student
-
- 35** **Aspects regarding the use of field artillery in contemporary operations**
Lt.Col. Florin COTEȚ, PhD Student
-
- 40** **Cybernetic actions on critical infrastructures in the military field**
Maj. Petrișor PĂTRAȘCU, PhD Student
-
- 46** **EOD support in operational environment**
Col.Assoc.Prof. Cristian-Octavian STANCIU, PhD

52 Civil-military cooperation in nowadays's security environment

Lt.Col. Eugen POPESCU, PhD Student

59 Approaches to risk management related to military logistic support actions

Col.Prof. Gheorghe MINCULETE, PhD

65 Movement and transportation – basic component of the logistic support of military units during peacetime

Col. (ret), Prof. Sorin PÎNZARIU, PhD
Col. Costel-Dorel MÎNEA

72 How the NATO Security Investment Program (NSIP) complex projects are realized

Col. (AF) Ștefan-Daniel COTIGĂ, PhD Student

77 Determining and increasing the combat capacity by engaging the military Clergy in domestic and international missions

Military Chaplain Traian CHIRCU, PhD Student

82 Canonical operational law in the context of the organization and functioning of native military and ecclesial organisms

Military Chaplain Traian CHIRCU, PhD Student

SAFETY AND PUBLIC ORDER

86 Corruption *versus* the need for integrity

Iuliana PANĂ, PhD student
Dan DINU, PhD student

90 The evolution of the Romanian Intelligence Services actions in preventing and combating terrorism, organized crime and corruption

Slt.eng. Bogdan-Constantin PAGNEJER

97 Current problems in Intelligence cooperation
Dan DINU, PhD student

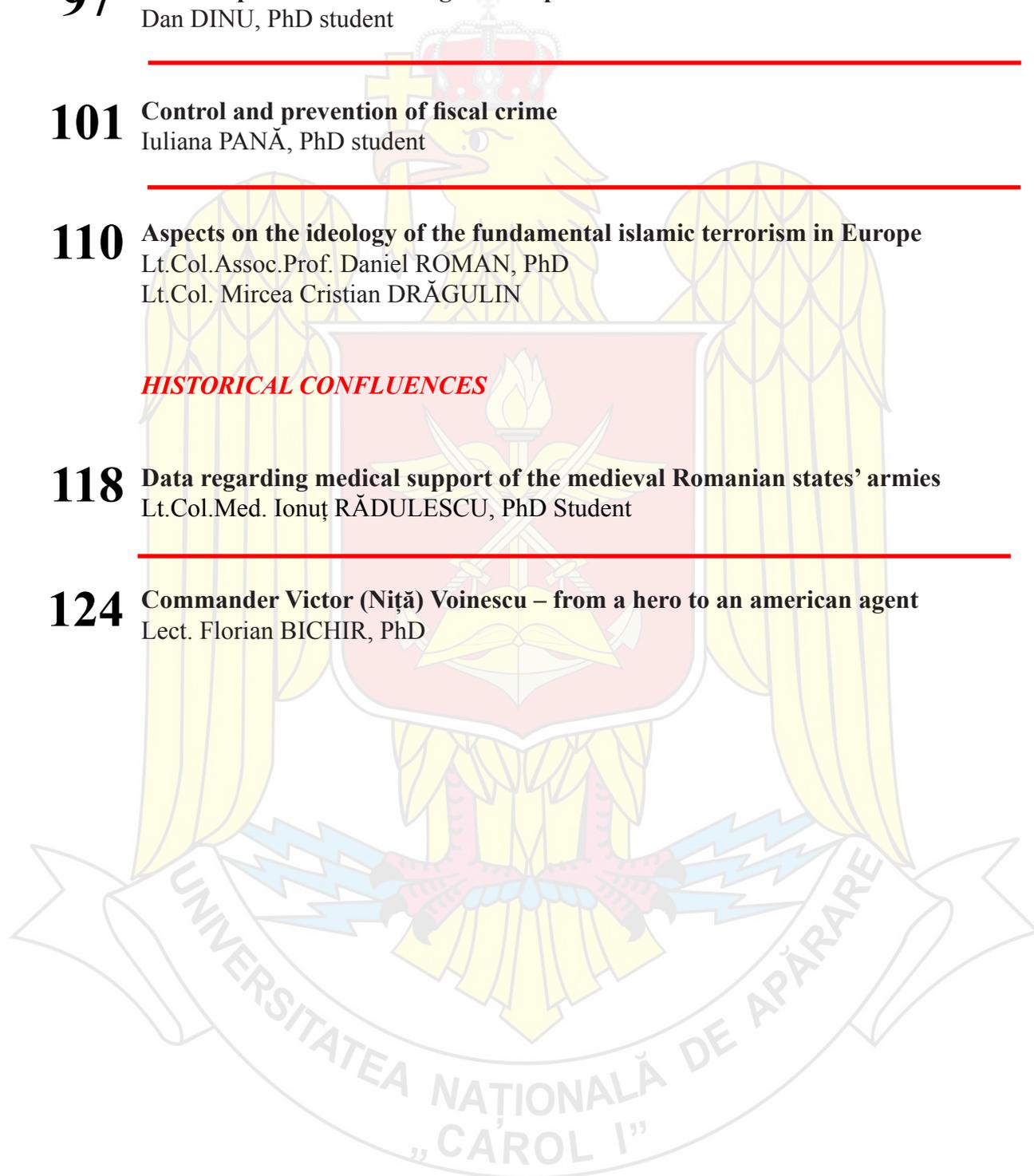
101 Control and prevention of fiscal crime
Iuliana PANĂ, PhD student

110 Aspects on the ideology of the fundamental islamic terrorism in Europe
Lt.Col.Assoc.Prof. Daniel ROMAN, PhD
Lt.Col. Mircea Cristian DRĂGULIN

HISTORICAL CONFLUENCES

118 Data regarding medical support of the medieval Romanian states' armies
Lt.Col.Med. Ionuț RĂDULESCU, PhD Student

124 Commander Victor (Niță) Voinescu – from a hero to an american agent
Lect. Florian BICHIR, PhD





MISSION COMMAND – AN AUFTRAGSTAKTIK MODEL

Cdor. (Navy) Cristian ABAIANIȚI, PhD Student*

Command and control represented throughout military history, and still arising even during the present days, a strong concern of military theorists about the effective use of these attributes of military conduct to achieve the objectives of the war. Moreover, the fact that doctrines and manuals mentioned aspects regarding the role of decentralized or centralized command and control in conducting an operation is a consequence of operational practice in the history of armed conflicts.

Keywords: mission; task; command; control.

„Those who fail to learn from history are doomed to repeat it.”
Winston Churchill

In the context of the emergence and exponential expansion of actions in the sphere of hybrid warfare, the use of the military instrument in conjunction with the other instruments of power produces the most effective results precisely because of the experience gained during the military history of using a suitable C2 (command and control). Both command and control are two concepts that work in parallel and have seen a simple evolution from being concentrated in the authority of one person to a decentralized type where authority is divided on the levels of military art.

Throughout the military history, both social organization and the volatility of the conditions of the battlefield required the adoption of a military conduct style consistently meeting the needs of achieving the objectives of the war. Command and control, as well as attributes of military conduct, have been applied in such situations, both centralized and decentralized, depending on the conditions of the combat environment, military culture and education, as well as technological developments in the field of military technology but especially in the information field.

The original concept describing how to apply the two attributes of military conduct was the „auftragstaktik”¹ and appeared in the Prussian military society prior to World War I period.

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Although this concept has been known by American military leaders since the end of the Second World War, its significance is mentioned only in 1986 in FM 100 5 „Operations” under the name of „mission orders”² and the so-called concept of „mission command”³ was recently adopted in 2010 in the NATO’s AJP 01 (D) „Allied Joint Doctrine”, and in 2011 in the US Army Force’s doctrine ADP 3-0 „Unified Land Operations”.

Both the Prussian concept and its American successor aim to provide the level of flexibility necessary to adapt to the interchangeable conditions of the battlefield in order to make appropriate decisions by commanders on the ground but not to exceed the limits imposed by the intention of the higher echelon that is not on the spot, on the battlefield. Such a condition of respecting intent is the only distinct element that has brought about changes to the current concept compared to the original concept. Expression of intent only in terms of tasks during the Prussian period has been improved by adding the purpose and end state precisely to clearly state the limits within which freedom of decision must be manifested.

The concept of auftragstaktik – appearance, evolution and meanings

The sources of the Prussian concept of auftragstaktik are attributed to the period of the Seven Years War (1756-1763) when Frederick II the Great (1712-1786) considered the need to keep to his own person the authority to command

and coordinate all the army corps in order to achieve concentrating them on the place and time chosen for the decisive battle. The reasons for this rudimentarily centralized C2 are due to the non-mobilization of the population for war just to bear the economic costs with it. As a result, the army was largely made up of prisoners of war, detainees and mercenaries without any national conscience, culture and military education that only the Prussian nobles commanders had. Such an army did not present serious assurances about the delegation of authority and the exercise of the initiative by the subordinates represented a major risk for the achievement of the objectives of the war, so that the Kaiser's decision was known to the level of the fighter having the law of the latter. At the end of this war, Frederick the Great took the decision to demobilize the army and retain a small number of military commanders.

The battles of the Fourth Coalition (1806-1807) made up of Prussia, Russia, the Kingdom of Saxony, Sweden and the United Kingdom in response to Napoleon I's campaign during his wars (1803-1815) represented a moment of deep reconsideration of the need to keep a centralized C2. This new European conflict found Prussia with the demobilized army and the same commanders during the Seven Years War, but in their old age with and unfamiliar with the Napoleonic warfare. Under these circumstances, Prussia suffered a disastrous defeat during the Jena Campaign (1806), bearing heavy conditions through the Paris Convention (8 September 1808) when „Prussia had to cede half her territory and population, pay an indemnity of 141 million francs, limit army strength to 42,000 men and accept French garrisons in key fortresses”²⁴. In the immediate aftermath of the Jena Campaign, King Frederick Wilhelm III became aware of the need for reforms in all domains, and in the military field he called, in 1807, a ”Military Reorganization Commission (Militär-Reorganisationskommission)”²⁵ which, in addition to reforming the military system, was also charged with identifying the mistakes committed during the Jena Campaign, finding those who will be blamed and establishing the necessary measures that had to be implemented immediately. One of the reasons for the failure in the Jena Campaign was the lack of effective coordination of the three army corps led by general Christian Karl August

Ludwig von Massenbach, general Gerhard Johann David von Scharnhorst and general Karl Ludwig August Friedrich von Pfull.

During the same period, there appeared in the doctrine „Exerzierreglement”²⁶ published in 1806 what would later be attributed to the meaning of the concept of auftragstaktik, namely „commander should give his divisional commanders the general concept in a few words, and show them the general layout of the ground on which the army is to form up. The manner of deployment is left up to them [the subordinates]; fastest is best. The commander cannot be everywhere”²⁷. The concept in this context is regarded as the concept of concentration all of the army corps and concentrating them in order to carry out the decisive battle. So, the first ideas about the need to decentralize C2 in the dislocation stage appear.

A remarkable Prussian personality with remarkable operational thinking was General Helmuth von Moltke Sr. (1800-1891), Chief of the Great General Prusac from 1857 to 1888, who realized that the ”million-man”²⁸ armies could not be ruled to the point of concentration or even during the decisive battle only through the intuition of one commander of the whole army. He supported the idea that any subordinate must take „the actions (...) in the absence of orders that supported the senior commander's intent”²⁹. This kind of developing military actions in that period was later named as ”mission tactics”³⁰. Also, Moltke Sr., in his writings, in order to apply of mission tactics, used the conduct philosophy described above through two types of „mission orders”³¹: the first category of order, called direct or express orders („Befehl”) were those orders that described in detail both the task and the method of accomplishment, and the second category of order, called the directive („Direktiven”), were those orders sending the task to the subordinates, and explaining the reasons for the commander to designate that task, leaving the subordinates free to act in fulfilling that task³² which supported that decentralized form of C2. Moltke acknowledged that he was much more in favor of directives than the direct orders that he adopted during the Austro-Prussian War (1866) when he won a resounding victory in the Battle of Königgratz (3 July 1866) as well as during the Franco - Prussian War (1870-1871). As a identified lesson from wars involving

Prussia, Moltke emphasized the importance of an order-based conduct system that emphasizes why instead how to perform a task¹³. Still, Moltke mentioned that „it is crucial for the subordinate to understand the purpose of the operation, and then work for realization even if it means working against the actual orders. Within the higher commander’s perspective it is necessary to tell the subordinate only what is necessary to accomplish the purpose”¹⁴. In order to implement the mission orders system as a centralized C2 (if direct orders are applied) or decentralized (if directives are applied) in mission tactics, Moltke together with Julius von Verdy du Vernois and Hermann von Wartensleben Carow, in 1869, edits „Instructions for Large Unit Commanders”¹⁵ where he lists three principles that support these tactics, thus: accentuating the purpose instead of the method, non-execution of a direct order if the situation in the combat area has changed and the subordinates can fulfill the commander’s intention by other means and, the last principle, the impossibility of complete and timely fulfilling of an picture about the battlefield by commanders who are not on the terrain.

In conclusion, Moltke’s period is characterized by the application of mission tactics by using mission orders with a focus on directives, which denotes a decentralized C2 but without neglecting the usefulness of direct orders to mark command and control centralized when the initiative of subordinates exceeds the limits of accountability. The conduct style based on directives will later materialize in the concept of *auftragstaktik*.

General Otto von Moser is the one who would re-make the philosophy of conducting from Moltke’s vision by naming as *auftragstaktik* which he first mentioned it in the ”Training and Control of the Battalion in Combat”¹⁶ manual in 1906. Also, in 1914 this concept was mentioned in the battalion field manual where it was defined „as a method of command and control in which the higher commander relied primarily on the cooperation of subordinates, rather than on detailed and binding orders, in the accomplishment of tasks”¹⁷.

The concept of *auftragstaktik* generally became valid and applicable from the beginning of the interwar period when General Hans von Seeckt (1866-1936) defined this concept as „a method of troop command and control based on providing subordinates freedom of action in

the accomplishment of their assigned tasks”¹⁸. Also, in 1933, the field manual „Troop Command and Control”¹⁹ it is stated that the „foundation of command and control is the mission and the situation”²⁰. This manual was also applicable in the first three years of World War II when German commanders assured freedom of action for subordinates as long as this freedom did not jeopardize their intentions. This kind of decentralization of C2 led to somewhat unexpected results by Wehrmacht achievement until 1942 when Hitler’s interference in the decisions of conducting German forces on the eastern front led to the abandonment of the *auftragstaktik* because of direct orders given by Führer which produced a chain of defeats.

Mission command – from the outset and to the present

Following the same pattern of the concept of *auftragstaktik*, and the emergence of ”mission command”²¹, or mission-based command as it is found in some national doctrinal textbooks, is initially predicted through debate and mention of its meanings in the American literature.

As I previously mentioned, at the end of the Second World War, the US Army, through its military representatives, first contacted the concept of *auftragstaktik* and its significance. The mission orders system described by Moltke is assimilated to directives excluding direct or express orders. The significance of the directives that formed the basis of the concept of *auftragstaktik* would, for the first time, be mentioned in the doctrine of the US Army in 1976 without giving a name for that meaning. Thus, through this doctrine, they recognized the need to use orders to „allow flexibility within a plan for a subordinate to accomplish the mission within the commander’s intent”²². Starting with the 1982 edition of FM 100 5 ”Operations”, the significance attributed to the Prussian concept was mentioned, which was completed with the adoption of the concept of mission-type orders in the doctrine edited in 1986. The 1993 version of the same doctrine calls for ”willingness and ability to act independently within the framework of the commander’s intent”²³, which is an important step in passing the command and control from being centralized to decentralized. The US Joint Doctrine (2007) provides that the unity of effort in an ”unified action”²⁴ involving both the military instrument

and other governmental or non-governmental or international agencies "is made possible through decentralized execution of centralized, overarching plans"²⁵ with the commander's intention which represents „unifying idea that allows decentralized execution within centralized, overarching guidance (...) a clear and concise expression of the purpose of the operation and the military end state"²⁶ and mission orders that aims to "direct a subordinate to perform a certain task without specifying how to accomplish it"²⁷. With this doctrine, the principle of decentralization of command and control marks the definitive migration of this philosophy from the centralization of the C2, which represented a type of military conducting actions in case of a defensive war that had been in place for more than 50 years of Cold War.

The Mission Command Concept was adopted and stipulated for the first time in 2010 in the AJP 01 (D) "Allied Joint Doctrine" where it describes how „commanders generate the freedom of action for subordinates to act purposefully when unforeseen developments arise, and exploit favourable opportunities"²⁸ and in the 2017 version of the allied doctrine, this concept was developed and refined, adding to it besides freedom of action also initiative and speed of action, but in accordance with the commander's directives. The last edition also mentions the flexibility that a commander must demonstrate in relation to the application of decentralization C2 or the application of decentralized control and the command remains a detailed type or "command by veto according to the prevailing situation and type of joint force"²⁹. In line with the Allied Doctrine of 2017, there is also the UK Doctrine of the Land Forces which, in addition to the initiative, the freedom and speed of action as tools of this concept also emphasizes the expected results of achieving the mission command, namely the objectives and effects. Therefore, expressing them in the intention is very important than specifying the detailed ways in which they can be fulfilled. Also this doctrine emphasizes mission orders as a means of materializing C2 decentralization.

In the year following the adoption of this concept in the NATO doctrine, the mission command is stipulated for the first time in the US Army, respectively in the ADP 3-0, "Unified Land Operations", where the following definition

appears: "the exercise of authority and direction by the commander using mission orders to enable disciplined initiative within the commander's intent to empower agile and adaptive leaders in the conduct of unified land operations"³⁰. What stems from this definition is that imposing discipline on the initiative is a desiderate for avoiding situations that would lead to further escalation of existing tensions in an operational environment.

By enumerating these meanings of the mission command in the order of their appearance, we can all say that they provide a sufficient degree of freedom of action for subordinates to carry out the missions entrusted but without exceeding the boundaries imposed by the intention of the commander and resulting from the restrictions and constraints established according to the conditions of the operational environment and conditions describing the desired end state. The commander's intention is the essential tool that guides how extensive the initiative and freedom of action can be. According to the Operations Planning Manual, the commander's intent is formulated to cover the key tasks (essential) that will lead to the achievement of purpose necessary in order to the accomplish the desired end state (acceptable conditions). So these three elements are the ingredients of a solid and reference intent for subordinates.

The pros and cons for applying mission command

The most remarkable advantage of applying this type of command is to encourage the subordinates' creativity in accomplishing the tasks that will compete to fulfill the objectives of the higher echelon required to achieve the strategic desired end state. Such creativity must be weighed in such a way that it does not produce unnecessary escalation of already existing tensions in the operational environment. Especially when in certain operations, such as NEO or anti-piracy operations, creativity must be restricted and supplemented by maintaining a reserved position in accordance with the rules of engagement.

Another factor influencing the importance of this concept is represented by the independence of actions performed by subordinates. For example, in the early years of the First World War the actions carried out and characterized by independence from the expected results at the strategic level led to the

creation of the so-called stationary war or trenches war which caused unnecessary loss of life.

The unity of effort is better achievable in the case of a centralized C2 than in the case of decentralization, especially when performing tactical action or operation but having a strategic effect such as a mining operation to impose sea denial, or the actions of special forces that must be limited in terms of freedom of action.

An advantage of command and control decentralization is the management of a large amount of information that, in a centralized C2 situation, may lead to increasing the time for decision-making process, which would slow down the tempo of action or making the decision to exploit opportunities.

Military education and culture is a decisive factor in the successful implementation of a decentralized C2. In the absence of an operational culture, some subordinate commanders prefer not to have an initiative as a justification for not being accountable for failures of actions taken thus they have been agreeing of transmitting by the commander the way to accomplish the task. On the other hand, the C4ISTAR system, besides other requirements, wants to be just what compensates for the lack of initiative of such commanders by monitoring, evaluating and correcting their actions.

The nature of the objectives may be a justification for the centralized or decentralized use of C2. Thus, in the case of predominantly non-military objectives, a centralized C2 is preferred, unlike the situation in which the decentralization of command and control is favorable for increasing the speed of action in order to achieve military objectives that will lead to the fulfillment of a desired end state expressed in military terms. In peace-support operations, it is also appropriate to centralize command and control due to objectives that need to be met with limitations (constraints and restrictions) that go beyond the military sphere.

Instead, in operations where the objectives are military in nature, the results of applying a centralized C2 reside in exaggerated attrition due to the removal of morals and motivation of subordinates, as it happened to the German army in 1941, after the failure of having Stalingrad conquered when Hitler took command of the whole armed forces by transmitting befehl-type orders known as „Führerbefehle”³¹.

Conclusions

Describing how to use command and control in a centralized or decentralized way to conduct an operation, from the outset and to the present, I have emphasized that the actual mission command concept is nothing more than a refinement of the auftragstaktik Prussian concept. Beginning with Frederick the Great, continuing with Scharnhorst, then Moltke, and finally Seeckt, all recognized the usefulness of using a military conduct originally based on a centralized C2 that migrated to the decentralized variant by using mission orders to apply mission tactics.

Although the first category of order, namely the direct orders that details both the task and the method of accomplishment that are appropriate to the centralized form of the C2, were considered useful for conducting an army without culture and military education, but along with the reform of the Prussian military system after the Jena Campaign, with emphasis on achieving appropriate military education, it has needed for cooperation between commanders and their investment with the necessary confidence in their actions. Thus, a system of directives has emerged that mentions the task and the reasons of the commander for subordinates to accomplish the task, which implies giving a freedom of action in accordance with the directive of higher echelon. These transformations of operational thinking were the prerequisites for the emergence of the concept of auftragstaktik which was mentioned first in 1906 and, after that, in 1914 it was consecrated as it is known in present days.

The period between World War II and 1986 was marked by the consequences of the Cold War where western military culture was under the auspices of a possible defensive position in the event of escalation of military action between NATO and the Soviet Union. This mentality has decisively contributed to maintaining a centralized C2 through the use of orders with a focus on mission and the exaggerated detailing of the ways of accomplishment. The reluctance to grant the subordinates' initiative was also justified by their lack of education about the creative capacity to accomplish the tasks. Although the 1976 US doctrine recognized the usefulness of orders to allow subordinates some flexibility in carrying out their tasks, the concept of mission orders was later defined in the 1986 edition of the

same doctrine. Statutory military conduct based on mission orders was accomplished in the allied doctrine of 2010 and, also, in the 2011's edition of US Army by mentioning the mission command. This type of decentralized command and control aimed at encouraging creativity in subordinates carrying out tasks by giving initiative, freedom and speed of action but consistent with the intention of the commander expressed solely in terms of purpose, the essential task(s) and the desired end state.

In modern operations that go beyond the military domain, such as stability operations, the application of a decentralized C2 pays particular attention to the nature of non-military objectives, the accomplishing of which requires action supported by all instruments of power. In such situations, a centralized C2 will be the common denominator for military action to support those of other non-military organizations or agencies.

In conclusion, adopting a military conduct style appropriate to an operation from a command and control point of view will be the commander's attribute that has to make the most of a mix of art and science to identify those requirements that justify the centralized or decentralized C2.

NOTES:

1 The concept of *auftragstaktik* is an artificial one made up of two German terms: *auftrag* which translates through the mission (see: Milan Vego, *Joint Operational Warfare – Theory and Practice*, US Naval War College, Second Printing, 2009, p. X-34) and *taktik* which means military tactics (see: Maj. Michael J Gunther, *Auftragstaktik: The Basis for Modern Military Command?* US Army Command and General Staff College, Fort Leavenworth, Kansas, 2012, p. 7).

2 Maj. Michael J Gunther, *op. cit.*, p. 50.

3 ***ADP 3-0, *Unified Land Operations*, Department of the Army, October 2011, p. 6.

4 Clau Telp, *The Evolution of Operational Art, 1740 – 1813, From Frederick the Great to Napoleon*, Frank Cass, 2005, p. 89.

5 *Ibidem*, p. 91.

6 Maj. Michael J. Gunther, *op. cit.*, p. 7.

7 *Ibidem*.

8 Milan Vego, *A short history of operational art*, Naval War College Faculty, April 2007, p. 2.

9 Maj. Michael J. Gunther, *op. cit.*, p. 3.

10 *Ibidem*.

11 *Ibidem*.

12 *Ibidem*, p. 8.

13 *Ibidem*.

14 *Ibidem*, p. 9 (apud: Helmuth Karl Bernhard von Moltke, "Moltkes Taktisch-Strategische Aufsätze aus den

Jahren 1857 bis 1871," in *Moltkes Militärische Werke*, vol. 2, no. 2, ed. German General Staff (Berlin: E. S. Mittler, 1892-1912), 183. Hereafter cited as *MMW*).

15 *Ibidem*, pp. 9 - 12.

16 Milan Vego, *op. cit.*, p. X - 34.

17 *Ibidem*.

18 *Ibidem*.

19 *Ibidem*.

20 *Ibidem*.

21 ***AJP-01(E), *Allied Joint Doctrine*, NSO, 2017, p. 5 - 1.

22 Maj. Michael J. Gunther, *op. cit.*, p. 48.

23 *Ibidem*, p. 50.

24 ***JP 1, *Doctrine for the Armed Forces of the United States*, NSO, 2007, p. II - 2.

25 *Ibidem*, p. IV - 15.

26 *Ibidem*, p. IV - 16.

27 *Ibidem*.

28 ***AJP 01 (D), *Allied Joint Doctrine*, NSA, 2010, p. 6 - 3.

29 ***AJP 01 (E), *Allied Joint Doctrine*, NSA, 2017, p. 5 - 1.

30 ***ADP 3-0, *op. cit.*, p. 6.

31 Milan Vego, *op. cit.*, p. X - 23.

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*** *FN-1, Naval Forces Doctrine*, SMFN Printing House, Bucharest, 2018.

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ASPECTS REGARDING "RED TEAM" AND "RED TEAMING"

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The decision-making process has always been commanders' responsibility both regarding the actual process and the acceptance of the inherent consequences. The possibility to support the decision process through analyses coming from different prospective has favored the appearance of *Red Teams* and their subsequent activities, *Red Teaming*.

Keywords: Red team; alternative analysis; decision-making process.

Red teams and their specific processes have been used along the years as instruments of increasing productivity by both governmental and commercial enterprises. Some of their important objectives were the reduction of risks and the

at the level of an organization with the declared purpose to support the decision-making process.

The importance of the *Red team* and of its specific activity has generated different definitions which harbor the idea of identifying the alternatives

Table no. 1

THE DEFINITIONS OF RED TEAMS

RED TEAM	SOURCE
An organizational element comprised of trained and educated members that provide an independent capability to fully explore alternatives in plans and operations in the context of the operational environment and from the perspective of adversaries and others	<i>JP 2-0, Joint Intelligence</i> , CJCS, 2013, p. GL-11.
A Red team is a team that is formed with the objective of subjecting an organization's plans, programs, ideas and assumptions to rigorous analysis and challenge	<i>Red Teaming Guide – second edition Development</i> , Concepts and Doctrine Centre, Ministry of Defence, 2013, p. 1-2.
Red teams are established by an enterprise to challenge aspects of that very enterprise's plans, programs, assumptions, etc. It is this aspect of deliberate challenge that distinguishes Red teaming from other management tools.	Bryce G. Hoffman, <i>Red Teaming, How Your Business Can Conquer the Competition by Challenging Everything</i> , Crown business, 2017, p. 50.

identification of possibilities to increase their opportunities¹. *Red team*, translated in Romania as *echipa roșie*, is defined as the concept represented

in organization in order to improve its activity. The experience in practice of using these teams has generated the definitions from the following table:

The structure of the *Red team* should depend on the type, the scope, and the time span of the project or the supported activity, being composed of personnel selected due to their professionalism,

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knowledge, and experience in the field, professional perspective, imagination and critical thinking. The teams can be permanent or established for a limited amount of time while their members could be from within or outside the organization, their tasks being also temporary or rather permanent. In certain cases, the organizational culture can function so that it will take action as its own *Red team*².

The team results depend to a great extent on the accurate selection of the members. A good candidate for the team has to be first and foremost professional, and then intelligent, imaginative, curious, analytical, logical, with vision, conscious, trustworthy and open³. It is essential that beside these qualities, the team members should be open using alternative approaches to the problem solved in question.

The dimension of the team is important in undertaking specific activities and, logically, the number of the members varies according to the specific tasks, the project, and the length of the period of time. If some publications consider that a *Red team* should have between 2 and 15 members or even more, considering the optimal number between *five and nine*⁴, another variant puts forward another optimal number of *five to eleven members*⁵. Regardless the approach, a smaller number of members could reduce creativity and diversity while a bigger number can have an impact on the quality of products.

The results when using such a team recommend it for any type of organization or institution whose main objective is to increase the quality of its specific services for the following reasons⁶:

- It performs critical analysis of both the plan and the hypotheses on which it was built;
- It forces the structure to take into account new, alternative, points of view regarding the institution and its activity;
- It assists in understanding business partners, potential customers, and members of the competition by presenting them in a different light;
- It assists in understanding not only the threats, but also the challenges to the business environment;
- It assists in the identification of potential threats, of possibilities that need to be avoided and turned into advantages;
- It supports, through its designed products, the decision-making process of the organization.

However, the *Red team* should not be seen as the solution to all the problems of an organization. The success of this team is based on its members' experience and intelligence, on the quality on information at their disposal, on the management support and, last but not least, on the other departments' understanding of their role. The team's activity has to be discreet and its success depends to a great extent on the support provided by the higher echelon of the organization. It is possible that the presence of the *Red team* may not be comfortable to the members of an organization, but on the whole, its activity will assist the organization in facing competition.

The activity performed by the *Red team* is called *red teaming* and is defined as: „the independent application of a range of structured, creative and critical thinking techniques to assist the end user in making a better informed decision or produce a more robust product”⁷.

Regardless of the structure of an organization or of its objectives, the *Red team* activity will be a methodology/method/process⁸ which will give the organization the opportunity to identify its vulnerabilities and perform activities to understand their cause in order to draft a plan, envisage outcomes or produce improved procedures.

The activity of the *Red team* can be considered as both art and science used for the benefit of the whole organization, not just its leadership. If science is based on necessary instruments and techniques to overcome human boundaries from the decision-making process, art results from the intelligent selection of those instruments, techniques and circumstances favorable to their use⁹. We would like to stress the fact that the correct use of specific techniques and instruments does not necessary lead to the desired outcomes, but demonstrates that the personnel is well-prepared. Choosing the moment when a certain technique can be used correctly and with best outcomes and the identification of proper results ensure an important support in the decision-making process.

The success of the red team depends to a great extent on the organization of the activities and on the establishment of teams' limits. When an organization considers that a *Red team* should be necessary, its activity should not be regarded as¹⁰:

- A challenge to the organization leadership in the sense that it is compulsory for it to adopt the conclusions and propositions of the team;

- A replacement for planning or for a plan. The team's product will never be a plan, but it will contribute to its improvement;

- An excuse not to take action and postpone taking action until the team delivers specific analysis;

- A source to predict the future or grant the success of the plan;

- A way to hunt for errors in a plan without mentioning the possibilities to limit them;

- A negative and cynical approach instead of a critical and skeptical one;

- A panacea.

The lessons-learned after the military's participation in different exercises and operations approach the problem of the decision-making process as part of military leadership. The importance of using a structure to support this process was identified a long time ago by military leaders.

Even if the actions that are specific to these structures have been identified along history, it is possible that, officially, the necessity to have these teams was highlighted in the USA, in 2003, when *Defense Science Board Task Force* presented a report on *The Role and Status of Department of Defense Red Teaming Activities*. The report underlined the fact that *red teams* were important to the analysis of future operational concepts in order to discover their weaknesses before the enemy did. At the same time, „in the wake of recent military operations, use of red teams can temper the complacency that often follows success”¹¹, thus supporting the need to commence and continue the transformation of the armed forces in order to face an adaptable adversary in the situation when *perhaps the most difficult environment to transform an enterprise is during a time of great success*¹².

The need to create such teams was identified at different military structures taking into account the possibility to actually support processes that result in decision-making. So, in the USA, the analysis of factors that represented the foundation of incorrect decision at strategic level before and after 11th September 2011, made by different governmental commissions and consultative councils, identified as of utmost importance „the adoption of Red teams in an effort to reduce risk, avoid surprise, spot opportunities, increase operational flexibility, broaden analysis, and enhance decision making”¹³.

At NATO level, the drafting of specific plans, policies, and procedures has complied with the same consensus that exists in other fields of the Alliance. The identification of capabilities to support the decision-making process in the Alliance became necessary and was performed through the *alternative analysis*¹⁴. From several points of view, *alternative analysis (AltA)* is the equivalent of the specific activity performed by the *Red team*, being defined as *the deliberate application of independent, critical thought and alternative perspective to improve decision-making*¹⁵.

Even if the term *Red team* is relatively new, military organizations performed activities that can be considered as belonging to these structures. One of the best examples is the war game used to test courses of action. To these, we can add other activities that are currently used frequently at the planning stage of an operation such as those related to the identification of a plan's vulnerabilities in the drafting process, to the validation or invalidation of identified planning hypotheses or to the identification of variants and alternatives. The team's fields of expertise can be related to the development of concepts and plans within different structures, to operational planning, to making products from the information field, developing doctrines, manuals and instructions, etc.

A *Red team* in a military structure does not guaranty the success of any operation, but, it can definitely contribute to the improvement of the decision-making process. Any operational plan is based on planning hypotheses while these are based on the identified information that lead to knowing and understanding the operational environment and the actors. The analysis of planning hypotheses from another perspective can lead to the identification of that information that can be considered as important to improving the plan. The analyses of the team, presented as briefings, reports or in the form of debates, should provide the commander with the possibility to understand every option at his disposal and to select the one that assists him in the decision-making process. On the other hand, the commander of the structure should be aware of the consequences and risks of selecting a specific option.

The concept of *Red team* appeared after the term *red cell* had already existed and been used for war games, aspect which might have caused confusion

among the military, thus resulting in its being misused especially by those involved in planning operations. If *red cells* belong to the intelligence department and have specific responsibilities in the planning process as they *perform threat emulation*¹⁶, *Red team* is a group composed of trained experts who provide the commander with an instrument that gives an alternative perspective when it comes to critical analyses, reviewing operational plans and analyses of enemy's capabilities in order to support the decision-making process¹⁷. It is essential that both the *red team* and the *red cell* work together, using specific, but still complementary products in order to support the decision-making process. Depending on commander's expectations, the operational environment and the characteristics of the operation, the *red team* should ensure the following¹⁸:

- Identification of logical fallacy and wrong analysis;
- Evaluation of the quality of information;
- Identification of opportunities or alternative results for existing solutions;
- Evaluation of consequences regarding a course of action;
- Testing a system, concept or plan from the enemy's perspective;
- Understanding available options for the enemies and other actors;
- Understanding the perspectives and most probable courses of action of allied actors.

Within military organizations, different factors can influence *the success of the Red team, but the activity of the structure should lean on three golden rules*¹⁹:

- *Time framing*. Products have to be delivered in due time in order to preserve their utility;
- *Quality*. The activity should be based on the best standards in order to preserve the team's credibility and utility of products;
- *Access/support*. Results have to address the organization's leadership in order to influence decision-making.

Methods, instruments, and activities used by *Red team* in its activity are numerous and have in common the analysis and testing of plans and activities of military structures from different perspectives. Depending on the type of military organization, the methods and instruments may vary, but they should be on the following list, which is surprisingly not an exhaustive one^{20, 21}:

- Structural techniques: *mind mapping, concept mapping*;
- Creative techniques: *brainstorming, reverse brainstorming, six thinking hats, creative combinations*;
- Diagnostic techniques: *key assumptions identification, role-plays, outside-in thinking, alternative futures analysis, analysis of competing hypotheses, war games, experimentation, deception detection, high impact/low probability analysis, quality of information check*;
- Inciting techniques: *team A/team B, devil's advocacy, what if analysis*.

However, could *red teams* and *red teaming* function in a military structure in case the critical thinking and alternative analyses contradicted to some extent the military standards and code? It may seem difficult, but eliminating barriers depends on gaining credibility by displaying professionalism in their fields, gaining critical thinking through training and education, convincing other structures that alternative analyses permit the identification of new perspectives and, last but not least, obtaining the unconditional support of the commander.

Conclusions

Red team is leapfrog forward in the decision-making process even if it is sometimes difficult to perform its activity according to the established principles as the insufficient promotion of its activity and the misunderstanding related to its real mission can lead to its marginalization and the minimization of the obtained results. In these conditions, the activity that will be performed to support the decision-making process will be no more than the sheer verification according to internal procedures of the way in which the other structures function.

The commanders or military departments and the teams that support them in decision-making can be influenced by the solemnity of the moment or by the consequences of the decisions, thus leading to less realistic decisions. The existence and the use of a structure such as the *Red team* can only be beneficial and provocative at the same time in the context of the new missions of military organizations and the array of new threats. This team's activity assists in understanding the enemies, who are becoming increasingly adapted to the operational environment, and especially their capabilities

and their potential use. A new perspective on the enemies contributes to the rethinking of the way in which organic forces may be used, plans improved and implicitly rate of success increased.

NOTES:

1 *The Role and Status of Department of Defense Red Teaming Activities*, Defense Science Board Task Force, Office of the Undersecretary of Defense for Acquisition, Technology and Logistics, Washington DC, 2003, p. 2.

2 *Ibidem*, p. 3.

3 Bryce G. Hoffman, *Red Teaming: How Your Business Can Conquer the Competition by Challenging Everything*, Crown business, 2017, p. 108.

4 *Red Teaming Guide – second edition*, Development, Concepts and Doctrine Centre, Ministry of Defence, 2013, pp. 2-5.

5 Bryce G. Hoffman, *op.cit.*, p. 107.

6 *Ibidem*, p. 50.

7 *Red Teaming Guide – second edition*, Development, Concepts and Doctrine Centre, Ministry of Defence, 2013, pp. 1-3.

8 Within the references, the activity of the *Red Team* is presented as methodology/method/characteristic/process.

9 Bryce G. Hoffman, *op.cit.*, p. 51.

10 *Ibidem*, pp. 59-63.

11 *The Role and Status of Department of Defense Red Teaming Activities*, Defense Science Board Task Force, Office of the Undersecretary of Defense for Acquisition, Technology and Logistics, Washington, DC, 2003, p. 1.

12 *Ibidem*, p. 16.

13 ***Joint Doctrine Note 1-16, *Command Red Team*, Joint Force Development, p. I-1.

14 Alternative Analysis (AltA).

15 *The NATO Alternative Analysis Handbook*, Second Edition, NATO, Joint Analysis and Lessons Learned Centre, 2017, p. 3.

16 *** JP 2-0, *Joint Intelligence*, CJCS, 2013, p. I-28, <http://www.jcs.mil/Doctrine>, accessed at 12.11.2018.

17 *Ibidem*, p. I-28.

18 *Red Teaming Guide – second edition*, Development, Concepts and Doctrine Centre, Ministry of Defence, 2013, p. 1-5.

19 *Ibidem*, pp. 2-7.

20 *Red Teaming Guide – second edition*, Development, Concepts and Doctrine Centre, Ministry of Defence, 2013, pp. 3-9 and *The NATO Alternative Analysis Handbook*, Second Edition, NATO, Joint Analysis and Lessons Learned Centre, 2017, pp. 17, 18.

21 While developing the concept, new instruments, procedures and activities are discovered or assimilated so that they will be later used for the alternative analysis.

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MODERN SURFACE-TO-AIR MISSILE SYSTEMS – NATIONAL/NORWEGIAN ADVANCED SURFACE-TO-AIR MISSILE SYSTEM (NASAMS)

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The „air-counterair confrontation” is a defining component of the contemporary war reality. This antagonism determined the continuous transformation of the air-space environment and fueled the constant progress of its main actors: the offensive air platforms, respectively anti-aircraft fighting systems. To keep the pace with the rhythm imposed by the air combat means, the surface-to-air missile systems constantly find new solutions to cope with the modern challenges of the constantly evolving battle space. NASAMS offers such a solution which proves to be a successful one and enjoys an increasing popularity, despite the serious competition from this sector.

Keywords: NASAMS; surface-to-air missile system; air threats; air environment.

The constant presence and increasing role played by the Air Power in all modern military conflicts, regardless their nature or origin, entirely prove the necessity to develop this vital component of the Military Power.

The concept of Air Power is the cumulative result of factors and elements which collaborate and condition its relevance in the broader context of the state power equation¹.

Consolidating Air Force, as a central element of the Air Power, requires a consistent and coherent effort which, among others, involves the permanent update and modernization of its weapon and support systems.

In the Air Force, maybe more than in the other categories of armed forces, the level of technological actuality of the weapon systems radically conditions its potential and relevance in the contemporary battlespace.

The ground-based air defense systems represent a vital component of the force structure and decisively contribute to the effort of obtaining a certain degree of control of the airspace above the area of operations, as well as of defending the national sovereignty in the air space.

Just due to the role played by this category of systems in the current air fight and the continuous improvement and diversification of the air threats, there is a constant interest in updating and developing the surface-to-air missile systems.

In this context, NASAMS offers a suitable solution to counter a broad category of air threats, mainly the ones operating inside the atmospheric envelope².

What sets NASAMS apart from the other modern surface-to-air missile systems is the fact that it uses as main interceptor the air-to-air missile AIM-120 AMRAAM³, with all the advantages and disadvantages resulting from such an option.

NASAMS is a medium range surface-to-air missile system produced by the Norwegian company Kongsberg Defense and Aerospace, in cooperation with the American one, Raytheon, the last one producing both the radar and the missile used by this system.

NASAMS is also remarkable due to a modern and very flexible C2⁴ solution, which facilitates the integration and cooperation with a diverse range of weapon systems, from anti-aircraft guns and missiles (L-70, RBS-70, HAWK, PATRIOT), to directed-energy weapons (DEW)⁵.

Like the other similar surface-to-air missile systems, NASAMS has been designed to defend the objectives of vital importance or urban areas against the entire spectrum of air breathing threats: combat air platforms, helicopters, cruise missiles and UAVs⁶.

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The system reached its operational capability in 1994 and was deployed for the first time by RNoAF⁷. In this environment NASAMS was continuously developed and perfected and, in 2003, 4 other systems were purchased and deployed by the Spanish Army⁸.

Of particular importance for the development of this system was the implementation of NASAMS II, a consistent update of the initial system, which increased its attractiveness and facilitated new and important contracts. Significant parts of this update were the implementation of Link 16 connectivity and the improved capabilities provided by the radar station, with its perfected variant, AN/MPQ-64F1 Improved Sentinel. Following this update, in December 2006, Netherlands Army signed a contract for a NASAMS II system which was going to use the tri-dimensional surveillance radar EADS TRML-3D. One year later, in 2007, the first NASAMS II system was delivered to RNoAF⁹.

The system's capabilities were proved repeatedly through tests and exercises, like the live fire exercise conducted by the Spanish Army in November 2008¹⁰. Of equal importance for the system's development were the firing exercises conducted by RNoAF in 2011 and 2012, which proved NASAMS's ability to launch different types of missiles produced by Raytheon, like AIM-9X Sidewinder or Evolved Sea Sparrow Missile (ESSM)¹¹.

The performance displayed by NASAMS during these exercises facilitated the signature of new important contracts, among which it is worth mentioning the one with Finland Ministry of Defense, in 2009, with RNoAF, in 2011 and 2013, as well as the one with Oman Ministry of Defense, in 2014¹².

The success enjoyed by the missile system is demonstrated by the signature, in 2015, of a new agreement between Raytheon and Kongsberg, which extends their partnership in developing NASAMS for another additional ten years, until 2025¹³.

A similar missile system was developed, up to a point, in the United States of America by Raytheon, to answer the need created by the HAWK decommission and the increasing focus of PATRIOT toward ballistic defense. The system is named SLAMRAAM¹⁴ and has, in general terms, the same contents as NASAMS. Despite the

considerable investments into the development and testing of this system, the program was eventually cancelled, in 2011, due to a combination of factors among which the budgetary cuts and the decreased interest prevailed¹⁵.

The main components of a NASAMS fire unit, at battery level, are the following: the command post (FDC¹⁶), the 3D radar AN/MPQ64F1 Sentinel, the electro-optical and infrared sensor system and the transport and launch installations, capable of transporting, aiming and launching up to 6 AMRAAM missiles, placed in containers. One of the most appreciated features of NASAMS system is its modular construction, which confers flexibility to the fire unit, by allowing the addition of new elements, radars, sensors, launchers, missiles etc.

Currently, a complete NASAMS II battery consists of a tactical control cell (TCC), a fire distribution/control centre, up to 8 radars (AN/MPQ-64 F1 Improved Sentinel), a multi-sensor platform (MPS 500), up to 12 launchers and 72 missiles, offering a considerable fire power capability for this level¹⁷.

The fire distribution centre is the central element of a NASAMS battery and represents an air defense battle management centre (AD BMC4I¹⁸), which proved its qualities and has already been deployed to several location and different configurations.

FDC is based on a modern fire control system which allows a superior handling of data, increased interoperability and an intuitive and easy to operate man-machine interface, facilitating the real time command of the air defense battle.

The subsystems integrated into the fire distribution center ensure the implementation of essential features which complement the functionality of the missile system, as a whole, such as:

- data link management;
- sensor control;
- air image production;
- track identification and classification;
- protection of own forces and means;
- threat assessment;
- weapon allocation and engagement control;
- mission result assessment.

Attached to the FDC, a mission support instrument (MST¹⁹) helps and accelerates the decision-making process concerning the deployment planning, system status monitoring and the production of detailed reports and analysis.

Integrating the tactical data links inside FDC involves both handling the relevant messages and implementing the C4I²⁰ functions to support the achievement of the needed interoperability level in order to maximize the coordination between FDC and the other actors of the battlespace.

The open and modular SW/HW²¹ allows the integration of offensive and defensive fire capabilities, through the combination of air defense systems, field artillery means, offensive missiles and dedicated assets for CAS²² missions, into an efficient „plug & fight” solution. The FDC implements extended connections with the higher echelons, adjacent units, fighting systems, sensors and interceptors, despite the variety of communication and data protocols in use, building a single system, with a high level of integration.

At the same time, FDC provides the users with several tools in support of the decision-making process, starting with the dissemination of a single integrated air picture, the common operational picture, the threat evaluation and weapon allocation. Additionally, each system connected to the FDC can contribute, using its own means, to the consolidation of the information base needed to conduct military operations.

The FDC is placed on the chassis of a Mercedes-Benz G-Class (4×4) light truck propelled by a diesel engine of 2,8 l, generating 120 hp and allowing a road speed limit of 138 km/h and a cruising range of 800 km. Additionally, the special design of the suspension and transmission systems provides a very good cross-country capability²³.

Another important element of NASAMS missile system is AN/MPQ-64F1 Improved Sentinel, a tri-dimensional surveillance radar, of high resolution, designed to discover, track, identify, classify and report all the air threats within its range.

The radar benefitted from a continuous update and improvement program, one of the main development directions aiming at the extension of its surveillance range. Another priority was to increase the ability to process signals, by integrating several computers as well as the latest COTS²⁴ technologies. This allowed a superior A/D²⁵ processing capacity, a faster data control and created additional space for future development of the radar.

The update process continued with the development of new X band emitters and receivers,

which have several advantages compared to the previous versions. Thus, the emitter uses a single main oscillator to generate frequency, which produces lower clutter and allows a better detection on clutter background. The single channel receiver, also in X band, is designed to pair up with the new emitter. The antenna system was also updated by the introduction of a new controller and a new digital interface for the interconnection with the data processor, giving the operator a superior control of the direction and rotating speed of the antenna.

In order to avoid the fratricide, the radar station benefits from an integrated modern IFF system.

The MPQ-64F1 Improved Sentinel Radar can be put into a battle position in less than 15 minutes and can be switched to the transport mode in less than 10 minutes, while achieving the full operational status does not take longer than a few minutes. A team of 2 soldiers is enough to operate the radar, without any need of additional personnel for the handling or maintenance.

The radar provides targeting data for the FDC ensuring accurate information before the launch and continuous updates during the mid-flight of the AMRAAM missile. The performance offered by the radar station is facilitated by its inherent features like the X band operating frequency, the tri-dimensional pencil beam, the Doppler impulse and the phase and frequency scanning. The antenna is designed to rotate with 20-30 rpm and allows the tracking of targets approaching from any direction and up to a distance of over 120 km²⁶.

The radar station is mounted and propelled by the same vehicle like the FDC, a Mercedes-Benz G-Class light tactical vehicle, offering the same features and providing a good cross-country mobility for this essential component of the missile system.

The recognition of the performance and features offered by this radar is also demonstrated by its popularity on the international stage, currently, more the 200 radars being ordered, out of which more than 100 have been delivered or are still under production.

Another important element and, to some extent, specific for this missile system, is the sensor system MPS 500, used for the visual identification and evaluation of the air threats.

The multi-sensor platform MPS 500 is a highly stabilized sensor system used during night and day

for the detection, observation and identification of flying objects as well as for the target tracking and engagement control. It consists of a sensor package encompassing a thermal camera, a video camera, a 6 Hz range detector, a video tracker, a vertical sensor and a North sensor.

The system is actively stabilized, equipped with a GPS unit and a North detection unit, and can be remotely operated from FDC. MPS 500 is equipped with its own power generator, and during transport the sensor platform can be lowered inside a special container, for safety reasons.

The sensor system is used for the accomplishment of the following tasks:

- passive mode target engagement;
- passive mode surveillance;
- threat evaluation and fire results assessment;
- higher echelon tracks evaluation;
- target and engagement data acquisition;
- jam emitter assessment.

Similar to the other elements of NASAMS, MPS 500 is using the same type of light tactical vehicle which gives it comparable movement possibilities²⁷.

Additionally, the compact and light design ensures a high manoeuvrability, flexibility and ease of deployment, allowing the quick integration of MPS 500 into existing missile systems.

The launching stations of NASAMS are used to transport, aim and launch the missiles placed inside sealed containers. As mentioned before, the launchers are able to use several types of missiles, in different combinations, even from the same launching station.

In firing position, the launchers are lowered to the ground level, fixed and automatically levelled using a system of hydraulic jacks and are able to launch all the 6 missiles they carry in only a few seconds.

The launchers are connected to the FDC through a secured wired or radio connection and can be deployed as far as 25 km from the command post.

Depending on the beneficiary, the launch platforms may be powered by different types of vehicles. Thus, the Norwegian systems are towed by Scania 6x6 trucks, the Finnish ones by Sisu trucks, while the Spanish ones by Iveco trucks²⁸.

After a contract signed in 2011, the Norwegian Army became the first beneficiary of a High

Mobility Launcher (HML), developed by Raytheon, consisting of 4 AMRAAM missiles mounted on a HUMVEE tactical vehicle. Integrating this new launching stations into the deployed NASAMS, contributes to the improved mobility of the missile system, as a whole²⁹.

AMRAAM (AIM-120) is a well-known air-to-air missile used by a broad range of modern combat planes, both American (F-15, F-16, F/A-18, F-22, F-4F) and European (Sea Harrier, Harrier II Plus, Eurofighter, JAS-39 Gripen, JA-37 Viggen and Tornado). The missile used by NASAMS is AIM-120C7, an improved version of AIM-120C, integrating several updates. Compared to its predecessors AIM-120A and B, AMRAAM has smaller control surfaces but a longer range and increased agility to fight against manoeuvring combat aircrafts. Additionally, AIM-120C7 brings an entire range of updates by improving the antenna, the receiver and signal processor, but also by integrating new software algorithms to fight against the new air threats. Also, the miniaturization of the missile's internal components created additional space for the future development and improvement of the missile³⁰.

The missile allows target interception as far as 33 km and up to a maximum height of 15 km³¹.

In order to improve the capabilities offered by NASAMS, Raytheon developed a new missile AMRAAM-ER, which promises an extension of the operational range with up to 50% and of the operational height with up to 70%. Actually, this missile is a combination between AMRAAM and ESSM missiles, both developed by Raytheon, by taking the frontal part of the first and the propellant of the last.

In the flight test of August 31st, 2016, in Norway, the missile proved a perfect compatibility with the NASAMS which launched it, opening the way to a new stage of development for this missile system³².

All the elements presented above entirely prove the fact that NASAMS is a medium range surface-to-air missile system in continuous development and improvement.

Currently the system is used by 6 nations and enjoys an increasing international appreciation, a fact proved by the recent interest expressed by states like India, Australia, Indonesia and Lithuania³³.

NASAMS offers one of the most modern and flexible air defense solution, capable to answer a broad variety of operational requests.

Among the most valued features of this missile system we can easily identify: the open architecture which guarantees a considerable growth potential, superior mobility due to the reduced dimensions, high fire and engagement capacity, increased stability to electronic counter-countermeasures and many others

To conclude, the medium range surface-to-air missile system NASAMS provides a competitive and adaptive air defense solution due to its capacity to quickly identify, engage and destroy a large array of present and future air threats.

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1 Ion Puricel, *Puterea aeriană în mișcare*, "Carol I" National Defense University Publishing House, Bucharest, 2016, p. 15.

2 Air breathing threats.

3 AMRAAM – Advanced Medium-Range Air-to-Air Missile.

4 C2 – Comandă-Control.

5 https://www.armyrecognition.com/norway_norwegian_army_missile_systems_vehicles_uk/nasams_norwegian_advanced_surface_to_air_missile_system.html, accessed at 15.01.2019.

6 UAV – Unmanned Air vehicles.

7 RNoAF – Royal Norwegian Air Force.

8 http://www.defense-aerospace.com/articles-view/release/3/99591/spanish-army-conducts-nasams-live_fire-exercise.html, accessed at 15.01.2019.

9 <https://www.airforce-technology.com/projects/national-advanced-surface-to-air-missile-system-nasams/>, accessed at 15.01.2019.

10 *Ibidem*.

11 *Ibidem*.

12 https://www.raytheon.com/sites/default/files/capabilities/rtnwcm/groups/public/documents/content/nasams_pdf.pdf, accessed at 18.01.2019.

13 <http://missiledefenseadvocacy.org/air-defense/u-s-air-defense/u-s-deployed-air-defense-systems/national-advanced-surface-to-air-missile-system-nasams/>, accessed at 19.01.2019.

14 SLAMRAAM – Surface Launched AMRAAM.

15 <https://www.strategypage.com/htmwtada/20110111.aspx>, accessed at 20.01.2019.

16 FDC – Fire Distribution Center.

17 <https://www.globalsecurity.org/military/world/europe/nasams.htm>, accessed at 21.01.2019.

18 AD BMC4I – Air Defence Battle Management Command, Control, Communications, Computers, and Intelligence.

19 MST – Mission Support Tool.

20 C4I – Command, Control, Communications, Computers, and Intelligence.

21 SW/HW – SoftWare/HardWare.

22 CAS – Close Air Support.

23 https://www.armyrecognition.com/norway_norwegian_army_missile_systems_vehicles_uk/fdc_fire_distribution_center_vehicle_nasams_technical_data_sheet_specifications_pictures_video_12712157.html, accessed at 23.01.2019.

24 COTS – Commercial Off-The-Shelf.

25 A/D – Analog-to-Digital.

26 https://www.armyrecognition.com/norway_norwegian_army_missile_systems_vehicles_uk/mpq-64f1_3d_radar_vehicle_nasams_technical_data_sheet_specifications_pictures_video_12712155.html, accessed at 27.01.2019.

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OPERATIONAL ART – ESSENTIAL COMPONENT OF NAVAL DOCTRINE

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In the context of the occurrences of crisis generating causes whose sources are found in the multitude of disputes of a historical, cultural, ethnic, religious or even educational nature, the adoption of operative thinking is a doctrinal actuality requirement. In this context, the use of operative art is a desideratum without which the existence of a doctrine would be devoid of gnoseological consistency.

Keywords: art; operational; design; synchronization; conduct.

„Plans are of little importance, but planning is essential”.

Winston Churchill

Perennial changes taking place on the geostrategic stage, the existence of risks and threats to national security and the need to implement responses that converge towards the same goal impose the usefulness of adopting comprehensive requirements in the doctrines at different levels of military art. All this is reflected in the correct understanding of the significance and necessity of applying operational art in operations, which has often been given a pejorative meaning in the context of its use. In this respect, the correct application of the elements of the operational art is a desideratum not quite easy to achieve, but their use in the field of planning, as an attribute of military conduct, can bring remarkable changes in removing ambiguities, artificial constraints and contradictions that may arise during the decision-making process.

At the same time, the use of doctrinal documents aligned with those used in NATO is also dictated by the adoption of coherent and appropriate measures due, in particular, to the existing hybrid threats in the Black Sea area. In this respect, the existence of an optimal level of training to cope with such coordination, synchronization, integration, prioritization and evaluation requirements is necessary to be in line with what is desired as operational art. Moreover, the mere application of the strategy in the modern operations is not sufficient

for the achievement of success, as the bigger knowledge and the better use of tactics will only lead to the execution of actions lacking operational consistency and characterized by excessive moral and material attrition. An absolute victory cannot be achieved but for an effective combination of strategy and tactics. That is why it is necessary to integrate tactics into a wider framework dominated by strategy. This desideratum can only be achieved by using a buffer level characterized by operational theory and practice and called operational art. It provides a fundamental conceptual structure that supports the integration of tactical actions and gives them a meaning in the strategic vision of fulfilling the conditions that characterize a system that is accepted to be functional in accordance with national interests.

In the current reality, characterized by sudden and unpredictable changes in the operational environment, operational art, although specific to the operational level, must be understood and used appropriately at the strategic and even tactical level. Also, the same operational reality directs its two components, the theory and the practice, so that the operational concepts used are correctly understood and lead to the realization of the purpose of operational art, to integrate the ends, means and ways to achieve the desired end state at the political level. History has shown that operational thinking based solely on the use of technology can prevent success, as compared to an opponent who, although lacking advanced technology, can achieve the

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desired results only through the development and use of superior operational concepts. In a conflict between two opponents, success will be on the part of the one who thinks and acts with greater determination supported by a solid foundation of operational theory and practice. However, these features of operational thinking do not explicitly mean abandoning the use of technology but are, together with it and the operational concepts that reflect the lessons learned throughout the military history, an absolute gain in achieving the strategic goal.

Operational art – evolution, interpretation and theoretical considerations

It is obvious that operational art has two components, namely operational practice and operational theory, the latter being the predecessor of practice. To the same extent, operational art involves both the art which operational practice corresponds to, and science correlated with operational theory. The history of military art fully confirms that the development of weapons and fighting techniques in general has determined the manner how to organize and conduct combat operations. Thus, for a long time in the history of armed conflicts when this level was poorly materialized, the wars had a local, static character, limited in size and, in principle, they decided through one decisive battle without having previously achieved shaping battles leading to the decisive one. Under these circumstances, military art was attributed to two branches: strategy and tactics. The responsibility of the strategy was directed to achieving the war plan with the objective of destroying the enemy through such a decisive battle, and the tactics was responsible for taking action on the spot in the field / environment of the battle.

Evolution of operational practice – the component of operational art

As technology evolved, and especially since the 18th century when the Industrial Revolution was triggered, in order to achieve the decisiveness of that single battle, the armies of the world began a process of technological endowment in parallel with increasing the number of troops. All these demands of time combined with the implementation of these changes led to the rethinking of military art as a whole, recognizing the need to adopt

new, operational concepts, such as: coordination, synchronization, integration and centralized or decentralized command and execution.

A series of views of military art researchers attribute the sediment of today's operational practice to military leadership illustrators since ancient times, such as Alexander the Great (356-332 BC), Hannibal (247-182 BC) and Julius Caesar (101-44 BC)¹. However, according to Claus Telp, the remarkable military personality that tainted operational practice through his actions was Napoleon I (1769-1821). For the first time, there was a glimpse of the need for operational thinking oriented towards planning, organization, coordination, synchronization and logistics, all of which were approached in such a way as to achieve a common purpose. From the point of view of the organization of his army, he applied the principle of decentralized control over the army corps, descending to the infantry divisions formed by infantry and cavalry units, fulfilling the conditions of a joint type organization. By pursuing the dividing of the enemy formation so as to more easily destroy it, he applied the principle of force distribution so that in conjunction with the synchronization of actions he led to a resounding success in the Jena Campaign of 1806 against the Prussian Empire. This campaign is renowned for the two decisive battles, at Jena and Auerstaedt, which took place on October 14 in 1806 but in different locations, about 20 km from each other. It is obvious that Napoleon's operational practice of using multiple army corps by a large-scale maneuver predict a fundamental principle of operations, namely that of the unity of the effort / purpose, which at the time it is called „*the strategy of a single point*”².

In the same way as the Napoleonic practice, the actions of the two generals during the American Civil War (1861-1865) are remarkable: General Robert E Lee (1807-1870) – commander in chief of the Confederate Forces and General Ulysses S. Grant (1822-1885) – commander in chief of Federal Troops. Although both were equally brilliant visionaries, unlike General Lee, who remained trapped in traditionalism without retaliation from the rules of the stationary warfare, General Grant made full use of experience gained during the Mexican-American War (1846-1848). Thus, he organized and phased in all the Civil War operations so that mutual support and the

benefits of the industrial revolution were ensured. In addition to the simultaneous use of several army corps distributed throughout the theater of operations, decentralized command and control (C2), and logistical support, Grant outlined a plan of operations he presented on 4 April 1864, which was „to work all parts of the [entire Federal] army together, and ... toward a common center”³ where the center was represented by Lee’s army. It identified the central point represented by the enemy army as an operational center of gravity for whose destruction/neutralization Grant had developed a course of action in two directions: one aimed at deep penetration behind the enemy in order to interrupt his replenishment lines and the second one by stopping enemy’s advancing and encirclement leading to capitulation.

Both the Napoleonic Period and the American Civil War were the earliest operational manifestations marked by the economic and social changes that triggered the onset of the operational level that would normally not exist due to the absence of circumstances such as: sufficient armed forces, adequate armaments to this level, and the support that the nation could provide. Until the 18th century the onset of operational practice was hard to predict due to the small army formed mainly by mercenaries without military training; starting with this century the „million-man”⁴ arise as a result of the mobilization of the population which forced the area of operations to be enlarged, actions are simultaneous in nature in order to create the conditions for decisive battles, which led to the increase of the war period.

Starting with World War I (1914 - 1918), the horizon of operational practice was widened by attempting to penetrate the defense line while adopting a maneuvering character for the purpose of denying of the withdrawal of the enemy and automatically encircle them. Although this war was particularly a war of material and moral attrition with disastrous results, there are some examples to be considered from the point of view of operational art. Thus, the Gallipoli Landing (1915) can be taken as an operational benchmark in terms of planning, deploying and supporting logistics of a multinational joint force. The Battle of Jutland (1916) in the North Sea was also an operational chapter showing the synchronization of the tactical actions of the English fleet to prevent the achievement

of the operational objective of the German fleet consisting of destroying a major part of the English fleet acting as naval blockade force.

The Second World War (1939-1945) was marked by a rich operational practice because the operational theory was crystallized in the interwar period in a content close to what we know today. Already certain operational concepts were known by the commanders of that period and they had been practiced and refined by being put into practice during the second world conflagration. A number of operational successes are recorded in various operations precisely because of the application of elements of operational art. The Weserübung Operation (April 9, 1940) was characterized by the development of operational level planning for the use of a joint force compound of land, airborne and naval components, through unity of effort, surprise, force economy, and synchronization. Under the same conditions, one month later, Operation Gelb took place during which, in addition to the previous one, the centralized planning process was used but followed by decentralized execution. The Granite Campaign (1944) brought to the fore all the elements of a modern operational plan with the establishment of the strategic objective, identifying the operational objectives for each operation according to each phase, tasks for the subordinate forces to achieve the alignments established according to a synchronization matrix.

All these examples of operational practice can be complemented also by Romanian manifestations of operational practice. In this regard, we can exemplify the Battle of Szolnok⁵ (24-25 July 1919) within the Campaign for the Liberation of Transylvania. This battle led by General Gheorghe Mărdărescu is marked by the synchronization of actions, which led to the achievement of the operational level objective - the liberation of Transylvania from the Hungarian occupation. Moreover, the coordination of the three army corps for the „double encirclement”⁶ maneuver led to the surprise of the Hungarian forces that eventually withdrew in total disorder. This battle, led by General Mărdărescu, demonstrated the very essence of operational art, namely, „to win decisively in the shortest time possible and with the least loss of human lives and material”.⁷ Also, in the history of the Romanian military conflicts it was demonstrated that the commanders proved the

possession of operational thinking oriented to the maneuver of enveloping the enemy, cutting down their communication lines, penetrating deeply and denying the freedom of maneuver, all of this are similar to what was later stated in 1933 by Mikhail Nikolayevich Tukhachevsky (1893-1937) through the concept of „deep battle”⁸.

As we mentioned above, operational practice has created the premise of the development of operational theory to make commanders understand both the positive and negative results obtained by applying intuition, inspiration, or presence on the battlefield of historical examples.

Evolution of operational theory – the component of operational art

The first rudimentary operational ideas were depicted by Maurice - Count of Saxa (1696-1750), who concluded the opportunity to attack the enemy’s logistic lines, thus causing weakness and abandoning the will to fight.

Having common ideas with Saxa, another precursor of operational theory was Frederick II The Great (1712-1786), who denoted the lowest level as „petite service”⁹ and the upper level, equivalent to the strategy, was „connaissances du général”¹⁰. He also believed that a war should be short in period and at a higher tempo to save resources, and from the point of view of enemy logistics replenishment lines, they must be attacked by adopting guerrilla tactics.

Dietrich Heinrich Freiherr von Bülow (1757-1807) made the first mention of the operation in his book „Geist des neuen Kriegssystems”¹¹, describing the operation as an army movement directly reported to the enemy’s actions.

The onset of operational thinking is attributed to Carl Von Clausewitz (1780-1831), a remarkable personality that, in his work entitled *On War*, still gave rise to disputes and controversies about certain concepts such as the center of gravity. Clausewitz took over from von Bülow the concept of operation and redefined it as an army movement within an operational plan. In addition to this concept, other concepts related to the „Kulminationspunkt”¹² and the „Schwerpunkt”¹³ related to center of gravity were mentioned in the book, the last one being translated as the „point of main decision”¹⁴.

Antoine Henri de Jomini (1779-1869) also stated in the book „*Precis de l’Art de Guerre*”¹⁵

the importance of taking control of enemy communications lines while protecting their own. The famous Swiss strategist is attributed the concept of „grand tactics”¹⁶ to describe tactical actions with a pronounced maneuvering character and executed in an early phase of the conflict in order to gain advantage in the battle.

Although Jomini’s approach to the art of war was based more on mathematical calculations than on art itself, its influence is found in other publications in the field at that time.

Thus, in the USA, several books were published such as: „*Military Art and Science*”¹⁷ (1848) of General Henry Wager Halleck, the „*Elements of the Art of War*”¹⁸ (1889) by Colonel James Mercury and the „*The Principles of Strategy*”¹⁹ (1894) whose owner is John Bigelow, and in England, General Patrick Leonard MacDougall published the „*The Theory of War*”²⁰ (1856) within the British Staff College, which was later replaced by the „*Operation of War*”²¹ (1866) by General Edward Bruce Hamley.

On the other hand, Clausewitz’s theory of operation was taken over by General Helmuth von Moltke Sr. (1800-1891) who considered the operation to belong to an intermediate field of study between strategy and tactics, being executed as part of a campaign to achieve objectives set by the strategy. Moltke considered the strategy to be responsible for carrying out all operations in the theater that had to be executed in order to have forces at beginning moment onset of the decisive battle. Tactics, from the point of view of the illustrious Prussian strategist, aimed at the methods of taking action during the decisive battle, with emphasis on flank attacks.

The benefits of maneuvering war are recognized for the first time by General Sigismund von Schlichting (1829-1909), who emphasized the importance of engaging the enemy preventing own movements. Thus, on the basis of the evolution of military technology, the size of the army corps and the expansion of the theater of operations, he emphasized the inefficiency of the concentration stage before the decisive battle, which involved the assembly of the whole army in a favorable position and the attack of the enemy from that static position not from the movements.

Wilhelm Leopold Colmar von der Goltz (1843-1916) is another theoretician of operational

practice, an adept of Clausewitz's thought that the campaign is a series of operations whose purpose was to create the conditions for the decisive battle. He also considered the center of gravity as always represented by enemy army.

Field Marshal Alfred von Schlieffen (1833 - 1913) strongly believed in the maneuver war („bewegungskrieg"²²) giving the example of the Battle of Cannae (216 BC) to explain the ineffectiveness of frontal attacks compared to those in the flank which, although they were at increased risk in terms of division of forces, had higher chances of success in relation to fixed position attacks.

All these operational theoretical references contributed to the onset of the operational art whose birth is attributed to the Soviet side. The experience gained during the Russo-Japanese War (1904-1905), the First World War and during the Russian Civil War (1918-1920) were the factors that contributed to the revival of Russian operational thinking.

The major contribution to the birth of operational art was made by Alexander Andreyevich Svechin (1878 - 1938), considered to be its founding father, who proposed the need for an intermediate level between strategy and tactics which he called the operational level to be the responsibility of operational art. In his book entitled „Strategiya" (1926), Svechin first defined operational art as „the totality of maneuvers and battles in a given part of a theater of military action directed toward of achievement of the common goal, set as final in the given period of the campaign"²³. Also, for the first time Svechin described the nature of operational art and the relationship between it and strategy and tactics, thus „battle is the means of operation. Tactics are the material of operational art. The operation is the means of strategy, and operational art is the material of strategy. This is the essence of the three-part formula given above"²⁴. As a conclusion, Svechin's operational art is the instrument by which the operational-level commander arranges tactical successes in an operational framework aimed at achieving strategic success in a theater of military actions.

The theory of operational art described by Svechin continued to represent the favorable framework for the development of the concept of

„deep battle"²⁵, a tactical level concept proposed by Mikhail Nikolayevich Tukhachevsky (1893-1937) as a solution to break through enemy defense that was so disastrous during the First World War.

In conjunction with this tactical level concept, the concept of „deep operation"²⁶ by Vladimir Kiriakovitch Triandafilov (1894-1931) was proposed at the operational level as a solution for the neutralizing of C2 and operational logistic support lines. Also, in order to achieve surprise, Triandafilov calculated the necessary operational level capabilities: „4-5 rifle corps with their organic artillery assets, 4-5 artillery divisions and 8-12 tank battalions"²⁷.

The concept of deep operation was completed and improved by Georgians Samoilovich Isserson (1898 - 1976) who proposed the concept of „deep offensive operation"²⁸ as an operational level form for the accomplishment of the defense in order to stop the enemy offensive.

Analyzing these theoretical exposures of operational thinking, we emphasize that the interwar period was the turning point for the birth and development of operational art, mainly due to the practical experience gained and the lessons identified during the First World War. Also, this period is representative of how the characteristics of operational art have evolved: spatial and temporal dimension, joint nature of forces organization, command and control system, combat power, planning, deployment and logistics. The factors that contributed to the emergence and development of operational art were:

- practical experience and lessons identified from previous conflicts;
- the development of weapons and combat techniques, as well as the endowment of forces with such means of fire;
- the temporal and spatial expansion of combat actions as a result of the increase of troops, the endowment with modern technology in terms of fire power, range of action and mobility;
- the impossibility of achieving the strategic objective through only one decisive battle, requiring successive battles to be made, consistently arranged in a campaign's operational framework that will lead to the achievement of the strategic objective;
- the joint compound of forces to achieve the strategic objective.

Theoretical considerations of operational art

Compared with the definition formulated by Svechin, the definition of operational art is now much improved and in line with current operational environment requirements. In generic terms, operational art is „a component of military art concerned with the theory and practice of planning, preparing, conducting, and sustaining campaigns and major operations aimed at accomplishing strategic or operational objectives in a given theater”²⁹. The military literature reviews the definition of operational art according to the specificity of each field of service’s action (air, land or sea) or according to the culture, philosophy or military traditions that guide the operational consciousness of military theorists. A reference definition for the doctrines of the national services might be the one mentioned in the Joint Allied Doctrine where operational art is „employing forces, in concert with other agencies, to achieve strategic and operational objectives through the design, organization, integration and conduct of strategies, campaigns, major operations and battles”³⁰. Under the current auspices of the comprehensive approach, a concept accepted in the NATO which we are part of, and to which each service must bring its contribution, the definition in the allied doctrine is a comprehensive one, listing everything in its content as all instruments of manifestation of operational art (design, organization, integration and conduct) so that both the military and the non-military instruments make full use of it to respond coherently to resolving a possible crisis situation.

From the point of view of purpose, operational art is the principal instrument which, on the basis of its concepts of expression, helps to correlate the objectives pursued with the ways and means made available and within the limits of the accepted risks. So, the purpose of operational art is to correctly formulate the answers to the four questions³¹.

1. *What are the conditions to be met for accomplishing the strategic objectives? (ends);*

2. *What are the military capabilities and resources to be allocated in order to performed these conditions? (means);*

3. *What is the sequence in time and space of actions to ensure these conditions? Under what approaches will those conditions occur? (ways);*

4. *What are the costs of executing the proposed actions? (risks).*

In another approach, the purpose of operational art is to establish the optimum balance between resources, actions and end state within the limits of accepted risks. This balance could be achieved by integrating, synchronizing and coordinating tactical actions to achieve the set end state. So if the purpose of operational art were not being attained, then any operation or campaign would consist of a series of tactical actions executed at random without having the necessary consistency to achieve strategic success. A series of incoherent and unrelated tactical actions can lead to operational success even strategically but in a very long time, with many losses, which would increase the weariness of the forces, which contradicts precisely what Milan Vego said in his *Joint Operational Warfare*, respectively, achieving decisive victory in the shortest time and with minimal losses.

Regarding the characteristics³² of the operational art that differentiates it from tactics, these are the ones that give it the distinctive side-specific level. A first feature is the objectives that are determined and cover a wide range of tactical tasks. While operational level objectives derive from the conditions to be met to achieve the desired strategic end state, at tactical level objectives are received and their place is directly taken over by tasks to achieve the effects that characterize operational objectives.

Greater dimension of space, time and forces reflected in the need to achieve operational and/or strategic objectives is another feature of operational art. While a tactical action takes place in a limited area, with a duration from a few minutes to several hours, a joint operation takes place in a theater of operations that consists of several action areas and can last from a few weeks to months or even years, as is the case with the US anti-terrorist operation.

Regarding the size of the forces, if it is not taken into consideration with previously two characteristics, this one is relative in nature to what we refer to as a characteristic by itself. This relativity is given by situations when a small force is acquainted with accomplishing a specific task, so that their acts produce operational or even strategic effects (e.g., special forces, submarines). What can cause this situation is the ability to exploit the vulnerabilities of the enemy by own strengths of several services.

Also, due to space and time, operational forces can have a joint character compared to tactical forces where they can be homogeneous in terms of organization. And for a comprehensive approach to the operational problem, other non-military organizations may be involved alongside the military forces.

Combat power is another characteristic of operational art emerging from the evolution of military technique. Under the conditions of emergence of modern types of weaponry, their use goes beyond the sphere of tactics by increasing the spatial dimension while reducing the time. The effectiveness of this characteristic exponentially increases with the judicious use of operational art that can supply the limited number of troops involved in a joint operation.

Operational planning is very complex, requires time and resources of all kinds compared to tactical level planning. Planning is also regressive in that it first determines the purpose (objectives and desired end state), then the necessary ways and means. At the tactical level, the planning is a progressive type in which the objectives are received from the operational level, and then the ways of their accomplishment are established in a progressive sequence. The progress of tactics is also given by the necessity of fulfilling a certain task, because the others can be dependent on the realization of the latter. In terms of planning time, that is quite high as compared to the tactical level because the specific objectives of the operational level are difficult to quantify, which makes them usually overestimated.

Operational deployment has a far greater impact than at tactical level. A mistake on this issue at the operational level may have adverse tactical consequences. Instead, tactical deployment is easier to achieve without a fatal impact on the operation itself.

The command and control of operational level logistic support requires special attention compared to tactical level. A poor C2 of logistics support can have a decisive influence on the success of an operation. Therefore, it is advisable for the joint force commander to have authority of operational command and control on logistic units.

At the operational level the approach (thinking) of the problem to be solved is a much more complex process than at tactical level where this feature is

almost lacking. The operational problem covers a vast array of not only military aspects, but also of non-militaristic issues, which makes operational thinking expressed through operational language that contains clearly defined concepts, understood and accepted by all elements of power - diplomatic, information, military, economic.

The relationships between the three components of military art are somehow interconnected. Thus, the strategy defines objectives (ends), establishes the means and imposes limits and operational art identifies the ways of fulfilling in direct accordance with the elements specified by the strategy. The tactics, in turn, aims to observe the achievement of tasks in accordance with the framework defined by operational art. Thus, operational art serves as a buffer between strategy and tactics, being connected with strategy and connecting, in turn, tactics. If this buffer zone did not exist, there would be a risk of tactics being subordinated by a strategy called „*politicization of tactics*”³³, and if the strategy is subordinated to tactics, there is the risk of „*tacticization of strategy*”³⁴.

Operational design – the primary tool for application of operational art

As it is apparent from the definition of operational art mentioned in the Allied Doctrine, the operational design is the primary tool through which the use of forces is depicted to achieve operational and/or strategic objectives.

The Operations Planning Manual presents the operational design as being *formulation and development of the overall idea (including the commander's intent), how to perform the operation („how”), based on the overall estimate of the situation and mission analysis*³⁵ associating this definition with the purpose for which there is such a concept in the planning process. Therefore, the purpose is oriented towards a representation, both graphical and textual, of how the sustained operation is carried out by the commander's vision after he has correlated the pursued ends with the ways and means provided to the extent of the accepted risks, thus responding to the four questions in this regard. Also within the definition there is the temporal location of the design time, that is during the third phase of the planning process when the planning guidelines of the strategic-level commander were received. Another definition of the operational

design is oriented towards the graphic (cognitive) construction on which the reference object of the operation is based, as follows: *operational framework that sustains the maritime operations plan and supports the execution, or a conception and construction of a framework underlying the operation plan and its subsequent execution*³⁶.

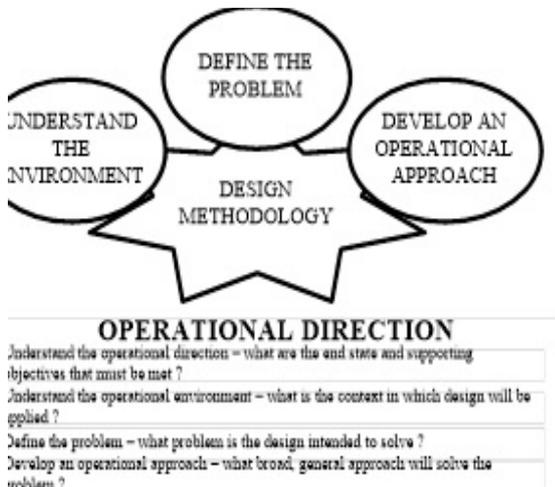


Fig. 1 Designing Methodology
Sursa: JOPP, p. D-2

The volatility of the current security environment conditions implies the need for coordinated, integrated and synchronized action of all instruments of power to achieve the conditions that characterize the desired end state. This requirement can be achieved through the operational design, which ensures both integration and synchronization and coordination in order to achieve the unity of effort. For this, it is of crucial importance to know the methodology of realizing the operational design, which is why, below, we will present the steps to be taken in account, in general, to achieve a viable and applicable design.

Such a methodology³⁷ as shown in figure no. 1³⁸ consists of the following steps: understanding the operational direction, understanding the operational environment, defining the problem and developing an operational approach. The understanding of the operational direction is based on the dialogue developed to understand the intent of the strategic-level commander, the strategic desired end state, the strategic objectives that will lead to the realization of this end state in order to appreciate correctly what will be the purpose for which the operational design will be developed. The correct assessment of the strategic desired end state is particularly crucial as it includes the acceptable conditions to which the crisis system is to migrate.

Also, understanding the objectives that support the desired end state will define the operational problem and the limitations, planning assumptions and explicit tasks will facilitate the development of the operational approach. The second step of understanding of the operational environment, is performed from a systemic perspective³⁹ (the PMESII model) and constitutes a reference model in support of the step of defining the operational problem by identifying the center of gravity, the actions to be taken and the instruments of power to be used. All these elements from the understanding of the operational environment will be the necessary ingredients for defining the problem that hinders the attainment of the conditions which are defining the desired end state.

Developing an operational approach step is itself the commander's perception of changing the current, unacceptable conditions of the system concerned under acceptable conditions within the limits imposed by the strategic directive.

As it can be seen in figure no. 2⁴⁰, the graphic construct of operational design is very similar to the design with the difference represented by its general shape. Instead, the particularity of this

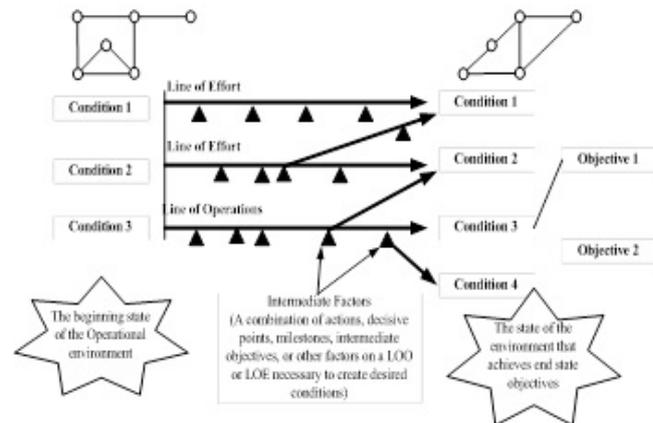


Fig. 2 Operational Approach
Sursa: Joint and Coalition Warfighting, Planner's Handbook for Operational Design, p. VI-2

construct is represented by the expression of time (as an operational factor) materialized by the dividing into phases. Another particularity is given by the non-synchronization of the decisive points for all lines of operation/effort as well as their sequence along a single line of operations/effort.

These design methodology steps can be considered useful in developing operational design, stating that such methodology needs to be adjusted

to meet the planning needs of an organization and to respect the reality of the operational environment. In the literature in the field there is a wide range of elaboration methodologies, some consisting of three stages, others having some stages merged, and moreover lacking a general valid and applicable pattern in all situations that characterize, at a certain moment, the operational environment.

Conclusions

In conclusion, operational art is an essential component of a doctrine as it is the main means of linking all tactical actions by embracing them in a general framework to achieve the objectives established by the strategy. The importance of applying operational art gains superior valences when its scientific character is complemented by those attributes of art – ability, skill, mastery, creativity. A sound tactical-level concept of the use of joint forces will lead to tactical success but not to achieving strategic objectives unless it is an integral part of an excellent concept of operations. In turn, this concept of operations must be characterized by elements of synchronization, sequencing, and coordination of tactical actions to shorten time and avoid unnecessary resource losses. Poor performance of operational art leads to tactical failures that produces operational or strategic failure. And the simple use of superior technology or the superiority number of troops does not guarantee strategic success unless it is in high attrition. The essence of operational art will be fulfilled when operational thinking is accomplished faster and better in conjunction with the use of superior technique. The technological advantage by itself will not surpass the operational art, although its theory and practice have been and will be influenced by superior weapons. That is why operational art is constantly improved and the creativity of its implementation will guarantee strategic success.

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30 ***AJP 01 (E), *Allied Joint Doctrine*, NSA, 2017, pp. 4 - 5.

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32 Milan Vego, *op. cit.*, pp. I-7,8.

33 Milan N. Vego, *op. cit.*, p. I-11. Politicization of tactics is influencing tactics by national habits or policies that can have disastrous consequences at tactical level with repercussions on operational and strategic end state. For instance, French tactics before 1914 had as a principle of offensive *fighting at any price* that had a negative effect on the operational level and, moreover, it was disconnected from the strategic reality.

34 *Ibidem*, p. I-10. This phenomenon was first named by Michael I. Handel in his work *Masters of War: Classical Strategic Thought* and represents a consequence of the evolution of technology, especially in the airfield, where the targeting replaces strategic planning. In another way, instead of setting objectives first without being influenced by tactics (from top to bottom, not bottom-up), these objectives bear the influences of the tactics or the evolution of the air weapon (apud: Colin S. Gray, *The Air Power Advantage in Future Warfare: The Need for Strategy*, Airpower Research Institute, Maxwell Air Force Base, Alabama, 2007, pp. 35-36).

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37 *** JOPP, *Joint Operation Process Workbook*, JMO Department, Naval War College, July 2013, p. D - 1,9.

38 Figure taken and adapted from JOPP, *op. cit.*, p. D - 2.

39 The system approach is achieved through the 6 domains (PMESII - Political, Military, Economic, Social, Infrastructure and Information) that support the analysis of the operational environment as a system of nodes, links and interactions/influences that are examined to view and understands the logic of how the system is operating.

40 Figure taken and adapted from J-7, Joint and Coalition Warfighting, *Planner's Handbook for Operational Design*, Suffolk, Virginia, 2011, p. VI - 2.

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ASPECTS REGARDING THE USE OF FIELD ARTILLERY IN CONTEMPORARY OPERATIONS

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Throughout history, the mission of the field artillery was to destroy, neutralize, or suppress the enemy with cannon, rocket, or missile fires and to integrate all fire support assets into the combined arms operations. Field Artillery has inflicted more casualties than any other weapon system on post-XIX-th century battlefields.

More recently, field artillery proved its role on the battlefield in the Operations Desert Storm, Iraqi Freedom and Enduring Freedom in Afghanistan, not to mention currently in Ukraine, where around 80 % of casualties are artillery related.

Keywords: suppress the enemy; integrate fire support; weapon system.

The contemporary world has been confronted and continues to face a multitude of political and security issues related to inter-state relations, despite the existence of international organizations designed for settling internal or external conflict situations.

The second half of the twentieth century brought to the forefront the Cold War which imposed a strategic balance on the "edge of a knife", a balance still full of the wounds of the remembrance of the horrors of the Second World War, the terror exerted by the arms race, weapons of mass destruction (WMD), fear of each other and, last but not least, of the great responsibilities assumed.

Thus, the end of the Second World War did not lead to a peace situation, but it turned into another kind of war - a world war - a war of lust, the threat that was applied to genetic strategies or generative strategies (armament strategies, battlefield developments, doctrines, concepts, clusters and force regroupings), wear strategies, embankment strategies, influence strategies, deterrence strategies (especially nuclear), in general, indirect strategies¹.

Later, the end of the Cold War (with the victory of Western democracies or, perhaps, without a victory) did not mean the end of the war, but the continuation of the war through other means.

Although not global, just five years after the end of the Second World War, a whole series of regional conflicts broke out, with different motivations and

justifications, be they ideological, the division of spheres of influence, religious or other.

A few particular examples of post-war conflicts highlight some relevant aspects of the use of artillery and rocket forces as a basis for the fire systems organized by military forces to carry out missions. The first major conflict was the Korean Peninsula, which commenced on June 25, 1950, when North Korea launched an army invasion in the southern 38 parallel and US President Harry S. Truman immediately reacted with the air and navy forces' commitment to support the defense of the Republic of Korea.

US Artillery's actions in Korea took place in successive stages of defense, counter-attack, and, in the end, offensive operations. According to some papers and articles consulted from open sources since the end of the Cold War, a number of established Western historians revised and rewrote about this conflict. For example, Allan R. Millett published two important papers detailing the evolution of the conflict as well as the impact on the use of US inter-American structures / forces: "The War for Korea, 1945-1950: A House Burning (2005)" and "The War for Korea, 1950-1951: They Came From the North (2010)".

The US Artillery Structures in the 1953 Korean War were mainly fitted with towed and / or self-propelled 105 mm, 155 mm, 8 inch self-propelled bomber and 240 mm self-propelled bumper². The Korean War offers us a unique perspective for analyzing the effectiveness of the use of artillery structures in a high / high intensity conflict, mainly due to the significant number of missiles shot during the conflict³.

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In some moments of the conflict, US Artillery troops fired five times the number of rounds compared to some periods of the Second World War⁴. This high volume of fire was generated by a number of factors, such as the use of defensive fire sectors to protect dispersed outposts and the execution of fire on the large number of North Korean and Chinese militants, which led the United Nations Korea to re-evaluate its lack of artillery units through higher consumption rules for long periods of time.

Moreover, in order to increase the efficiency of counter battery fire against static, strongly fortified firing positions, precise shots were used using impressive amounts of artillery projectiles for their annihilation.

The artillery fire planning process in the Korean War was not much different from that used in the Second World War, which assumed the definition given in the Artillery Battle Manual in force at that time⁵ as a "tactical plan for the use of weapon systems within a structure so that their fire missions are coordinated".

Integrating forward observer teams into tactical maneuvering units, and ground and aircraft observation staff at senior levels were essential to supporting effective targeting.

In the Vietnam war (1955-1975), due to the specific conditions of the land on which the actions were carried out, the missions for which artillery was used experienced a slight rebound.

Units with uncovered flanks and large spaces between them were determined for the mode of action that was more decentralized, with the exception of classical centralized missions (preparing the offensive fire, hitting the opponent in some moments of the fight).

In addition to classical missions, artillery assured the "testing" of newly emerging ammunition⁶. With all the growing importance of aviation, Field Artillery retained its dominant role in the 1960s, and under the conditions of the war in southern Vietnam, 137 allied artillery detachments were used, of which 74 belonged to the American Armed Forces.

The US Army engaged 63 artillery detachments, 32 were equipped with 105 mm M101 and M102 towed howitzers (range 11 and 14 km), 15 M114 155 mm towed howitzers (range 14,6 km) and self-propelled M110 howitzer (range 16.8 km),

12 mixed artillery self-propelled howitzer M110 203 mm (range 33 km), 7 M114 self-propelled howitzer, 5 self-propelled M109 155 mm howitzer and the remaining two, with self-propelled M108 105 mm howitzers.

Battles and engagements were insular, objective-oriented, and generally took place at great distances from the bases of dislocation, raising great problems in terms of action and force protection. The outbreak actions and the omnidirectional character of the threat decisively influenced the deployment of forces and fire support in the theater of operations, completely modifying the operational doctrine of artillery⁷.

The main prerequisite for establishing the artillery maneuvering area was that every spot in the area in which the American units operated could be covered with fire by at least two artillery batteries.

Overall, medium and heavy artillery was placed in large, permanent bases, and the mild one, *i.e.* the 105 mm howitzer, consisted of smaller, temporary base crews that could, if necessary, move across the active area. For this reason, in the individual operating areas, there was the firing support base system, known as the FSB (Fire Support Base).

The confrontation between the Arab countries and Israel was the bloodiest, most expensive and unresolved conflict. The Arab-Israeli confrontations took place in the following timeline: May 15 - July 18, 1948 (Palestinian War), 29 October-7 November 1956 (Suez War), June 5, 1967 (Six-Day War) October 6- 25, 1973.

In the following paragraphs, we will present some details on the use of artillery (within ground troops) in the conflict of 06-25 October 1973⁸.

Egypt had about 15 artillery brigades, nearly 200 tank destroyers, 1400-1600 guns of various sizes, about 500-600 missile launch ramps, a large number of individual anti-aircraft missiles (a rocket could be worn by a fighter).

Syria had 6 to 8 artillery regiments, 100-130 tank destroyers, around 1,000 guns, and over 150 anti-missile launch ramps. Israel had three independent artillery brigades, 50-60 anti-aircraft missile batteries, more than 1,500 cannons. The other participating countries did not engage in artillery technical battle. Some military specialists appreciate that a role of first importance in the army-Israeli army confrontation had TOW missiles

- Tube-launched, Optically tracked, Wire-guided anti-tank (at that time, ultramodern) that took out of the battle during the second Egyptian offensive over 250 of enemy tanks⁹.

In the same region, extremely bloody and destructive warfare engaged Iran and Iraq. When this war broke out, few were the military and political observers who predicted this military confrontation would last for such a long time (September 4, 1980 - late December 1986).

In the war between Iran and Iraq, a wide range of weapons, techniques and artillery ammunition were used, but cannons were predominant, 120 mm and 155 mm, 175 mm non-recoil cannons and surface-to-surface missiles installed on mobile launch systems.

Regarding Soviet Army's operations in Afghanistan generally we have little information, given its failure and the very high loss of lives. As part of this intervention, artillery was massively used, prompting a Western military analyst to assert that the Soviet forces were constituted by a "artillery army with many tanks".

During the war, new firing techniques and drills were developed to hit the enemy in mountainous or desert ground. The shootings were executed with both state-of-the-art smart ammunition and classical ammunition.

In the planning of offensive operations, there was a variable length fire preparation with large-scale artillery. Direct fire support was executed by successive concentration of fire and sometimes even by wave of fire, so that the infantry advanced behind a true firewall, which resulted in great losses among the civilian population in the battlefield.

Regarding the use of artillery, this was done according to the organization of the Soviet army, i.e. artillery groups at the level of the regiment, brigade, division, in some artillery armed groups, depending on the scale of the operation, the artillery of the Romanian Armed Forces during the period after the Second World War and up to the events of 1989.

Artillery tasks were extremely diverse, including counter-battery fire (as a primary mission), interdiction, blocked firing, harassing, and battlefield lighting.

Frequently, direct-fire support was used with large caliber pieces in the offensive fire preparation. Massed fire was also used in order to neutralize or

destroy hardened positions or to close areas. It was a mission to delay the withdrawal by pulling out cassette ammunition for this purpose.

The main drawbacks regarding the use of Soviet artillery in operation (combat) were the following: the lack of training of the infantry officers in matters of artillery, which required the bringing of artillery officers from the country for the fire to tactical levels; lack of co-ordination of the maneuver by maneuvering infantry units (subunits); insufficient number of battalion-level artillery scout-observers and infantry company; insufficient number of battalion artillery observer scouts and infantry companies; great difficulties in performing independent missions by battalion batteries due to the lack of possibilities to prepare indirect bursts at battery level.

From the way artillery was used in this military conflict, the following conclusions can be drawn: the artillery actions in anti-guerrilla missions need to be thoroughly prepared because they have very high particularities; the basic fire support process, when intelligent ammunition is not available, direct firing must be executed; in escorting and escorting convoys, in rough terrain, part of the artillery can be used; during battles in urban areas it is necessary to use intelligent guided ammunition in order to avoid unnecessary destruction and the damage of the population in the fighting area; training and training of infantry officers for the use of artillery.

During the Gulf War, during the period of the force's deflation on the theater of operations, the largest amount of artillery fires was made after the Second World War, about 7,000 pieces in both camps, mostly in large caliber (over 100 mm), of which about 3.000 guns¹⁰. Self-propelled artillery, which used diversified ammunition, had its share and benefitted from a cutting-edge artillery research technique at that time.

Artillery and rockets were used in a unitary concept in co-operation with other types of weapons, in order to achieve the conditions necessary for the transition to terrestrial offensive and the successful deployment of forces with minimal losses.

In the months leading up to the beginning of the war, a number of technical problems were solved regarding the co-operation in action of the artillery belonging to the different states in the coalition due to the incompatibility of the command and control systems, by applications and struggles for achieving the interoperability of allied artillery forces.

The Artillery executed concentrated or massed fire with high-caliber shells and rocket launchers (M.L.R.S.) or fire on small / punctual targets, using classic ammunition and high-precision ammunition of "COPPERHEAD" and "SKEET"¹¹ type.

The triggering of ground combat operations was not performed after a fire preparation in its classical form, directly before the offensive. The preparation of fire was carried out practically during the entire period of completion of the combat and training device for the triggering of the terrestrial actions, being executed by the combined actions of all the categories and the fire support platforms.

After the Allied forces offensive, given the high rate of advancement, the artillery executed missions aimed at forbidding the withdrawal of Iraqi forces and occupying new strengthened positions, hitting counter-attack groups and participating in their rejection.

The actions of the allied forces' artillery were based on a special mobility, by diversifying the artillery maneuvering areas, which were directly occupied with the execution of the fire missions, being abandoned immediately after their accomplishment.

In the context of the Gulf events, it is worth mentioning the use of the "SCUD" surface -to-surface rockets by the Iraqi artillery. These were usually launched at night using mobile ramps, creating false positions and ramps, given the danger of using chemical and biological loads.

In conclusion, the "Desert Storm" operation used both classical artillery and high-tech artillery, acquisition of targets by radiolocation, thermal imaging and infrared.

The Yugoslav conflict, one of the most serious interethnic conflicts that destabilized peace and security in the Balkans, is based on issues caused by political, ethnic and religious differences, territorial disputes and economic problems.

It generated both the breakdown of the former Yugoslavia and the emergence of new states, as well as a permanent animosity between the inhabitants of different nationalities and religions. During fighting in this region, combatants mainly used infantry, artillery and missile technology to carry out the following missions: the destruction of certain civilian and military objectives; closing communication channels; the unfolding of the struggle behind the enemy, according to the

methods and procedures of the guerrilla warfare; accompanying convoys, etc.

The Russian Federation, known for its technological advantages in the field of high-precision weapons, preferred to use large-scale field artillery during the 1999 Chechnya war, so that about 70-90% of the enemy targets were committed by it.

During Operation Iraqi Freedom, field artillery units proved to be essential throughout the duration of major operations¹². For example, on March 25, 2003, strong sand storms forced the Coalition aircraft to remain on the ground, exposing maneuvering forces that fought hard around Nasiriya to hit the enemy. Artillery was the only weapon that could intervene, providing fire support throughout the action regardless of weather conditions.

Nowadays, the conflict in Ukraine, begun in the spring of 2014, shows us that the main "killer" in the Donetsk and Lugansk areas are artillery units, especially those equipped with high-range barrels, usually mobile reactive / missile launch, BM - 21 Grad / Tornado, B.M. - 27 Uragan and B.M-30 Smerch.

Thus, in an investigation by the "Bellingcat" website, known as "Origin of Artillery Attacks on Ukrainian Military Positions in Eastern Ukraine between 14 July 2014 and 8 August 2014", they analyzed the appearance of 1,353 craters generated by artillery shells near the common border between the two states.

Moreover, at the international artillery conference "Future Artillery-2017", hosted in the United Kingdom capital, London, the delegation of Ukraine, through gl.mr. Andriy Koliennikov, referring to the Donbass conflict, reported that 80% of all fire missions were executed by artillery of different calibers, pointing out that it is imperative that artillery units hold in their inventory sensors, especially "Unmanned Air Vehicle / Unmanned Air System" and modern counter-battery radars.

The percentage of fire missions is also confirmed in an article recently published in "ARMY MAGAZINE VOL. 69, NO. 2, FEBRUARY 2019", entitled "King of Battle: Russia breaks out the big guns" signed by Col. Liam COLLINS and Capt. Harrison MORGAN, who also described the main advantages of the Russian artillery as compared to that of the US-Army: fire / beating power, reaction capacity and culture / philosophy of use in operations.

In conclusion, it is clear from the articles presented in this article that the place and role of artillery has not only been maintained, but in some conflicts has even increased in importance, as shown in particular by those in Korea, the Arab-Israeli conflicts, which are still models of study triangle "aviation-tank-artillery" or in the conflict in Ukraine, "missile-based artillery (aviation) – unmanned aerial systems / platforms".

Due to the increase of the mobility and the range of most of the cannons, the achievement of modern technology of fire command and control, the automation and improvement of the working methods of the staffs and digitization as well as the use of the smart munitions ensured the achievement of much greater effects, with important implications for achieving the purposes of operations, campaigns or wars, as appropriate.

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CYBERNETIC ACTIONS ON CRITICAL INFRASTRUCTURES IN THE MILITARY FIELD

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The evolution, magnitude and effects of cyber attacks determined the states and organizations to undertake of increased security measures. Along with the development of new digital technologies, the number of Internet service users has considerably increased, which has also contributed to the unavoidable occurrence of ill-intended persons aiming to achieve a number of advantages through various illicit and controversial methods. Moreover, the profile of the cyber aggressor has advanced to the level of state and non-state actors. Thus, most of the targets that they identify as critical infrastructure belong to the military field.

Keywords: advanced persistent threat; cyber aggressors; critical infrastructure; APT28.

The importance and need for services provided by critical infrastructure in the society entails protection and resilience. The designation by states of the critical infrastructure at national level and the regulation of their protection have contributed to the inter-institutional dialogue, the coordination of protection from a central structure, the training of specialists in the field to jointly conduct simulation exercises by involving several institutions and government agencies in various sectors. In this respect, as a good example to those listed above, reference can be made to *the Critical Infrastructure Protection in Romania*, stemming from the legislative point of view from Emergency Ordinance no. 98/2010 on the identification, designation and protection of critical infrastructure, currently amended and completed by Law no 225/2018. Thus, by this law, vital functions are defined „as those services that are essential to the functioning of society, such as: government business management, international activities; national defense; internal security; the functioning of the economy and infrastructure; security of population income and living standards”¹.

Further on, by Law no. 225, the list of designated critical infrastructures has come to include 12 sectors and within the national security sector, one of the subsectors refers to country defense, public order and national security.

Thus, each state institution which is found in one of the sectors mentioned in the law may be holding one or more critical infrastructure assets. Given the leading role of critical infrastructures in ensuring national security and their need to be protected, the access to critical infrastructure data and information is limited by the legislative requirements on the protection of both critical infrastructure and classified information which increases the interest of ill-intended persons or entities in obtaining and using as much classified information as possible. In this situation, cyberspace has become an environment conducive to such actions.

Profile of cyber aggressors

The diversity of cyber attacks has shown that there are several categories of actors, depending on their objectives. Therefore, according to *the Cyber Security Strategy of Romania*, the main actors that generate threats to cyberspace are:²

- persons or organized crime groups exploiting cyberspace vulnerabilities in order to obtain patrimonial or non-patrimonial advantages;
- terrorists or extremists who use the cyberspace to deploy and coordinate terrorist attacks, communication activities, propaganda, recruitment and training, fundraising, etc., in order to achieve their terrorist objectives;
- states or non-state actors who initiate or conduct operations in cyberspace in order to gather information from governmental, military, economic fields or materialization of other threats to national security.

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Cyber threats are the product of these actors, often known as cyber aggressors or cyber attackers. Of the three categories listed above, the actions of states and non-state actors have the highest impact on national security, due to their resources, technological capabilities and time required, which underlie the preparation and launching of complex cyber attacks. In the terms of security of a state, in the light of the history of cyber-attacks, most of the actions of cyber-aggressors are directed towards national critical infrastructures, especially those of the energy sector, the financial and banking sector, and the defense, public safety and national security sector.

Terrorists or extremists use cyberspace for communication, information exchange, intelligence gathering, and unauthorized access to databases. The Internet has become a vast digital library that provides information about the targets, including some critical infrastructures, as well as anonymity in network digital communications.

The Internet represents both an active confrontation area for terrorist groups and a vital means of propaganda, communication, recruitment of new followers, exchange of experience and knowledge. In this context, the Internet has been used to create networks between terrorist groups, being an efficient way of rapid communication, enabling a decentralized organization that is difficult to be identified and monitored.³

Cybercriminals include people or groups of ill-intended persons who seek to gain financial advantages in a short time using various fraud schemes. According to McAfee's global 2018 study⁴, the annual revenue from cybercrime has reached about \$ 600 billion, representing 0,8% of global gross domestic product. In recent years, the increase in cybercrime has been influenced by both the use of new technologies by cyber criminals and the evolution of cryptomonas in cyberspace. At the same time, almost a quarter of the annual profit derived from cybercrime activities is intellectual property theft, and when military technology is threatened by cyber criminals, the national security is at risk.

Advanced persistent threats

Cyber actions directed toward critical infrastructure in the military field are conducted by state and non-state actors, and represent advanced

persistent threats (*Advanced Persistent Threat – APT*). Advanced persistent threats are designed and launched by professional attackers on cyber infrastructures, backed by with the financial resources from some states or organizations. From the perspective of critical infrastructure in the military field, the main purpose of the persistent advanced threats is to obtain information at a high level of confidentiality, in order to have a strong impact on national security. Thus, there are precise objectives that are targeted by planning and launching attacks over a long period as long as they are not at risk to be found, which would compromise the information extraction.

Definitions of persistent advanced threats are quite varied, so one of them can be summarised by the meaning of the three terms as follows:⁵

Threats: APT attacks are not just codes and programs, and they are executed through coordinated actions of well-organized, funded, motivated and skilled people.

Persistent: The opponent has a well-established and prioritized mission, being guided by continuous monitoring and interaction by the organizing entity to achieve the final objective and to maintain the access to the target as long as possible.

Advanced: the opponent resorts to all the potential that he owns, including both intrusion techniques specific to computer systems and networks, and conventional techniques for gathering information such as telephone interceptions and satellite images. Along with available malware components, the opponents access and develop various tools, combining multiple targeting methods and techniques.

From the perspective of Symantec specialists, advanced persistent threats are a type of targeted attacks (planned by targets) that use a variety of techniques. *The drive by downloads, SQL injection, malware, phishing, spam* are only a few of these techniques. A targeted attack is not necessarily an advanced persistent threat; however, this can always be said about APT. Therefore, below there are presented the ways in which advanced persistent threats differ from other types of targeted attacks:⁶

- *Customized attacks:* advanced persistent threats often use customized tools and intrusion techniques, adapted and developed specifically for a targeted objective. In this context we find exploiting zero-day vulnerabilities, viruses, worms

and rootkits programs. Another peculiarity is given by triggering multiple and chain threats to ensure permanent access to the targeted objectives. Sometimes a misleading threat is launched to give the impression that the attack was successfully repelled;

- *Low and slow actions*: they are framed over long periods of time by low and slow movements of the attackers, avoiding being detected as much as possible, until attackers meet their stated objectives;

- *Higher aspirations*: threats are designed to meet the requirements of international espionage and sabotage, which involved undercover state actors. The objectives of APT may be military, political or economic, and the groups behind APT are well-organized and funded, with the ability to operate with the support of military and state intelligence;

- *Specific objectives*: Compared to targeted attacks pursuing a larger spectrum of organizations possessing intellectual property or valuable information, APT targets a narrower set of objectives, including organizations that manage and exploit one or more critical infrastructures. In the military field, in addition to specific critical infrastructures, other entities, such as manufacturers and suppliers of military equipment and techniques, defense contractors or various partners are also targeted.

Overall, the diversified typology of cyber attacks highlights that any critical infrastructure owner in the military field may be targeted. Therefore, by their specifics, advanced persistent threats are planned to take advantage of the weakness of the security, not to be identified and to be effective as long as possible.

Notable APT attacks on critical infrastructures in the military field

The advanced persistent threats have moved from a commercial purpose to a strategic one, becoming instruments that can be exploited by many international players. The evolution of cyber attacks, including advanced persistent threats, lead to recognition of cyberspace as the fifth domain of operations by NATO. Thus, cyber security investments have increased significantly, advanced by adopting strategies in 2013-2014⁷, continuing with the implementation of policies and procedures, the establishment of CERT teams, headquarters

and cyber security governing structures, as well as the development and intensification of training, through multinational and inter-institutional involvement.

On the other hand, in response to all these measures, state and non-state actors have managed to develop sophisticated attack tools and techniques, planning and executing attacks on the most important targets. APT attacks carried out so far have had as main targets, in addition to critical infrastructure in the military field, other critical infrastructures in the field of security and defense. Many of the attacks, for security and confidentiality reasons, have not been made public.

The APT attacks listed in Table no. 1 represent some of the most representative attacks so far, targeting a number of entities with an important role in security and defense field.

In order to meet the targets, the attackers used various techniques, tactics and procedures. Of these, the most used techniques, tactics and procedures, highlighted in the previous table, have produced countless consequences for organizations, so they have to take increased cyber security measures.

Attackers have launched complex *spear phishing* campaigns on targets and the sent messages were containing topics specifically designed to draw people's attention in order to access malicious links containing malware. Spear phishing is a way sending messages to a group of users that share common items (they are employees of the same institutions, companies, departments, etc.). Emails are designed so that the recipient sees the sender as a known person (from whom he or she usually receives or waits for correspondence). Attachments containing malware have names that are similar to the recipient's domain⁹.

The advanced persistent threat group APT28

Among the groups that have frequently launched APT attacks on critical infrastructures in military field from several states of the world, the APT28 threat group stands out, as being already established and very active in cyberspace.

The APT28, also known as Fancy Bear, Pawn Storm, Sednit, or Sofacy, has high status and high qualification among cyber attackers. In order to penetrate the target networks, the group used a diversified set of malware tools including: X-Tunnel, X-Agent and CompuTrace¹⁰.

The attention on APT28 attacks can be described not only from the perspective of the large number of targeted objectives, but also from the perspective

Actions directed against the Ministry of Defense in Montenegro. The security firms FireEye, Trend Micro and ESET have confirmed that Fancy Bear

Table no. 1

Notable ATP Attacks⁸

Denomination	Tehnigues, stratgies, procedures	Level of technology	Targetetd objectives
Red October	Spear phishing Social engineering Dropper Troian	Medium	Dimplomatic establishments Scientific research organizations
Cosmic Duke	Dropper Loaders Exploits Keylogger	Medium	Governmental institutions of NATO / EU member
Mini Duke	Social engineering Dropper Backdoor	High	Governmental institutions in the areas of foreign affairs, diplomacy, energy, telecommunications and defense
APT 28	Spear phishing Social engineering Wattering hole Backdoor	Highest	Governmental institutions in military and political fields NGOs, journalists and political parties of NATO / EU members
APT 29	Spear phishing Social engineering Backdoor	Highest	Governmental institutions Think-thanks, ONGs and media agencies
Turla	Social engineering Wattering hole 0-day	Highest	Embassies and consulates Governmental organizations in the field of foreign affairs

of the activity profile of these targets, most of them having the status of critical infrastructure.

In this context, one of the most prominent events in the aftermath of the APT28 attacks, which has gained international interest, is linked to the US presidential election campaign (2016), the main purpose of which is to influence the domestic policy of the country.¹¹

Regarding the fact that APT28 threat group is targeting military targets or other important economic or technological targets connected to those referred to above, there is a constant interest in obtaining classified information as valuable as possible and seriously harming the national and international security and defense.

Below there are listed some APT28 actions on several military targets, suspected or confirmed by cyber security companies.

(APT28) has organized at least three separate attacks in January, February and June 2017, targeting several institutions in Montenegro. Using phishing specter tactics, the attackers wanted the intended users to open seemingly legitimate messages with relevant content about them, which allowed viruses to be installed on the computer. In January 2017, the Ministry of Defense of Montenegro was the target of an attack by several e-mails sent to wreak havoc. If messages were opened, Spear Phishing was automatically installed on victims' computers, along with APT28 malware. The next attack was February and lasted for several days, and the victims were government and state institutions websites, as well as the government-oriented media. The attacks were resumed in June 2017. Analyzing the diversity and purpose of these attacks, and the professional manner in which they were launched, the experts

of the aforementioned companies confirmed that these attacks were synchronized.¹²

Actions directed against military targets in the Czech Republic. In 2017, several private Google email accounts of military personnel were compromised. Although the attackers did not get classified information, they were able to get more personal information and sensitive data. In addition, they also managed to compromise an IP address belonging to the Czech defense ministry by a malware known as X-Agent. The wave of spear phishing emails targeted mainly people from military diplomacy deployed in Europe. The vector and targets of this attack fully correspond to the APT28 specific attack mode. Similarly, other spear phishing targeted European arms companies and a border guard of a European state.¹³

Actions directed against the Italian navy. Cyber security researchers from the Italian CSE Cybersec believe they have discovered an APT28 campaign targeting the Italian Navy in 2017, known as „*Operation Roman Holiday*”. They discovered a multi-stage campaign, initially based on the dropper malware program, written in Delphi programming language, followed by an X-Agent malware version downloaded from the Internet. Researchers have discovered an additional Windows DLL (Dynamic-Link Library) file that connect to a command-control server called “marina-info.net”, similar to the Italian navy server, which made them believe it was developed to attack the Italian critical infrastructure protection and the other Italian cyber security institutions.¹⁴

Actions directed against Ukraine artillery. From late 2014 and through 2016, a malware (X-Agent) was distributed on Ukrainian military forums within a legitimate Android application, legitimately developed by a Ukrainian artillery officer. The application was developed to reduce the time it takes to fire by Ukrainian artillery units. The application has been used by over 9000 users. The ability of this malware was to retrieve communications and gross location data from an infected device in order to identify the general location of Ukrainian artillery forces and engage them. In the 2 years, open source reporting indicates that Ukrainian artillery forces have lost over 50% of their weapons. The peculiarity of these cyber actions is given by the expansion of APT28 application in mobile malware development.¹⁵

These examples are only a few events in the immense sphere of advanced persistent threats that targeted and damaged critical infrastructure and military personnel. The fact is that APT attacks already launched can be found in two hypostases. In the first hypostasis, it is important that some of these actions be known by the public while others have to become classified information. In the second hypostasis, there is an extremely dangerous situation for any cyber-infrastructure organization when persistent advanced threats are not discovered or are discovered very late, and many important data and information have been already exfiltrated.

Conclusion

The overflowing track of cyber-actions has determined states, international, national, public, and private organizations to take a number of cyber-security measures. Thus, the legislative regulations are largely identified in strategies and laws, models to describe cyber-attacks (e.g. Cyber Kill Chain, MITRE, Laliberte, etc.), security solutions offered by large companies and accredited by independent test laboratories, Incident Response Teams (CERT / CSIRT), cyber defense, command structures, and more.

In order to achieve effective protection against cyber-attacks, military organizations holding critical infrastructure, along with the rigorous application of technical security, should take into account people's vulnerabilities. Investing in promoting a solid security culture can be a viable, proactive and sustainable solution to reduce, as much as possible, the number and impact of cyber attacks.

NOTES:

1 Law no. 225/2018 for modifying and completing OUG no. 98/2010 regarding the identification, designation and protection of critical infrastructures.

2 Romanian Cyber-security Strategy, 2013.

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EOD SUPPORT IN OPERATIONAL ENVIRONMENT

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In areas where military or small military conflicts occur or have occurred, there is a wide variety of standardized or improvised explosive mechanisms, which are still unexploded. Explosive mechanisms threaten both the forces and means that contribute to the accomplishment of the missions, freedom of movement / action, causing personal and fighting vehicles losses and making it difficult to use the logistical support means, but not in the end also affects civil society.

Keywords: EOD; operational environment; neutralise; IED; UXO.

Motto: "Terrorism is the most amorous form of organized violence".

Paul Wilkinson

In the last decades, military conflicts have evolved a lot, so that classical wars, so-called conventional, gradually turned into unconventional, asymmetric conflicts. These types of conflicts, unfortunately, are also waged between different actors in terms of military endowment. Thereby, less trained actors from the military point of view, referring here to the equipment and the level of training, are increasingly using as a form of compensation in their actions improvised explosive devices. As a counter measure for these actions, stronger actors have developed a military branch to deal with the neutralization of these improvised devices. This military specialty is called Explosive Ordnance Disposal (EOD).

Operations conducted on both national and non-national territory combine simultaneously three kinds of elements – offensive, defense and stability. Armed forces use offensive and defensive operations to defeat the enemy on land. They simultaneously carry out stability operations in order to interact with the population and civil authorities. Civilian support is the fourth component of large-scale operations in which different types of operations are conducted. EOD is an essential component for all phases across the entire operational environment.

EOD support is an essential element in the protection of military and civilian personnel, critical

assets, infrastructure and public safety. Threats with explosive devices may be present in all phases of military operations. To manage risk to the lowest possible level, commanders must integrate EOD support in all the phases of the whole spectrum of the operational environment¹.

Offensive operations are combat operations performed to defeat and destroy enemy forces and create advantages by using land, resources and populated centers. They impose the commander's will on the enemy. EOD structures act to support the goals of offensive operations by depriving the enemy of resources. This is done by neutralizing and destroying the ammunition captured from the enemy. EOD structures also support the information gathering process by post-explosion analysis, analysis of the resulting fragments, explosion site exploitation, and by analyzing the technical components of the explosive devices used. EOD support is the only branch capable to provide security against the use of improvised explosive devices (IED), and also capable to provide ample information about the techniques used by the enemy, thus contributing to the development of the counter improvised explosive ordnance (C-IED) process. In addition, EOD structures support the creation of a safe environment for stability operations by reducing the enemy's ability to use explosive munitions, ensuring a safe state, and eliminating all unexploded ordnance (UXO) of both friendly and enemy forces².

Defense operations are combat operations performed to defeat an enemy attack, to gain time,

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to save forces and to develop conditions favorable to conduct offensive or stability operations. EOD structures participate in the fulfillment of the defense objectives by protecting people, assets and critical infrastructures. This is done by decommissioning and neutralizing or destroying UXO, IED, home-made explosives, chemical and biological weapons, nuclear weapons, and weapons of mass destruction. The lead factors of EOD missions during defense operations include: the security level of operations, enemy weapons and also their tactics, techniques and procedures (TTPs). EOD units will focus on protecting their own forces, multinational forces and the host nation from all threats involving explosive devices or ammunition. EOD structures support the development of information collection plans during defense operations in the same way as for offensive operations; in addition, EOD forces provide significant support for vulnerability and threat assessment.

Stability operations include various military missions, tasks and activities conducted outside the territory of the state, in coordination and cooperation with other nations, with the purpose of maintaining or restoring a secure environment, providing essential government services, infrastructure reconstruction and humanitarian aid. The support provided by EOD structures during offensive and defense operations continues during stability operations. The main purpose is to limit the influence of opponents and to isolate the population from the danger posed by the enemy by establishing civil security. If the enemy represents a significant military threat, the forces engaged in Stability Operations perform self-defense activities as well as defending civilian population against attacks. EOD units will focus on the safety and security of the forces, civilian population and infrastructure in terms of the threats posed by explosive devices. It is essential that commanders maximize the use of qualified EOD personnel to minimize the likelihood of collateral damage. Security is the most important condition that rests on all the other sectors. At this stage, EOD's support also focuses on training, counseling and providing assistance to host nation and multinational forces in recognizing and responding to explosive munitions and devices³.

Civil assistance is the support provided by the armed forces to civilian authorities in the country

or abroad for domestic emergencies as well as for law enforcement activities and other activities. Civil assistance includes operations that address the consequences of natural or man-made disasters, accidents, terrorist attacks and incidents in or outside the country. Armed forces carry out civil assistance operations when the size and scale of events exceed the capabilities of domestic civilian agencies.

Existing laws on combating terrorist use of explosives on national territory predict that the armed force will aggressively combat the threat of explosive attacks by coordinating the efforts of all institutions in cooperation with critical infrastructure owners and operators and essential resources for discouraging, preventing, detecting, protecting and responding to terrorist attacks with improvised explosive devices.

EOD units are made of experts with extensive technical and tactical training in explosives. They are trained, equipped and properly integrated to attack, defeat and exploit explosive ammunition. Explosive ammunition is defined in the common doctrine as all ammunition containing explosives, materials of nuclear fission and fusion, and biological and chemical agents. These include bombs and warheads; ballistic guides and missiles; artillery ammunition, mortars, rocket and ammunition for small arms; all mines, cartridges and propelled-driven devices; electro-explosive devices; clandestine and improvised explosive devices; and all similar or related elements with the explosive components in nature. This category also includes home-made explosives, improvised explosives and explosives from the national economy. EOD units are made up of soldiers with the best tactical and technical training that the military and the civilian environment can offer.

EOD structures perform civil support operations, protecting the civilian population, infrastructure and property from the threat of unexploded military munitions and improvised explosive devices. EOD forces respond, render to safety, exploit and remove all categories of explosive devices either in an ongoing operation area (AO) or in a military base or in support of civilian authorities. These operations include conducting EOD procedures in response to requests for assistance from territorial authorities under the immediate intervention authority and in accordance with senior echelon

recommendations. These EOD specific procedures include: identification of ammunition / device, safe procedures (RSP), recovery and disposal of explosive ammunition or explosive device. By its status, the EOD structure is the first entity to respond to a terrorist attack involving explosive material⁴.

At national level there are several centers responsible for terrorist attack intervention, each center being responsible for a particular region. In the event of a terrorist attack with an explosive device, the center responsible for the intervention in the event of such an attack is subordinated to the Anti-Terrorism Control Group (GCA).

The command elements of the EOD forces, in the case of joint operations, are transferred to the commander of the joint forces. National and multinational EOD units in support of land-based war operations are ordinarily under the operational control of one army EOD headquarters due to a common understanding of terminology, training and equipment.

Armed operations executed outside the national territory will take place as part of a joint force that may be part of a larger multinational force. Mixed EOD services can be used to increase effort in areas where there is greater necessity or a different situation from the possibilities offered by a single group. The units in the area may be designated to provide additional administrative and logistic support for joint formations providing EOD services, due to the limited capacity to perform these functions by EOD structures. The common integration of all EOD structures will ensure unity of effort, planning, preparation, execution and evaluation of joint EOD operations.

The primary role of the EOD is to protect life and property or priority assets. EOD gives commanders the opportunity to react quickly to explosive ammunition threats when they occur. The responsibility of the EOD mission applies both at destination and installed operational environments. In a deployed AO, EOD provides support for missions and operations in which the commander requests immediate support against threats with improvised explosive devices.

The EOD provides search and training procedures, on-site assistance, explosion safety assessments, and the development and implementation of EOD emergency responses,

anti-terrorism activities and force protection plans. The ability of EOD to neutralize explosive devices safely is essential for the commander's ability to protect key facilities and infrastructures. Conducting safe neutralization decreases the likelihood of dangerous detonation and the spread of contamination with different chemicals.

EOD offers the ability to plan, direct, and support incident clearance operations by identifying and removing unexploded ordnance (UXO) to facilitate the introduction of data about it in military databases.

EOD supports the army's anti-IED strategy by assisting in creating C-IED staff training exercises. EOD forces can also provide training in the recognition and reporting of explosive munitions, search procedures for explosive devices and their evacuation. This training increases the effectiveness of the program for the protection of friendly forces and civilian population.

With the commander's approval, EOD forces train the foreign army in the identification and safe clearance of munitions. EOD provides advice to foreign citizens in support of humanitarian demining operations.

Upon completion of an EOD intervention, the EOD Team Commander may create a chart detailing specific incident information. These "storyboards" include photographs, cardinal instructions, emplacement methods, explosive ammunition type and size, device functioning and composition, and other relevant information. This information can also be used by courts, both foreign and domestic, to help prosecute those responsible for the attacks with explosive devices.

EOD maximizes combat effectiveness and facilitates understanding of the situation in a timely manner by collecting, processing, exploiting and analyzing the components associated with the tactical and technical intelligence of explosive ammunition. Technical intelligence derives from the exploitation of foreign material produced for strategic, operational and tactical commanders. The collection process begins at the site of the incident by conducting safe procedures (RSP), site exploitation, or post-blast analysis. EOD determines the movement, burning and functioning of explosive ammunition, collects the loaded cryptographic and biometric materials and analyzes the occupation and location techniques. The EOD will then develop

and integrate the intelligence reports, contribute to the development or modification of the RSP, and prepare information for the fighting forces in order to evacuate to organizations that have extra exploitation capabilities. The information collected on explosive ammunition supports the counter-indicated efforts by targeting, fighting the enemy TTP, assisting in the development and refinement of electronic warfare countermeasures or exploiting the electromagnetic spectrum associated with the explosive device.

Faced with adaptive challenges in an era of persistent conflict, it is imperative that the army produce leaders and forces with a high degree of operational adaptability. Achieving the required level of operational adaptability requires the army to rely on two major responsibilities in broad spectrum operations; weapon maneuver and security of the area of responsibility.

Armed forces perform combined maneuvers to obtain physical, temporal and psychological advantages over an enemy. Armed forces establish and maintain security on a large scale to strengthen the gains and ensure freedom of movement and action. Armed forces use weapon maneuver and wide area security to harness, preserve and exploit the initiative. Armed forces capable of efficient maneuver, both at the operational and tactical levels, give commanders of friendly forces the ability to discourage conflicts, prevail in the war, and succeed in a wide range of unforeseen situations.

EOD supports freedom of movement and maneuver by ensuring safety and eliminating threats posed by explosive ammunition that limits or prevents the commander's ability to move his forces.

The commander of the maneuver forces can command a tactical mobility operation such as field clearing to remove explosive ammunition and to facilitate mobility on a critical route or area. In order to be able to clear the ground, the commander of the forces must eliminate both the enemy forces and the organized resistance in an assigned area. The force does this by destroying, seizing or forcing the withdrawal of enemy forces so that they are not able to interfere with the unitary missions of their own forces. EOD forces can be used to support maneuvering forces or to clean the terrain of explosive elements. The commander of the EOD forces provides recommendations to the maneuver

commander on the organization, procedures and support requirements for cleaning operations.

Commanders of EOD structures in mobility operations are tasked with neutralizing improvised explosive devices. Successful use of IEDs by the enemy is the end product of a network of enemy activities called the IED network. EOD's ability to secure explosive munitions, including IEDs, leads to the collection of legal and technical information that makes it easier to attack those individuals or groups involved in the IED network.

Planning a successful countering improvised explosive devices (C-IED) operation is a complex task involving all the forces of the conflict force and is based on a framework designed to ensure the free movement of its own forces and allow commanders and staff to plan and take proactive measures to identify and defeat IED attacks before being successfully employed in other operations. At each level of war there are key C-IED activities that influence operational planning. These activities must be viewed individually as well as in the context of their relationship with the other activities that allow a C-IED effort. C-IED operations should adopt a holistic approach that includes solutions for obtaining information, training, operations, materials, technologies, policies and resources to address all the fundamental elements of ensuring freedom of movement, including prediction, detection, prevention, neutralization and elimination. To a greater extent, this approach should be considered in terms of a common interdiction, which includes ensuring mobility as well as many other factors of war. C-IED operations are carried out in all phases of a military operation (modeling, deterrence, initiative, stability and support to civil authorities) and must be carried out on several lines of effort, each to begin conditionally and then all to continue in parallel during a campaign.

The three C-IED effort lines are⁵ the following:

Network Attack: The common force that has attributions regarding network attack prevents the emplacement of IEDs by attacking multiple enemy vulnerabilities. Key vulnerabilities in the opponents IED engagement system include: ability to influence local population support, use of techniques, tactics and procedures (TTPs) used to plant previous IEDs; the ability to maintain a supply and distribution chain of IED components; the ability to establish

and modify the IED construction-emplacement process.

Device Disposal: The goal of eliminating an IED is to prevent or mitigate its physical effects, cumulative with marginalization or prevent the enemy from exploiting the value of its effects, including propaganda and fear. IED disposal actions begin once the device has been activated and include safe detection, disarmament, and in-depth analysis of its components.

Training Friendly Forces: The commander must ensure that forces are properly trained before carrying out an important operation. Fields of particular interest include the development of relevant and current TTPs related to IED, exercises and Standard Operating Procedures (SOPs). Training should be designed to improve individual and collective protection and the ability of the unit to function efficiently in a high-risk of IED use environment. Training should also include those activities that facilitate the establishment and increase of the coalition and partner nation's IED defeat capabilities, including the transfer of C-IED technology to all participating forces.

EOD groups execute command and control (C2) on C-IED activities and operations in support of forces within AOs. EOD forces can execute C-IED missions on all phases of operations, based on mission volume and control range. It should be noted that missions in the final stages will mainly focus on building the capacity of the host nation and training the force. At this point, the attack on the network and device disposal will be of secondary concern, beyond the protection of force.

Armed forces can be simultaneously in multiple environments. The challenge for the EOD commander is to ensure that their capabilities are in the right place at the right time to support the commander in the AO. It is also important that the commander should understand how to use the specialized capabilities offered by the EOD when trying to maximize protection while reducing the high risk of collateral damage.

EOD structures play an essential role in all phases of military operations. While in a conflicting environment, the EOD structures support the commander of friendly forces, by the following abilities: the ability to identify, to be safe, to collect and exploit unexploded ordnance or explosive device; a tactical analysis of enemy

IED TTPs; the ability to carry out the training and guidance of the joint forces, those of the host nation and multinational forces; the ability to perform command and control (C2) for all phases of C-IED operations and EOD forces in the operations area.

Internally, EOD structures provide immediate response to civilian assistance requests, execute force protection, and provide support for C-IED training.

The ability of EOD forces to perform offensive, defensive and stability operations while providing civilian support is essential for broad spectrum operations. Neutralization of explosive ammunition by EOD structures provides significant support to commanders in all the types of operations they execute. Ammunition neutralization / evacuation structures are ready to respond to incidents of explosive ammunition immediately, according to commanders' priorities. EOD structures coordinate directly with combat units to integrate EOD capabilities into all the types of operations they perform.

In conclusion, we can state that besides classical threats, terrorism is a direct threat to the security of citizens of Alliance countries, and modern technology leads to increased terrorists' potential to cause destruction. As a result, the actions of potential Alliance adversaries will have an asymmetric character and will target the exploitation of allies' weaknesses, using a wide range of complex and diverse methods and techniques. From this point of view, we can confidently assert the fact that EOD specialized teams save lives regardless of the type of operation they perform - offensive, defense, stability or support.

The magnitude of the field I have approached and the increasing impact that terrorist attacks have on civilians in big cities as well as allied forces in theaters of operation have led governments and armed forces to develop this branch of tactics, techniques and procedures to counteract this phenomenon. However, we must remember that the development of EOD structure is closely linked to the ability of terrorists to continuously develop their actions, as demonstrated in the theaters of operations in Afghanistan and Iraq. As a conclusion, we can state that EOD structures need to be developed continuously to create a secure environment for both the population of the Alliance's member states and its armed forces.



NOTES:

1 *ATTP 4-32 Explosive Ordnance Disposal Operations*, Department of the Army, December 2011, accessed at 7 March 2019.

2 *Land Forces Magazine*, nr. 2, Bucharest, 2000.

3 Ioan-Dan Popa (2003), *Acțiunea echipelor EOD (Explosive ordnance disposal) pentru neutralizarea mecanismelor explozive*, The Land Forces Academy Yearbook, nr. 2, Sibiu, p. 2.

4 *Ibidem*, p. 4.

5 Michael Smith (2001), *Calls to honour inventor of bomb disposal device*, <http://www.telegraph.co.uk>., accessed at 7 March 2019.

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CIVIL-MILITARY COOPERATION IN NOWADAY'S SECURITY ENVIRONMENT

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In the context of the current security environment, civil-military cooperation is an ongoing concern regarding the conduct of multinational operations in optimal conditions. Currently, actions at international level, which included the military operations, regardless of space, duration and violence clashes, showed a major outstanding need to coordinate the military operations with the actions of local/central and the international institutions and NGOs.

Therefore, the work of civil-military cooperation is adequate capacity to coordinate actions previously recorded. Through the activities of civil-military, the commander builds relations in area of operations where military operations are conducted. These are supported by the contact established between NATO and civilian actors. Besides institutional contacts taking place between multinational Headquarters and various civilian actors, however, between these entities there are informal links that provide knowledge systems of work, planning and joint training activities.

Keywords: civil-military co-operation; multination operations; international organizations; NATO.

At present, NATO's security challenges are difficult to predict because they come from a wide variety of threats, both military and non-military. Such challenges may include ethnic, political and religious rivalries, territorial disputes, and conflict over resources, inadequate or failed efforts at reform, the violation of human rights and the weakening of states. This may lead to local and regional instability.

Based on the reasoning that President Kennedy highlighted during the Vietnam War (1959-1975), it should be acknowledged that the strategic military challenge of conducting military operations in the civil areas¹ is achieved not only through military means. Thus, in his speech to the graduating students of the United States Naval Academy in 1961, the President said „You should serve not only as commanders, but also as advisers to foreign governments ... You must understand not only this country, but other countries, too. You must know something about strategy and tactics and logistics, but also economics and politics and diplomacy and history. You must know everything you can know about military power, and you must also understand the limits of military power”². All that President Kennedy said about cooperation between military and civilian actors during military operations was

confirmed subsequently by becoming increasingly noticeable and appreciated by most countries that participated in the multinational operations in Kosovo, Iraq and Afghanistan.

Civil-military cooperation in multinational operations

As time passed, all the actions of civil-military cooperation acquired and obtained new values, reaching part of military operations (becoming a new branch within them) and especially peace support activities, encompassing support given by States or local authorities multinational forces in the area or theater.

In the political and military fields nowadays, conducting military operations taking place in different environments, where there are (economic, social and physical) influences, can trigger the disorder that manifests itself in society and regions where there was no history of such conflicts. In carrying out civil-military cooperation activities involving political institutions is not an advantage. CIMIC functional specialists and multinational forces are employed to provide the necessary support for the reconstruction of civil infrastructure and restarting the economy.

Experience has confirmed that the deployment of missions can swing dramatically. A common feature still exists in the category of engaged actors, both in the area of operations and beyond. In the course of operations, multinational military forces must take into account, in addition to

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indigenous population and other parties to conflict, the presence of other actors in the area, like the media, diplomats, international non-governmental and governmental organizations. These actors with specific missions should act in more and more coordinated and complementary harmonized style, ideally, regulated by a special representative of UN Secretary General / SRSg a regional relevant organization (e.g. OSCE, EU, African Union) or other multinational organizations.

Another feature of the civil-military activities certifies the cooperation with a large group of non-governmental and international organizations present in the theater of operations. Sometimes, in situations of humanitarian assistance and some operational advantage of multinational forces over non-governmental organizations, cooperation is achieved with difficulty. In other words, the efficiency of non-governmental organizations results from the assumption that they come in conflict zones before the outbreak of hostilities and withdraw after military operations are stopped.

In theory, all civilian actors follow a set of principles that govern their activity and behavior, based on a theoretical basis (e.g. NGOs religious agencies, humanitarian aid agencies) and a particular field of expertise, like humanitarian aid, reconstruction and development, economic support, education issues and many other problems. Understanding the motivation of the civilian actors provides multinational military forces with the possibility to minimize frictions when interacting

assistance or disaster intervention. These include a wide range of actions, from immediate assistance in saving lives, to drafting long-term economic development and stabilization of infrastructure plans, aspects in education, or social development in general. All this has an impact on the overall situation and therefore must be part of the plan of interaction with the military forces.

Depending on the context, in support of military forces, commanders may request and use also the support of the local people in the area of operations. In some cases, for achieving their objectives, military forces may be dependent on civilian resources and information. Commanders will seek to secure as much as possible civilian support for conducting operations. So far, land forces participated in international missions in theaters only with operational structures (up to battalion level) and officers and NCOs deployed in multinational headquarters at various levels of command. The diversity of organizations involved in the conduct of operations caused interference of different cultures, both domestic and those from *abroad*. In planning military operations staffs have more responsibility to assess the civil environmental implications and calibrate those measures which lead to the objective pursued.

In peacetime, crisis and wartime, structures of Romanian civil-military cooperation will act on national territory and, in case of crisis response operations (NA5CRO³) and collective defense, outside the Romanian territory, as listed in figure 1⁴.

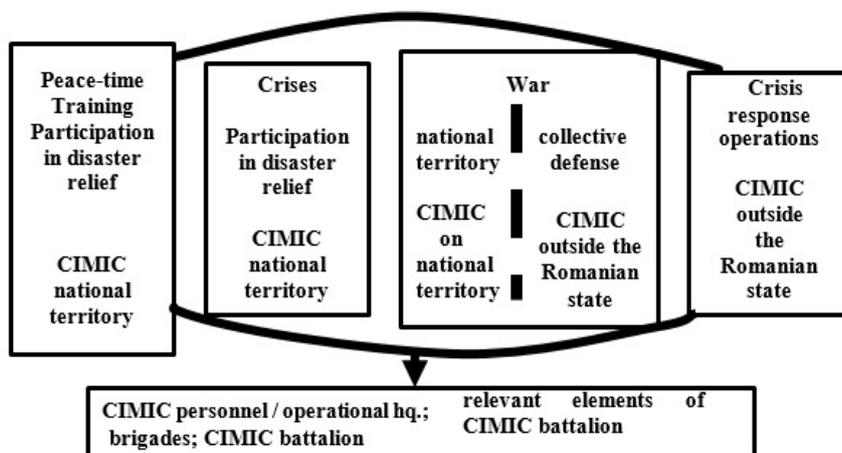


Fig. 1 The action of civil-military structures in peacetime, in crises and war situations⁵

with them. The obligations assumed by civilian actors are not only in the area of humanitarian

Multinational military actions carried out in the civilian environment will be conducted during

all phases of operations. Military forces carrying out civil-military cooperation identify the actions needed to maintain civilian support. It is unlikely that multinational military force could gain complete freedom of action and movement without the existence of positive interaction with civilian actors. Establishing good relations with them can prevent the opposing force from gaining tactical advantages. Therefore, the commander must use connections established with civilian actors in civil-military cooperation mechanism. Romanian Armed Forces, CIMIC is the responsibility of all commanders and subordinates⁶.

The personnel carrying out civil-military cooperation is constantly involved in operational planning. The key work instruments of civil-military cooperation are estimates and assessments made individually or collectively at the level of complexity required - strategic, operational, tactical - at which the planning process is conducted within specific documents or integrated as relevant information in operation planning documents, together with other military specialties. The assessments conducted by the CIMIC structures are designed to provide commanders with information for the analysis of the general situation in their area of responsibility, which supports the Commander in identifying gaps and capabilities of the civilian environment that may affect deployment. Civil situation assessment will be performed prior to the deployment of forces and the conduct of any military operation.

The personnel carrying out civil-military cooperation activities is organized according to the mission and focuses specifically on the transition phase of military operation. Successful civil-military cooperation missions result in building specific skills such as negotiation, mediation, interviewing techniques, theory and practice of communication necessary for liaison officers to build better relations with civilian actors.

All military forces in joint operations area must know the specific civil-military cooperation missions. The type and validity of training for this purpose are set depending on the mission. The training and education of pre-deployment units must include a theoretical CIMIC module and integrated training by planning and execution of specific training exercises or training mission. Structures of civil-military cooperation accomplish missions in peacetime, during crises (in the country

and across state borders) in situations of war and post-conflict.

At peacetime, the activities of civil-military cooperation assure the achievement and development of cooperation framework between military forces and civil institutions, central or local, international organizations, intergovernmental organizations, nongovernmental organizations / NGOs, private companies' volunteers. Also, in different situations, the structures of civil-military cooperation can conduct studies and make recommendations regarding military intervention in support of the population and local authorities in the area of operations, updating and submitting their periodically to the military commanders of the structure.

In crisis situations, structures CIMIC support central or local authorities, to reduce the ailment of population by making civil-military cooperation approach to fixing and guidance meetings with local government authorities present in the area.

Wartime tasks⁷ of civil-military cooperation structures is achieved through:

a) ensuring the necessary measures within the National Military Command Center and the operational headquarters, to achieve and maintain cooperation relations between combat forces and civil authorities or other civil organizations involved in achieving stability and normalizing the situation in the area of operations;

b) providing assistance in negotiations between the warring sides;

c) supporting civil authorities in providing humanitarian assistance: transport, food, accommodation, medical care, etc.;

d) participating in drafting orders, dispositions and requests for cooperation between military forces and civil authorities;

e) identifying the protection needs for cultural objectives and property of the civilian population;

f) finding and marking the areas that can provide shelter, food and housing possibilities;

g) participating in actions concerning population and resource control;

h) supporting counter-terrorism.

The missions of CIMIC structures⁸ in post-conflict period are the following:

a) supporting civil authorities by providing assistance in areas where they are not able to exercise their responsibilities;

b) participating in infrastructure reconstruction the CIMIC projects;

c) participating in mediation and negotiation activities;

d) supporting actions on repatriation, return and integration of the population in areas of residence;

e) coordinating plans in order to transfer responsibilities and functions to the civil authorities.

The increasing role and importance of civil-military cooperation in multinational operations

The changes in the last decades of the last century and the beginning of the present century, had as main factor the security environment which has been continuously changing, gaining some very important features, among which: hardships, uncertainty, unpredictability and above all the amplification of new hazards and threats, the first of them being terrorism. Therefore, these changes have resulted in closing down the Warsaw Treaty, the dissolution of the Soviet empire, the Cold War end and the transition from a world of bipolarity to one pole, all of which are well known and analyzed, remaining only very few issues of novelty that could be raised and analyzed in depth.

In this reprehensible security environment, consequence of terrorist acts and hybrid threats that some totalitarian regimes foreshadow for the peace and democracy of the world, essential international institutions (UN, OSCE, EU) protested through the intervention of North Atlantic Block or coalitions causing war on terror and many interventions in regions where democratic values were severely affected. Through many plans it has been shown that the asymmetry of military operations is extraordinarily dominant, approach that does not involve change any more than at other times in history, and acquired new forms and actions with direct results on the way the response of the international community, included or in particular by carrying out multinational operations.

Multinational military operations carried out in recent decades show enough examples, but I did not insist on them in this paper, wishing it to show the new physiognomy of general stability military operations in all military actions. As the participation in stability operations has increased, it has given rise to a concept with great weight in

the preparation, execution and completion of these operations, that is, civilian-military cooperation.

At the same time, civil-military cooperation means an interface between the multinational Joint Force (when established) and the institutions and civilians acting within the area of operations and is found in civilian operations, military affairs and civil affairs acting under some aegis and command. The concept of civil-military cooperation involves doctrine, structure, forces (units, subunits, mobile teams and CIMIC specialists and functional specialists) and must achieve interoperability with similar concepts of the Alliance and its members.

The concept of actions of civil-military cooperation on the Romanian territory or abroad shall be conducted in accordance with the mission performed which consists in creating and sustaining the conditions that contribute to the accomplishment of the overall mission and the general CIMIC principles defined in CIMIC NATO doctrine. This involves activities in support of military action by establishing and maintaining contacts with civilian actors at the appropriate level during the preparation and conduct of operations and interventions about helping people and local and central public institutions, carried out to ensure law and order after the settlement of conflicts, with the mission of normalization of the situation in these areas.

In line with the National Strategy of National Defense, the White Paper on Defense, the Military Strategy of Romania, the Doctrine of the Romanian Army and international obligations, the key measures of structures carrying out civil-military cooperation are: establishing and maintaining relationships between military and civil authorities; creating and deploying CIMIC forces in support of Romanian national interests; performing CIMIC tasks abroad in support of crisis response operations (non Article 5) which are conducted under the mandate of international organizations such as OSCE, EU and UN, and under NATO in collective defense (Article 5); accomplishing civil-military cooperation tasks in the national territory in peacetime, crisis and war.

The activities of civil-military cooperation represent a distinct point in the Command Operation Plan and are executed to support the performance of its tasks being necessary that forces carrying out civil-military cooperation be

embedded completely in the headquarters and have a concept regarding the area of operations. In order not to compromise the mission, the work of governmental, nongovernmental, and private international volunteer organizations has to be supported, within available resources.

Therefore, the role of civil-military cooperation activities is to achieve effective relationships with a variety of civil organizations, but also with key local authorities and population in settlement of conflicts. For actions of civil-military cooperation there is a need for structures assessed, managed and organized so that the accomplishment of the mission is appropriate. In other words, human resource is the most important feature of the civil-military cooperation, so in the absence of trained staff, prepared and endowed with developed language skills, possessing a stock of data and information in this field, it is impossible to obtain the expected benefits.

Structures carrying out the civil-military cooperation will be employed by the multinational forces that support them in carrying out assessments in relation to the civilian population in the area of operations and assessments that consider the development of civil environment or determine and ensure contact with government organizations, non-governmental and civil institutions in the area. Moreover, elements of civil-military cooperation can run and undertake some CIMIC projects with stringent use in helping civil environment in accordance with the operating structure that it augments. In this sense, a very important thing to remember is that the forces carrying out civil-military cooperation take into consideration the principles of humanitarian assistance but they do not act as a non-governmental organization.

Due to the onset and development of the war on terror, the physiognomy and manner of expression during multinational operations have been through a fundamental change, open consequence to the change on how to conduct actions, having an opponent everywhere and nowhere, extraordinarily difficult to recognize and count, an opponent that turns to atypical methods of fight and does not comply with international law, laws and principles of armed struggle. The normal behavior in such a situation is to act using appropriate tools in this context, along with concern for the civilian population, the environment protection within

constant parameters required, the perpetuation of life in that area and the preserving of human rights without which democracy and peace that must be promoted would not be possible. Street fight is conducted for each house, shelter, tunnel, channel, etc., in unequal conditions, in particular because terrorists know the ground very well in comparison with own forces and have a different position regarding the supreme value of human life for the Alliance, subject to contempt in their beliefs.

We can argue that the war against terrorism is the same as guerrilla warfare, but we tend not to associate the two terms as guerrilla warfare has accumulated a vast experience in some areas of the world. For example, in his campaign for conquering Asia, Alexander encountered a kind of battle that he was not familiar with, namely guerrilla fights conducted by tribes attacking with greater frequency and with great efficacy the famous Greek troops. And this happened more than 2300 years ago in the present territory of Afghanistan. Over time, this war was classicized having laws and principles that fall under the general and particular aspects of armed conflict, while the terrorist war is devoid of any legitimacy, being deeply immoral, criminal and uncontrollable.

Civil-military cooperation is a strategic action that regardless of doctrinal approach, lays the foundation of activities increasing the level of responsibility of interactions between different actors or peripheral to the peace process and managing the transition from conflict to peace.

Civil-military cooperation activities are often misinterpreted as being as "public affairs". In fact, civil-military cooperation maintains a dialogue and interface between components of civilian, police, and armed forces present in the area of operations on the one hand and the political dimensions of security, humanitarian, development or other nature on the other hand, aimed at achieving wider and more strategic policies about peacekeeping and peacebuilding, and humanitarian assistance or de-escalation or conflict management.

Civil-military cooperation is a strategic management exercise at every level, whose operator must be able to *think globally and act locally* (or think strategically while acting tactically) and to seize the advantage of each component or partner to maximize the interested parties and minimize the spoilers of the peace process in the appropriate manner and time.

An element of civil-military cooperation will not use their own financial resources or funds, instead seeking to find ways present in the area in which they operate. The element of civil-military cooperation before meeting with civilian actors (civilian and local institutions, as well as envoys of the local population) is prepared based on data and information for this type of call, supporting the finding of ideas leading to the best solutions. The main purpose of these discussions is the help military forces provide for civilians in order to make the best decisions necessary to resolve the present problems in the area. Quite frequently, the resources present in the area of operations are not enough to solve the existing problems, thus having to resort to the support of other institutions and international organizations and non-governmental organizations. At this stage we are discussing about the coherent cooperation that forces carrying out civil-military cooperation have to provide to civilian organizations that, more often than not, possess impressive material resources and, remarkably, are also willing to use them too. Therefore, the mission of civilian-military cooperation elements is to facilitate the information framework regarding the actual state of the civilian population by civilian organizations and to prioritize together with them the needs to solve complicated situations.

Interoperability and compatibility issues are more special in coalitions where interoperability must be achieved in the very theater of military operations, given that there are armies of countries that are not part of NATO there, too. The way in which coalitions functioned in the last decade revealed the possibility of fulfilling the conditions for acting synergistically and the results were usually the expected ones, but they also brought to attention many issues to be resolved during the preparation for the mission.

The organization of warehouses in the area of responsibility with material resources for humanitarian assistance is a good example in this regard, in order to facilitate the alleviation of local population suffering in that context at the time. Indeed, material resources in the area will not be found in reality or will not be enough, but through joint and active efforts of civil-military cooperation elements with the citizen authorities, necessary decisions may be determined to restrict or remove the populations in the area. If necessary,

if the situation requires it, both materials and funds of military forces present in the area will be used. In other words, in multinational operations, the military can provide support to local authorities by providing concrete assistance, such as medicine, food, clothing, water, means of ensuring sanitation, etc.

When civil organizations have resources there are situations when they are unable to move them in maximum security. In this respect, they may use military vehicles or military security can be provided throughout the convoy itinerary. Civil organizations in the region have the resources but are not prepared to carry out projects, plans or measures necessary to ensure existing needs. Thus, the forces carrying out civil-military cooperation will support and guide these institutions to resolve arising situations. If there are insufficient or zero resources, the forces engaged in civil-military cooperation activities will look at some non-governmental sources for project financing.

The fundamental changes in the status of Romania such as becoming a member of NATO (2004) and the EU (2007) had among other consequences of exceptional importance that of changing the perceptions of allies on the capability of Romanian Army to fulfill any mission in any conditions and according to the new physiognomy of actions involving various NATO or coalition forces. Notable are our participations in the *hot* areas of the planet, primarily Iraq and Afghanistan, where Romanian contributions are rightly considered essential for helping, through its army, bringing peace and democracy in the world.

Requirements of security today depend largely on the involvement of a wide range of both civilian and military systems and concise cooperation and coordination between the variety of civilian and military players in theater of operations. Therefore, multinational forces need a comprehensive approach, civilian actors and military personnel must work together to plan and act together in order to build consensus on how to support the common objectives related to security and stability in the conflict.

The physiognomy of multinational operations will change, of course, from one action to another, as it will happen with the activities of civil-military cooperation. This axiom leads us to the decision that, within the current grant or in future scientific

endeavors, to bring into focus those changes that have relevance for our research as well as potential readers.

Conclusions

Currently, military multinational operations are conducted in a coherent framework, which makes this civil-military cooperation be based on requests and needs of change. In this direction, the work of civil-military cooperation in different situations may be restricted in certain areas.

Following the acceptance and understanding at global level of this issue, civil-military cooperation is an integral part of each multinational military force. However, while international organizations and national governments have accepted the fundamental role of civil-military cooperation by developing additional courses of education and training for CIMIC staff, there is still much to do to achieve maximum efficiency for CIMIC structures and to improve coordination and cooperation in the field - conditions necessary for the achievement of mission objectives. Thus, integrated training for military and civilian actors is another dominant element that could significantly increase the efficiency of civil-military cooperation.

Essentially, the development and implementation of NATO member states' contributions to joint civil-military doctrine will be a long-term effort. The Alliance intends to review its ability to work and coordinate closely with all partners and internationally integrated actors in the operating civilian and military system, so as to achieve a lasting settlement based on trust and respect among military commanders at the strategic, operational and tactical level.

As a last point, the civil-military relationship depends on the personal skills of the military, the careful selection of personnel and their thorough training may lead to the development of efficiency and ability to successfully perform activities of

civil-military cooperation, even if it does not express the solution to all your concerns.

NOTES:

1 The civil environment involves a myriad of ethnic, religious, ideological and technological issues, which require sustainable solutions in societies disrupted by conflicts, disasters or humanitarian catastrophes. *AJP-3.19, Allied Joint Doctrine for Civil-Military Cooperation*, Nov. 2018, p. 1-2.

2 Remarks at Annapolis to the Graduating Class of the United States Naval Academy- June 7, 1961, <http://www.presidency.ucsb.edu/ws/index.php?pid=8181>, accessed at 13 January 2019.

3 Non-Article 5 Crisis Response Operations.

4 *** *Doctrina pentru cooperarea civili-militari (CIMIC)*, Bucharest, 2013, p. 27.

5 *Ibidem*, p. 27.

6 Ordonanța de Urgență a Guvernului nr. 21 din 16 martie 2017 pentru completarea art. 2 alin.(1) din Legea nr. 121/2011 privind participarea forțelor armate la misiuni și operații în afara teritoriului statului român, p. 34.

7 *** *Manualul pentru cooperarea civili-militari (CIMIC)*, Bucharest, 2015, p. 14.

8 *Ibidem*.

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APPROACHES TO RISK MANAGEMENT RELATED TO MILITARY LOGISTIC SUPPORT ACTIONS

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In any society, human actions in peacetime involve related risks according to the specificity of each field of activity and external impact factors.

However, from a comparable point of view, military and logistic support actions, depending on the missions to be accomplished and the decisions taken in well-established place and time conditions, involve high complexity risks.

The risks specific to the military logistic support occur both during the preparation of the operations and especially during their carrying. The causes highlight the power and unpredictability of the opponent's actions on logistic resources, with major implications for the proper support of their own driving forces.

Below we will highlight determinations and explanations regarding the phases of the risk management of specific military logistic support.

Keywords: military actions; operational decision-making processes; logistic support; logistic support risk management; phases of logistic support risk management; the decision to prevent the risk of logistical support.

Logistics support management is a complex and continuous process focused on identifying, evaluating and controlling all the risks generated by the specific actions of logistic support for the preparation and conduct of military operations.

In the specific actions to pre-empt the risks associated with operational logistic support, a specific risk management mechanism is developed, starting from an initial analysis of the context that requires risk management and continuing with risk identification and assessment, designing risk management plans, and finally the implementation of those plans.

In the operational decision making process it is necessary to identify and analyze all risks, not as an additional feature but rather as a completely integrated element of the planning and execution mechanism. Within this framework, the concept of risk management provides protection and preservation of the combat power, as well as maintaining flexibility for bold and decisive military actions. It follows that proper risk management in preparing and conducting operations determines the possibilities of multiplying the potential of offensive or defensive military actions.¹

The action risks reveal deviations, usually important, from the results to be achieved, which, if not foreseen to be counteracted, may lead to unexpected failures in military operations. Once produced, these inconsistencies may inevitably involve various forms of costs, caused by decision-making complications and the loss of important resources (human, material, financial, informational). Therefore, the above mentioned deviations lead to the failure to achieve the expected operational objectives in unforeseen situations, before or during the military confrontation with the identified and/or declared opponent².

Risks are known to be variables that cause undesirable effects in conducting operations, which are part of a set, and are taken into account only when large-scale operational decision-making processes are taking place. Under these circumstances, risk management processes should result, through simulations, in systematic examinations of the potential results obtained by complex military decisions by tactical and operative echelon planning boards³.

In the operational environment, military boards are determined to make complex decisions under the extreme pressure of time and fatigue. As such, they should take into account the risks associated with the potential action options, given the continuous research of the opponent and the continuous timely

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information with all the details beneficial to the subordinate decision-maker⁴.

Dependent on the above mentioned operational precautions, specific logistics risk management actions are required and they have to ensure that optimal logistics support decisions are taken under the overall decisions of operations on the basis of logistic analyses and estimates designed to reflect the actual state of the decision environment in order to avoid and to prevent potential threats, hazards and associated vulnerabilities.

In the United States, guidelines for reducing short-, medium- and long-term risks are visible both in action and in force-generating operations. According to US military experts, it will require a holistic approach and a careful balance of investment in military capabilities. Within this framework, the geopolitical environment and the evolution of threats that will lead to significant efforts, adequate to the status of the forces, the stationary requirements and their preparation, taking into account the capacities of the involved partners, have an important role to play⁵.

On the basis of studies, analyses and evaluations, experts have identified the risk as the function determined by three variables, according to the relationship⁶:

$$R = f(T, V, C)$$

where:

R = risk;

T = threat;

V = vulnerability;

C = consequence.

The active manifestations of the opponent during the emergence and definition of the crisis in interstate relations show *various threats* with the superiority of the military power, for intimidating the military forces prepared for confrontation and, implicitly, their logistic support structures. The measures taken by the boards in charge to fill the deficits and eventually the losses in such situations are established by decisions highlighted in appropriate peacetime plans that will be put in place during the course of the threats.

"We believe that in order to solve the particular decision-making problems necessary for the logistic support under conditions of risk, a risk management process should be carried out, which includes five phases of management, namely: identification of the hazards that can affect the logistic system of

force; hazard assessment; development of control methods, determination of residual risk and of the related decision; the implementation of control techniques; routing and evaluation. We will then briefly discuss these phases"⁷.

Identifying the hazards that can arise over the logistics system of force

Hazards can be defined as features of the opponent's actions to bring major damage to logistics support structures, as well as its territorial facilities, by systematically hitting with high-precision means, or by the action of special forces infiltrated into the area of logistic responsibility. In order to ensure the prevention of risks, all information obtained for this purpose must be exploited and the potential hazards identified in the areas of logistic support applicability. At the same time, this concerns the experience of logistics managers in managing risk situations, but also the current decisional conduct according to the solutions adopted at the past risk manifestations in the design and implementation of the logistic support.

On the basis of expert analysis, the dangers associated with military operations are mainly determined by the problems caused by the fatigue of decision-makers and by the lack of synchronicity of communication between military organizations belonging to several nations. In this respect, the achievement of the military objectives requires the protection of the civilian population, as well as the environment specific to the operation area, according to the requirements highlighted by the well-established rules of employment⁸.

Hazard assessment

Experts in the field of logistics support consider that the determination of hazard from danger is more an art than a science.

For this purpose, logistics managers should use historic data, perform intuitive analyses to estimate the risk posed by each hazard. If the evaluation is done using probabilistic methods, the risk assessment model results from the intersection of the probability column with its degree of severity. The levels of probability and severity are estimated based on the knowledge of the logistics evaluator of the details of chance occurrence and the severity of the consequences once the events occur.

Both in and during military operations, special importance should be given to managing the supply-to-supply chain impact risks from suppliers to end-users (fighters and technicians) by the logistics planners to design procurement, contracting, reception, receipt and transport of products, equipment and materials from suppliers accepted through the logistic support implementation structures.

Managing risks with impact on supply chain partners involves a set of measures to mitigate the effects of uncertainty by coordinating activities (upstream and downstream) to direct input, conversion and output flows and ensure profitability and functional continuity⁹.

According to experts, the supply as a complex activity planned and carried out by a specialized partner in the supply-chain may be negatively influenced by associated risks, also called operational risks or interruption risks. These may include uncertainty about purchases, uncertain costs, disruptions caused by natural or man-made disasters, such as earthquakes, floods, financial crisis etc.¹⁰

For example, possible risk situations that could seriously affect the provision of logistic support to operational forces deployed in a theater of operations to be considered by military logistics planners would be:

- loss of goods and technical equipment caused by partial or total destruction due to the actions of the opponent;
- obligations owed by companies or individuals due to the impossibility of meeting contractual obligations due to the enemy's attacks on their properties;
- loss of military and civilian staff due to the conflict situation, with foreseeable consequences on the continuous realization of the logistic support.

In order to mitigate the risks with impact on the supply-delivery chain components, appropriate coordination and collaboration between an operational military structure and its suppliers is required. To this end, important ongoing collaborative actions with suppliers and timely exchange of information should be undertaken¹¹.

In the initial period of the conflict, military structures at the strategic and operational level may consider risk management strategies associated

with supply activities identified by the occurrence, impact and period factors, which may be *short, medium and long term*¹². These strategies can continue during the conflict, but with some simplifications imposed by operational situations.

For example, a *long-term strategy* to avoid or reduce risks related to acquisitions from businesses in the operating area is designed to ensure that rigorous supplier selection processes are carried out by operational military structures, followed by regular audits of facilities, processes and funds spent by these. Another strategy to mitigate the risks associated with supply is the availability of multiple sources. A third long-term strategy is to divide or transfer the risk through sanctions stipulated in the uncertain procurement contracts¹³.

A medium-term strategy could refer to specific actions to establish a safety stock, but many bidders avoid this because of the additional costs involved, the risk of physical and moral wear, or the occurrence of surplus product or materials¹⁴.

A short-term strategy identifies actions by the military beneficiaries to monitor the data and quantities delivered by suppliers in order to immediately identify possible non-conformities with the supporting documents¹⁵.

Considering the correlation with the strategies outlined in *Figure 1* we present the elements of risk measurement in the field of supply – the component of military logistic support. All the presented elements reveal a high degree of involvement of the military logisticians to prevent as much as possible the risk situations during the logistic support actions for the fulfillment of the mission received by an operational military structure.

- *The elaboration of control methods, determination of residual risk and of the related decision*

The aspects presented requires logistics managers to achieve the following goals:

– For each hazard, one or more control methods for eliminating or reducing risk will be developed in the design and the implementation of the logistic support;

– For each hazard and for each elaborated control method, the level of remaining risk, namely the residual risk, is determined permanently by acquiring the control procedures to be implemented;

– Only the commander is empowered to decide whether or not to accept the residual risk in achieving logistical support. If the commander considers the risk to be too high from a logistics point of view to continue the mission, he will order the development of additional control techniques or even alter, change or reject the mission¹⁷.

It is clear from the above that, in the logistic support decision making process, logistics planners will take into account the mentioned risk management steps and the *associated vulnerabilities*. In this context, we see that *vulnerability* is understood as a result of combining the existing risks to the logistic structures of execution of the force with

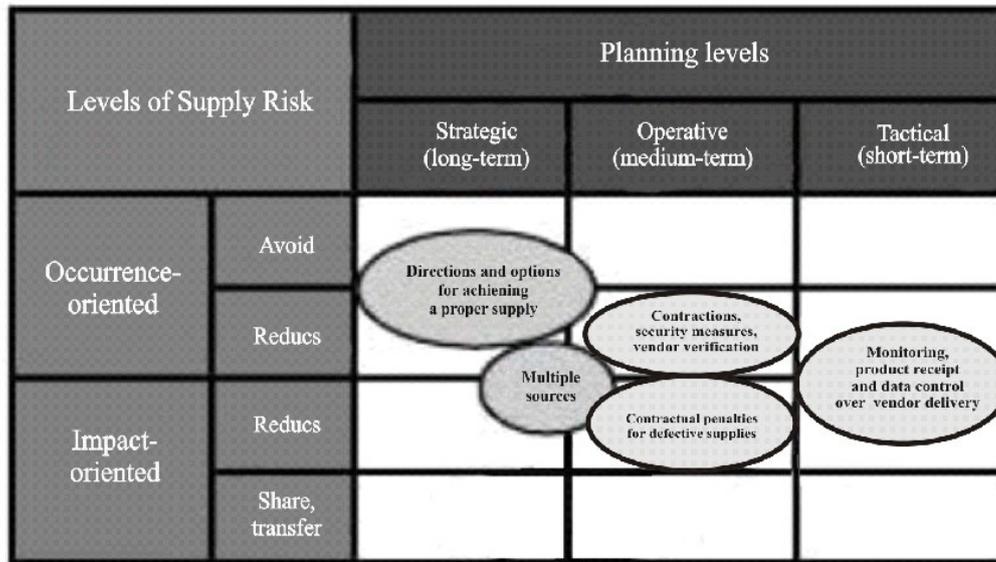


Fig. 1 Elements of supply measurement in the joint operations area risk¹⁶

• *The implementation of control techniques*

According to military experts statements the head of the logistics module of an operational structure must inform logistics planners about how each control technique will be implemented.

• *Managing and evaluating* requires, operationally, the logistics chief and planner’s involvement to ensure that the management and implementation structures of subordinate logistic support can adequately manage risk by:

- explaining how each of the control techniques will be monitored and applied in good conditions;
- evaluating the effectiveness of each control technique in reducing or eliminating risk.

We appreciate that each control technique in reducing or eliminating the risk of the operation mainly involves, on the one hand, the application of the appropriate measures to ensure and protect the actions of the big unit, the logistic support units and subunits and, on the other hand, the provision of logistic resources to achieve the success of the military action.

their ability to defend themselves and to provide adequate logistic support for the fulfillment of the operational objectives.

For the design and implementation of the risk management specific actions, logistics managers will be permanently involved, taking into account the guidance received from the higher echelon regarding the risk parameters established for the respective military structure. However, if during the planning process of the logistic support they find insufficient resources available for managing the risk according to the threats, vulnerabilities and obvious consequences, then additional demands will be made for the resources of the echelon, and if the situation imposes it, they will require changing the course of action of the respective operational military structure¹⁸.

Conclusions

The perceived risk on force logistics highlights, first of all, the lack of logistics information about the probable actions of the opponent. Specific risk prevention actions allow the prevention of

adverse events and, as such, create the possibility of taking precautionary measures. The destructive effect of the enemy's actions must be anticipated for counteraction by establishing, for the period of time affected by the deployment of forces, the preparation and deployment of military actions, stockpiles and consumption of specific materials, as well as the pre-positioning and contracting in the area of logistic responsibility of some transport capacities, maintenance, medical assistance and appropriate campaign services. At the same time, an optimal decision, as a result of a judicious planning of logistic support, eliminates as far as possible the risk factors, through a proper achievement of ensuring the actions and protection of the logistic support structures.

In the process of managing the risks, military logistics managers will have to apply the necessary actions to efficiently achieve the objectives of the operational organizations they are part of. From the practice of military actions, the risks associated with logistic activities (established for the individual or team) are directly dependent on the operational objectives of the respective combat structure.

Therefore, the necessity to know the application of risk management as essential for the logisticians in the organic structure of an operational military organization. It is obvious that by this mechanism the maintenance of the parameters of the military power of the respective structure is achieved, based on the timely provision of the necessary logistic resources.

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2 *Ibidem*.

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MOVEMENT AND TRANSPORTATION – BASIC COMPONENT OF THE LOGISTIC SUPPORT OF MILITARY UNITS DURING PEACETIME

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Movement and transportation are an important component of the logistical support of peacetime military units, which aims to move combat forces and transport the logistics support needed to conduct their training activities in good condition in order to fulfill the basic mission of each military unit. Movement and transport contribute to the constitution of reserves and stocks of goods for crisis, mobilization and war. Planning the movement and transportation of assets and material assets depends on a number of factors that underpin the timely and appropriate placement of logistical support necessary to meet the fundamental and specific objectives of each military unit during peacetime.

Keywords: movement and transportation; logistics; logistic support; planning.

The development of Romanian society as a whole, the new content of relationships between states, the growing progress in the field of science, the experience of military thinking and practice, the new physiognomy of war, the constantly modern features and requirements of the armed confrontation are the main factors that leave an increasingly obvious print on the trends and evolution of military actions and their logistic support.

Currently, the national interest in ensuring our own security interferes and subordinates to the objectives of the North Atlantic Alliance. In this respect, the structural and functional modernization of the state and economy structures in order to transpose the country's national security programs into practice requires applicable standards according to the Alliance and European Union strategies, taking into account the specificities and characteristics of the modern war.

The predominantly local and asymmetric nature of future conflicts in which both state and non-state actors will be involved poses great challenges to the ability of managing a military action. The capability

to respond rapidly and jointly, the national and multinational support and, last but not least, the multidimensional protection are supposed to be supported by an integrated modern system, if we take into consideration the physiognomy of future conflicts, the whole variety of choices regarding the information and psychological warfare, as well as the massive use of new generations of *intelligent weapons*.

In this respect, the process of transformation of the Romanian Armed Forces aims at achieving an efficient logistic system that involves the relief of tactical military units from administrative tasks. From this point of view, we consider that the fulfillment of the missions and tasks which are specific to the military units during peacetime is influenced and conditioned at the same time by the functionality of the organizational structures, including the logistic forces, which have a decisive role in ensuring timely and efficient logistic support, necessary for the training of combat forces during peacetime, as well as the smooth conduct of military actions in crisis situations, mobilization and war.

Improving the training of combat forces in peacetime by providing quality logistic support involves the transformation and modernization of current logistic systems to meet the logistic requirements set by the NATO. In this respect, an important component of a modern logistics system that is able to provide efficient logistic

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support to train combat forces during peacetime is movement and transport. This main component of the logistic support chain comprises all the capabilities, specialized structures, facilities and equipment designed to carry out the current activities organized in the "Main Activities Plan" of each military unit, as well as for the deployment, support and re-deployment of the forces involved in the preparation and conduct of military exercises.

Military legislation states that "the movement, as part of a military operation is the activity required to change the geographic position/location of the forces, equipment and materials of their endowment, and assumes the support capabilities necessary for mobility, transport, infrastructure, movement control, and appropriate interdependence relationships"¹. Closely related to the notion of movement, "transportation is the whole array of activities by means of which specific military and/or civilian means that are endowed and/or contracted from other sources are carried out by the movement of forces, personnel, equipment and materials in the desired geographic location"².

We believe that the movement and transportation of personnel and material assets, which are considered to be an important pillar of logistic support, play an important role in ensuring that the flows between the components of the logistic system function properly, with multiple tasks in economically optimizing the spatial and temporal complexity, in reducing the time required to achieve the initial binomial requirement – the ultimate satisfaction of living needs and training of combat forces in the military units during peacetime.

The movement and transport of personnel and goods in peacetime determines, from our point of view, the existence of two kinds of transport: interior, through which spatial travel is carried out from one military unit to another during the supply process; and commercial, which is in the sphere of circulation between the goods supplier and the military units.

In the current market conditions and in most of the supply activities, the transport of the goods from the supplier to the military units is carried out with the means of transport of the latter. In this respect, we consider that the use of the Franco-deposit-beneficiary clause in the procurement contracts

concluded between the military unit contracting authorities and the suppliers of the goods is an economic, useful and mandatory one. There are also situations when economic agents do not accept this clause, or even if they accepted it, the cost of purchasing the product would become lower only by using the transport facilities of the military units. That is why we argue that the transport of goods, from the supplier to the military unit as well as from the place of storage in the military units to that of the final consumer (unit, subunit, formation, fighter, etc.) is an extremely important component of the logistic support of military units during peacetime. Movement and transport are, in our opinion, one of the essential activities of physical distribution to the final consumer, namely the military unit in the process of training and initiation, and is therefore considered to be the most important component of the logistic support of peacetime activities.

Movement and transportation in peacetime must be viewed from a different perspective when dealing with the transfer of equipment, materials and personnel from sources of supply / receipt to combat forces that are participating in the preparation and conduct of applied military tactical exercises, as well as for maneuvering the military forces, from the place where they are stationed during peacetime, to a district where the military exercises are planned to be carried out. The need for transport of the goods and for the fighting forces in the area of preparation and conduct of the military exercises is usually ensured by means of transport from the military units specialized in transport.

Depending on the period in which they were planned, the type and place of training and deployment of the military exercises, transports are carried out for: the deployment/re-deployment of the fighting forces; supply/replenishment with equipment and materials and evacuation shipments. Starting from this reasoning, we argue that when it is necessary to move the combat forces in an area of military exercises which are more distant from the initial placement of the military unit, besides car transport, it is possible to call on the railway, airlines, ships or a combined transportation method. The basic principle in the execution of the movement and transport consists of the use of endowed transportation methods for the benefit of subordinate echelons. During the preparation and conduct of the military exercises, large quantities of

goods from different supply classes are consumed, which implies their re-supply in short time. We therefore believe that military units participating in military exercises need to assess their own and external transport means on a continuous basis, they need to know the sources of support for transport in the area of the military exercises and submit requests for transport to the upper echelons, according to the needs of participating military units. Coordination of the activities carried out for the planning, organization, monitoring and control of the execution of the movement and the transport within the military exercises is performed by the structure of movement and transport within each military unit participating in the military exercises.

The movement and transport of personnel and material assets in current military activities and during military exercises is based on the capabilities and organizational structures of military units specialized in transport and their higher echelons and we believe that it is influenced by at least three components: movement control, transport infrastructure and shipment security planned for the conduct of specific current activities and military exercises.

Movement control can be defined, in our opinion, as a group of activities that comprises planning, guiding, programming and controlling staff and materials on communication lines, while maintaining transit visibility and tracking initial planning requirements. That is why we believe that permanent blockages in the area of the current military activities and military exercises must be always identified and avoided, and the possible interruptions of the flow to be minimized. One of the greatest challenges of movement control is rapid adaptation to changes in road conditions and weather conditions.

The transport infrastructure required to carry out the movement and transport of personnel and goods is made available by central and local public authorities through one of the forms of transport: air, rail and road. As far as we are concerned, the capacity of the transport network must be balanced according to traffic requirements, so that means of transport and routes are neither saturated nor insufficiently exploited.

The shipment security during the current specific activities and military exercises relies on the norms imposed by the upper echelon of each

military unit, and execution is carried out by the military police structures in the composition of military units or specialized military units. Based on these considerations, we state that the work of coordinating the movement and transport aims at executing such transfers of people and goods from one place to another, to be carried out in a timely manner and at the lowest costs, to determine an exchange value that is as low as possible.

We also consider that these components have an important influence on the unitary management of the movement and transport system, while the logistics bodies together with the bodies of movement coordination aim to increase the share of movement and transport in order to meet the material needs of the military units during peace, through modernization of the movement and transport system at a global state. In this respect, the leadership of military units must make decisions at a high frequency and those decisions often need to be reconsidered at short intervals due to the changes that occur. Also, for the efficient management of this important logistic area, logistics managers need to keep in mind the transport costs, which include all costs directly related to the movement of goods from one military unit to another and from their own stores to the final consumer, respectively the military units that train during peacetime. Based on these transport costs, the choice regarding the means of transport is considered, which is a fundamental part of logistic support management, due to its impact on the operational efficiency of the military unit. Failure to identify the most appropriate way of transport can lead to higher costs than originally expected. The means of transport used must fulfill a number of conditions, including: regularity, transport capacity, speed and low cost.

Each of the transport methods used (rail, road, water, air or special) responds specifically to these requirements according to their technical and economic particularities. Under these circumstances, the choice regarding the means of transport becomes a problem whose correct solution makes it possible to further optimize the transport.

We believe that the main decision-making aspects of transport optimization refer to the evaluation and selection of means of transport, the scheduling of transport and the establishment of supply routes. Transport officers must propose optimal transport solutions to logistics managers

and commanders, so that they take strategic and operational decisions that directly influence the achievement of the fundamental and specific objectives of the military units during peacetime. We consider the major objective of the transport and movement conception to be the insurance of current military activities and combat forces during the training and the conduct of the military exercises, in the time and at the established place and at a reasonable cost for the military unit. This fundamental objective is in close correlation with a number of specific objectives, including the following: maintaining the quantity and quality of the logistic support at initially set parameters; the efficient use of means of transport during military exercises, by taking into account the positioning of the supply sources and economic agents who supply goods. We claim that important transport optimization decisions also refer to routing the transport activities over a longer period of time, compared to tactical (operational) decisions that seek to implement concepts and address current issues of movement and transport. From our point of view, the choice of optimal transport options is influenced by many factors, including:

- *the type of goods carried* – refers to the value, density and characteristics of the goods, as well as to the storage requirements;
- *the quantity required by the sub-units* – includes the duration of the demand cycle, maintaining the quality and integrity of the goods to the destination, the information regarding location along the route where the goods are located and the estimated time to arrive at the destination;
- *the logistics structure used to carry out the transport* – it envisages the establishment of transport capabilities and the support activities of the transport operations, as well as the physical distribution of the goods to the fighting forces, which are also the final consumers;
- *territorial area* – refers to the degree of territorial dispersion of combatant forces which undergo training and preparation in peacetime, as well as the dispersion degree of supply sources and goods suppliers;
- *the resources of the military units* – it includes the financial, material and human means available to the military units to carry out the movement and transport with their own means and / or those of the specialized military units provided by the higher echelons.

Taking into account the factors analyzed above, we consider that the main criteria underlying the elaboration of the plan for the movement and transport of personnel and goods during peacetime are the following:

a. the means of transport and movement are one of the most important decisions of the military unit's commander, which refers to choosing the appropriate means of transport. The existing options include the following basic means: road, rail, water, air and pipelines. Depending on the type of goods carried, the requirements and needs of the combat forces, as well as the particularities of the means of transport, each military unit resorts to one or more options. From our point of view, the selection of means of transport is based on the following main criteria: costs, transit time, consistency (variability), availability, flexibility, frequency and safety.

b. coordination of the means of transport and movement. Any military unit can choose between calling an uncorrelated transport route and coordinating the means of movement and transport. More and more frequent, especially for efficiency and celerity, is the option of intermodal transport. Simply calling in several means of transport, depending on the territorial area or the type of goods carried, does not mean, in essence, intermodal transport. It is necessary to combine means of transport based on standardized special equipment (e.g. containers), which can easily be transferred from one means to another, but in the end the goods have to reach the military unit's depots or directly the subunits, respectively to the forces fighting with some concrete advantages in terms of reducing transport times and costs by using these combined means of transport.

c. the degree of direct involvement in the movement and transport activities. Each military unit in need of traffic and transport services has to make a major decision regarding the degree of direct involvement of its own capabilities in transport activities. We believe that the possible options are the following: calling the military units specialized in motion and transport, relying on their own transport capabilities and the option resulting from the combination of the two above-mentioned alternatives in different proportions. The use of its own fleet of transport means has a number of advantages: a) increasing the degree of control

over transport; b) reducing the loss and destruction of goods as a result of the decrease in the number of manipulations; c) using their own means of transport as mobile warehouses, transporting the goods to the fighting forces. However, we know that using our own capabilities can be a disadvantage, due to the costs of their operation, but also those generated by the use of their own human resources.

In order to fulfil the plan of movement and transport, officers in charge with this component of peacetime logistic support, heads of logistics structures and commanders of military units are involved in a number of operational decisions. The type of decisions is influenced to a large extent by the degree of involvement of their own resources in the field of transport movement, i.e. the satisfaction of transport needs through their own fleet and / or on economic bases. Among the most important operational decisions we include the following:

a. selection of operational and appropriate means of transport – envisages the choice of transport, following the evaluation of suppliers of goods, on the basis of a set of cost criteria and performance of the means of transport;

b. scheduling transports – according to supply needs for current activities, as well as simultaneous support of military exercises in which combat forces are involved;

c. establishing routes – comprises the defining of the routes of the goods from the origin point to the final destination, both in the case of transport with its own fleet, or using specialized carriers made available by the superior echelons, especially during military exercises;

d. making requests for goods – envisages contacting the specialized carrier and informing them of the pick-up point of the goods, their type, weight and volume of the cargo, as well as the final destination of the goods;

e. speeding up transport – consists of making all necessary steps to ensure that a cargo arrives at a destination within a certain time and collaborating with the specialized carrier for this purpose;

f. shifting the shipment – includes changing the destination for a particular cargo, either during the journey, until it has reached its destination or when it has reached the point of destination and notifying the specialized carrier of that decision;

g. tracking – implies to know where the goods are at a certain point in time, on the route between the origin point and the destination.

Besides the responsibilities arising from the operational decisions presented, the officers responsible for the movement and transport activity have the obligation to carry out a series of related activities, involved in the achievement of the established objectives. In this respect, we can claim that the following related activities are very important: establishing the transport budget; establishing transport capabilities, requesting compensation for the loss or damage of goods during transportation, creating an information system based on the activity of movement and transport that analyzes the effects of the movement and transport activity on the other components of the logistics system.

A frequent way of reducing the share of expenditures for the transport of goods is the choice of suppliers who provide free shipping for the delivery of goods. Also, in order to reduce the expenditure with transportation, one can resort to the use of heavy vehicles, by respecting the transport timetable, the reduction of the loading and unloading periods, the extension of the modern transport technologies, the improvement of the activity of the suppliers and beneficiaries, as well as the positioning of the goods in the means of transport.

In this respect, we would like to point out that the choice of transport means largely influences the time in which the military units have access to the goods necessary to carry out the specific current activities planned in the "Main Activities Plan" and the speed with which they can reach the soldiers, i.e. the combat forces involved in the preparation and conduct of tactical military exercises, marches, etc.

In our opinion, as in the economic environment, the capabilities of multimodal transport (the combination of two or more means of transport) are increasingly being used in the military environment, and there are several ways to do so. Thus, the *piggyback* describes how to combine rail-based transport with road transport, *fish back* explains how to combine the waterways / river transport and road transport; *tranship* is the combination of rail-based transport and naval transport; *air truck*, the combination of airlift-specific and land-based means of transport, etc. That is why we consider that the development of intermodal transport is necessary, this fact being the result of some favorable factors, from which the most important are:

- the emergence of new types of transport;
- improving and standardizing container sizes;
- the possibility of exchanging equipment between different means of transport (e.g. trailers and containers);
- the use of computers, information technology to monitor the movement of means of transport, but especially to optimize routes and schedule transport operations;
- the establishment of intermodal terminals, these ensuring the transfer of goods between different means of transport;
- facilitating the large circulation of containers as a result of improved handling technology.

We anticipate that in the near future, the combination of means of transport will be able to provide important economic advantages, each combination offering advantages specific to the chosen means. Thus, the combination of rail-based means with transport trucks (road) provides the necessary flexibility, being, at the same time, a much cheaper solution than pure road transport.

Last but not least, we expect that if precise objectives are set at the managerial level, in relation to the transports that need to be executed, then efficient transport routes should be chosen, routes that correspond to the requirements set for the fulfilment of the mission of each military unit during peacetime.

Conclusions

Within the logistic support of peacetime units, one of the basic components - the movement and transport, considered to be a microsystem of any military unit, must react quickly and efficiently in providing logistic support for the optimal deployment of all current military activities planned at peacetime, but this requires at the same time the knowledge of the list of essential requirements of logistics support, stocks and supplies of goods to be achieved. Logistics planning and leadership structures, heads of motion and transport coordination departments and their subordinate staff adapt their logistic activities to the initial requirements and new requirements along the way, often without being prevented by their change. That is why we believe that if the early integration of transport structures is performed in a very short time, they can develop a rapid response to growing demands in crisis, mobilization and war.

The attempt to re-plan a military activity (exercise, march, training, etc.) or to entrust another unplanned activity to another unit requires the motion and transport microsystem to react immediately by rethinking the size of the logistic support by redistributing military personnel, material assets and equipment, or transferring the rapid implementation of the movement and transport structures from one military activity to another. The mental and physical capacity to cope with such predefined requirements, the ability to reorient when necessary, are ensured in the movement and transport microsystem through effective organization, pragmatic planning and efficient leadership.

The firm establishment of the movement and transport capabilities according to the general and specific requirements of logistic support can increase the mobility of the fighting forces, as well as the necessary logistic support for their training and preparation during peacetime, and provide aid in picturing a realistic vision regarding the "Plan of main activities" of each military unit. If the motion and initial transportation requirements are consistent with the ultimate goal of the military activity, then the transport capabilities can be synchronized in depth. Logistic planning and management bodies, together with the movement and transportation coordination departments, make an overall assessment of the conduct of the military activity as a necessary element for the detailed planning of the transport capabilities required to support it. Planning the movement and transport of goods must anticipate the requirements of each military activity in order to provide the necessary logistic support, reducing the need for improvisation. Judicious planning of transport capabilities requires permanent coordination between the tasks of the "Main Activities Plan" and the logistics support activities underlying their execution. Therefore, in order to be successful, the *Logistics Plan* must adapt according to the changes in the nature of the military activity during peacetime.

By addressing the movement and transport requirements to support military activities, we highlighted the implications, multiple determinations and particularities of their implementation in the logistic support of regular and peacekeeping training activities. It is important to understand the interdependence between the

general and specific requirements of movement and transportation, and the fact that they intertwine and mutually condition each other require constant adaptation and development in order to properly correspond to every possible application. That is why we consider that some of the requirements and factors that influence movement and transportation can be applied in all situations, namely peace, multinational operations, crisis, mobilization and war, and others can be applied only in multinational operations and in crisis situations, mobilization and war.

As a final conclusion, we believe that the widening of the spectrum of joint military actions adapted to NATO requirements generated the approach to the movement and transportation requirements in accordance with the missions and tasks received by the fighting forces. In this respect, we argue that the movement and transportation of personnel and material assets with the purpose of supporting peacekeeping training and other training activities, as well as the logistic support underlying the constitution of war material stocks, depend on a number of requirements and factors that are partly found in logistics-based doctrines and have been deepened by different specialists, but the approach has been taken only for multinational operations and for crisis, mobilization and war situations.

Starting from these considerations, we suggest correlating the requirements and factors that underlie the movement and transportation of personnel and goods during peacetime, from the existing doctrines, instructions and regulations

with those of logistic support in situations of crisis, mobilization and war, while introducing those with a character of novelty.

NOTES:

1 SMG/ L-2, *Doctrina întrunită pentru mișcare și transport*, Bucharest, 2006, art. 0103, p. 10.

2 *Ibidem*.

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HOW THE NATO SECURITY INVESTMENT PROGRAM (NSIP) COMPLEX PROJECTS ARE REALIZED

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NATO Security Investment Programme (NSIP) is a long-term program designed to build new infrastructure assets or improve existing infrastructure elements on member states or partner countries territory and is jointly funded by all member states. Since its establishment until now, this program has been a symbol for member countries for the effective sharing of obligations and benefits, and for those outside the Alliance a demonstration of the permanent involvement of its members in the joint defense of NATO populations and territories.

Keywords: NATO Security Investment Programme – NSIP; North Atlantic Treaty Organization – NATO; infrastructure; Capability Packages – CPs, projects.

The North Atlantic Treaty Organization (NATO) is a political and military alliance formed in 1949, which currently consists of 29 countries from Europe and North America, and of whose main objectives is to protect the populations and territories of its members through collective system of defense, and guaranteeing the freedom and security of its members through political and military means.

All member countries contribute to administrative expenditure for the functioning of the Alliance and each is represented by one permanent delegation at NATO headquarters in Brussels for taking decisions that are adopted only by consensus of all 29 members.

Following the 2014 Summit in Wales, the North Atlantic Alliance undertook a series of measures to strengthen collective defense, discourage any threatening action, and enhance and improve their defense capabilities.

At the Warsaw Summit in 2016, the Allies restated the commitment to the fundamental principles and values set out in the Washington Treaty, especially the principle of collective defense (Article 5) and the need of maintaining and developing their individual and collective capacity to resist to an armed attack (Article 3). However, the historic decisions were taken to strengthen the position of deterrence and defense and to increase the contribution of NATO to the

international community's efforts to maintain the existing stability in the world. Heads of states and governments participating in the Warsaw Summit confirmed the major common values that unite the states of North America and Europe and publicly restates the determination of sharing the responsibilities and benefits of security that are so necessary to NATO member states.

During the NATO Summit in Brussels in July 2018, member countries confirmed the decisions taken during the Summits in Wales and Warsaw regarding the relationship with the Russian Federation. NATO publicly declared the continuation of the process of strengthening the deterrence and defense position, including by means of increasing its military presence in the Eastern part of its own territories. NATO and Russia's civilian and military cooperation activities remained suspended, and the willingness to resume the political dialogue was reasserted, with the statement that the Alliance is not seeking confrontation and does not pose a threat to Russia.

About NATO Security Investment Program (NSIP)

Throughout the entire history of mankind rarely was there such a case in which all members of a military alliance agreed to contribute to a common fund and put this initiative into practice, to respond and to cope with an outward threat to the Alliance.

Since the establishment of the North Atlantic Alliance, a need was identified for *joint funding* of the complex infrastructure projects, this requirement leading then, in 1950 to the constitution

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of the *NATO Infrastructure Program*. From the moment it was founded until now, this program has produced intense discussions and negotiations, due in particular to the financing needs of projects and the establishment of financing shares allocated to each participating nation in a specific project.

It is clear that the problem of cost sharing is a complex one. Negotiations have also included the payment capacity of member states, how they use the facilities they have made, and the benefits and costs owed to the Host Nation.

Subsequently, after several stages of development, influenced by successive reorganizations of the Alliance, changes in strategic concepts and strategies and by the new members joining, at the end of 1994, the NATO Infrastructure Program was renamed *the NATO Security Investment Program*, especially in order to emphasize that this action is an investment in collective security.

The NATO Security Investment Program (NSIP) seeks, through funding from NATO's common funds, to build or upgrade their capabilities needed to accomplish the NATO level of ambition, depending on the requirements identified in the NATO Defense Planning Process (NDPP).

The NSIP aim is to ensure peace, security and stability by strengthening and maintaining a strong transatlantic link that proves the solidarity of NATO member states, but also by continuing to accept and assume the roles, risks, responsibilities, costs and benefits of membership of the North-Atlantic Alliance¹.

At present, the development of all construction and procurement based on Minimum Military Requirements (MMRs) required to support NATO's military capabilities is made by the staff responsible for logistic planning from Allied Command Operations (ACO) and from the Allied Command Transformation (ACT).

The implementation of NSIP projects in Romania is mainly aimed at the realization of the key capabilities needed to achieve the Allied level of ambition on the national territory. Also, capabilities built or improved through NSIP projects are intended to increase Romania's defense capacity.

Our country has always shown determination in achieving the deadline in substantiation and implementation of the NSIP projects for which its implementation authority was designated.

The Security Investment Program concept is NATO-specific and is dealt with in detail in all the

doctrinal documents of the North Atlantic Alliance logistics in the chapter dealing with the functional areas of logistics, namely in the infrastructure domain. This concept is one of the three pillars of NATO resources that, on the basis of the requirements identified by the Defense Planning Process, meet together to provide the NATO capabilities needed in order to fulfill the Alliance's military level of ambition. The other 2 pillars are *Manpower and Operations and Maintenance*².

The NATO Security Investment Program consists of several individual components called Capabilities Packages, each of which occurring due to its own requirement, and these Capabilities consist of a series of projects.

The Capabilities Package may include projects starting from one (Stand Alone Project – SAP) up to more than one hundred, depending on the complexity of the requirement for which it was created.

NSIP projects' aim is to implement Capabilities Packages, and the responsibility for how a NSIP project is implemented is the responsibility of the Host Nation or the authority designated for it.

It all cases when a Capability Package requires funding through the use of NATO common funds, there are some procedural steps to be followed for the implementation and use:

- *Initiation*, where the requirements of the Capabilities Package are identified;
- *Defining the requirements*, in which military requirements are met;
- *Approval* of the Capability Package by the North Atlantic Council;
- *Implementation* of the Capability Package by the national authority;
- *Operation* of the Capability Package, by its use from designated user;
- *Decommissioning* and excluding the Capabilities Package from the NATO inventory when it is no longer needed.

In our country the Ministry of National Defense manages the processes of substantiation and implementation of NSIP approved projects for Romania and is responsible for carrying out the procurement of the procedures of goods, services and execution of works to implement these projects, as well as the execution of projects, the financial management of resources approved for execution of projects and the payment to NSIP suppliers.

Under NATO's property laws, the goods resulting from the implementation of NSIP projects are owned by the state on whose territory they are built and are included in the North Atlantic Alliance records for use in accordance with NATO operational capabilities requirements.

Specific processes for keeping in good conditions and upgrading existing military capabilities and – where necessary – for building new capabilities, should only be carried out with the efficient use of available resources, by precisely establishing national priorities, both for the capabilities that can be achieved through national funding, as well as those to be funded, substantiated and implemented jointly with other NATO member states or partners.

Setting the resource allocation priorities for the development of capabilities destined for national defense is made by pursuing the achievement of Romania and NATO's common goals in accordance with the priorities agreed upon jointly by our country and the North-Atlantic Alliance.

NATO Security Investment Program was created to help ensure peace, security and stability by establishing and maintaining a strong transatlantic link that demonstrates strong NATO solidarity and maintains a successful strategy of fair sharing of the roles, risks, responsibilities, costs and benefits, which link together the members of the North-Atlantic Alliance. However, due to the relatively small amount of contribution to the NSIP of each member country, set as a percentage of GDP (Gross Domestic Product), these national contributions were always perceived more as a political statement of solidarity among the NATO nations rather than a financial burden.

Its member status of the North-Atlantic Alliance imposed the harmonization of Romanian legislation with that specific to NATO regarding the procedures for management and use of the military objectives and facilities built in Romania through the NATO Security Investment Program.

The main document that legislates the conduct of specific activities substantiation and implementation of projects under the Program of NATO Security Investment is *NATO Capability Package Directive (Bi-SC 85-1)* periodically updated by care of the staff with responsibilities in that field from the NATO Strategic Commands structure.

In Romania, the Ministry of National Defense is responsible for carrying out NATO-type complex NSIP projects and implementing these projects, this activity being carried out through structures which are subordinated to Ministry of National Defense.

In Romanian Ministry of National Defense, NSIP project management is designed on three levels of responsibility for making decisions, namely the *strategic* level, the *integrator* and the level of *execution*.

At strategic level, the activity is coordinated by the Department for Defense Policy, Planning and International Relations (DPAPRI), through Integrated Defense Planning Directorate (DPIA), at integrator level NSIP activities are coordinated by the NSIP structure of the Logistics Directorate from Defense Staff HQ, and at the execution level NSIP activities are coordinated by Major Program directors, such as they were established by the Defense Planning Directive (DPD).

Sometimes, due to low funding levels, acquisitions and construction with lower priority requirements are postponed, and in other cases, projects for the restoration and upgrading of existing facilities are funded as Stand Alone Projects.

For each planned military operation, the Allied Command Operations (ACO) conceives infrastructure requirements to be included in the NATO medium-term resource planning. These plans are updated annually and reflect any changes approved by periodic reviews of missions. However, NATO procedures allow a fast change in urgent projects to support ongoing military operations and in response to unexpected threats to meet new emerging priorities.

For the NATO Security Investment Program (NSIP), facilities and equipment designated by the governments of the participating countries will be financed through the funds of this program within the limits agreed for joint financing. These may be used by one or more NATO nations, but sites acquisition and utilities providing remain the responsibility of the Host Nations.

NSIP currently has 137 Capabilities Packages at different stages of planning, verification, approval or implementation, and together represent a NATO commitment of over € 8 billion. The cost of projects may range from € 50,000 to several million in some cases³.

The decision-makers of the North Atlantic Alliance continue to approve and finance projects to improve infrastructure. Thus, NATO has recently accepted, among other infrastructure financing projects, to reimburse US investments for many projects funded within the European Reassurance Initiative (ERI).

The range of NSIP projects that can be funded through NATO common funds are mainly infrastructure projects within the locations set up for this.

NSIP projects in Romania are run through the Ministry of National Defense, after the signing of their acceptance documents by the Minister of National Defense, and the implementation of NSIP projects in Romania is carried out through the structures of the Ministry of National Defense with responsibilities in the investment projects management, according to legal, technical, financial and administrative framework of NATO, in collaboration with the North-Atlantic Alliance specialized structures.

A first step in NSIP projects implementation in Romania took place with NATO's Capabilities Package CP5A0062 – *Providing Operational Facilities in the seven new Member States* approval, a package comprising 10 NSIP projects – of which seven major projects and three minor projects – with a total initial value of 31,713,200 euros (of which NATO contribution: 20,816,636 euros and Romania contributions: 10,896,564 euros)⁴.

NATO Security Investment Program covers the specific processes and procedures, the capabilities needed to design, Capabilities Packages definition, analysis of available resources, investment proposal, implementation, acceptance and management till the decommissioning and removal from the NATO inventory.

Each project within a Capability Package is assigned to one of the member nations of NATO, to one of the Strategic Commands and sometimes even to a NATO agency responsible for delivering that component.

Typically, Capability Packages are designed to support and service the command structure of NATO, command, control and communications (C3), for deployable capabilities in support of the deployment of forces or for training, exercises and education in support of deployable forces.

Due to the size of NATO Security Investment

Program, the Capability Package funding is usually planned to take place over several years. The planned investment together with the necessary costs for labor and assistance can be found in *the Medium Term Resource Plan*, a five-year document that is annually updated. Under this plan, the annual amount of expenditure for NSIP is set and controlled by the Resource Policy and Planning Board (RPPB) and is called *the NSIP Ceiling*. This represents a commitment of NATO members to spend funds on identified and approved Capacities Packages in a calendar year only up to a certain amount.

With a Capability Package approval by the North Atlantic Council it is confirmed that the Capability Package identified and approved is the most cost-effective solution to cover a recognized deficit of military capabilities needed to meet the level of ambition of the Alliance.

The capability is used and remains in the NATO inventory until it is considered obsolete or a future NATO Defense Planning Process (NDPP) demand cycle considers it being exceeded by requirements and a formal decommissioning process is started.

Recently, Allies have approved new Capability Packages to provide infrastructure for airborne early warning (AEW), airborne ground surveillance (AGS), communication jammer, maritime patrol, and air transport aircraft⁵.

Conclusions

The main findings of this article are as follows:

- NATO continues to pursue several lines of effort to achieve the goals of the insurance and discouragement initiatives, of which the most significant ones are:
 - continuing to increase the NATO military presence in Europe;
 - supplementing the number and increasing the size of NATO's joint and multinational exercises and training with NATO Allies and partners;
 - improving infrastructure elements to achieve a faster response rate for national and NATO forces;
- the funds allocated to complex NSIP-type projects in Romania provide flexibility and short-term response and increase the capacity of intervention and availability of the national armed

forces, the armed forces of NATO Allies and partners;

- one of the most important measures taken to strengthen the collective defense of the North Atlantic Alliance and Romania is for improving their own capabilities for defense or building new ones on Romania's territory through the NSIP complex projects.

NOTES:

1 <https://www.nato.mae.ro/node/1014>, accessed at 03.10.2018.

2 <https://www.act.nato.int/nsip>, accessed at 06.11.2018.

3 *Ibidem*.

4 http://www.mapn.ro/evenimente/uploads/pdf/20161007_115124_dfd62b1ce91d4670da6903dc7b5a7df1.pdf, accessed at 12.04.2018.

5 http://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2019/budget_justification/pdfs/11_NATO_Security_Investment_Program/FY19_NSIP_J-Book_Final.pdf, accessed at 08.12.2017.

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*** AJP-4 (A) Allied Joint Logistic Doctrine, December 2003, Brussels, NATO.

*** BI-SC Agreed Capability Codes and Capability Statements, nr. NU0053 / 14.10.2011.

*** *50 YEARS OF INFRASTRUCTURE. NATO Security Investment Program is the sharing of roles, Risks, Responsibilities, Costs and benefits* - commemorative publication issued to celebrated the 50th anniversary of NATO's Infrastructure Committee on 15 May 2001 Editorial Board: Drawn from Members of the Infrastructure Committee and Design and Layout: NATO Graphics Studio.

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DETERMINING AND INCREASING THE COMBAT CAPACITY BY ENGAGING THE MILITARY CLERGY IN DOMESTIC AND INTERNATIONAL MISSIONS

Military Chaplain Traian CHIRCU, PhD Student*

The involvement of military priests in domestic and international missions is considered to be more than useful, by the nature of their training and specialization being leaders for the achievement of unity of combatants, as well as well-known confessional conflicts, in which religious law applies to legitimate war, as we will see in the following.

Keywords: mystic; sacerdot; isihast; combatant; hedonist; missionary; strategic; comrades; confessional.

By reintroducing religious assistance into the structures of defense, public order and justice, the military priest is assimilated as a catalyst among these institutions. The Church has entrusted it with a very special mission, which otherwise draws pastoral strategies towards the parish environment, the military priest being called upon to rediscover the "link between freedom and holiness" in its area of missionary competences¹, in the spirit of the fundamental law on freedom of conscience, religious expression and according to the statutory canonical norms in force, specific to the cult they represent.

With a tradition of military missionary, re-energized for over three decades, through the minister in the military structure, the state of permanent and beneficial connection to the absolute God, without which there is no absolute sense or truth or morality, is maintained, ethics becoming only a matter taste, a mood or at most a whim. For the members of the armed forces, the need for religious assistance is closely linked to the oath of faith by which they engage in the national defense mission, even at the cost of their lives, and as God's help is invoked on the oath in question, it appears that sacerdotal presence to consecrate in the name of the Church military manifestations, most of them being oriented to the noble purpose of Messianic incitement, that of the triumph of life against war-induced death, through a periodical intonation on the state hymns: "Priests with the

cross in the forehead for the army is Christian / The devotee is liberated and her holy purpose / We die better in battle, with full glory / Than being slaves again in our old earth"².

Given the double jurisdiction of the subordination, the military priest does not carry any responsibility for confessional representation, but integrates into the great military family, with all that goes with the rigors of the barracks, being the guarantor of respect for human rights in the armed forces freedom of conscience and religious expression, without distinction between the majority Orthodox and other denominations.

The role of the military clergy in peace, crisis and war

Sacred forces in the armed forces are the ones who teach the militaries their mystical vertebrate in prayer, provide them with the techniques of self-learning through meditation and recollection, which have the beneficial role of oxygenating the inner life of the combatants by activating their own spiritual sensors and making more aware and responsible for their purpose. In addition to proper training, the fighter needs to realize that what he has to do is legitimate, moral, ethical, and exonerating of responsibility after the war, because not always and in all cases, those who were forced to kill, in order not to be killed, return to the seemingly quiet atmosphere of the barracks, from where they left, without their souls being shaded by obvious negative states, and which none other than the military priest can manage. In such circumstances, the members of the armed forces assimilate the spiritual leader as their guiding lighthouse, as their

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own sacrifice priest who illuminates and clarifies their options, instructs them precisely how they can overcome their self-defeating automatisms, how to restart their lives psycho-spiritual and self-denial, how to convert the failures of life into victories, and ultimately understand the call to perfection, and that their noble mission is a holy duty assumed by oath of faith.

In the triad of sacerdotal responsibilities: didactic, sanctifying and administrative, the priority preoccupation of military priests is to prevent behavioral deviations by causing the soldiers to act with "heart-breaking" at peacetime or when facing crises or war. And the priest, like the officer, must fortify his call and the power of struggle through continuous training, centered on four sacramental pillars: theology, theosophy, theophilia, theodology (theology-science about God, theology – experimentation of grace as divine energy uncreated, theophilia – love for God and theodology – fixation in the state of God's service and honor).

The vocal vocations and vocalists of the vocation, perseverance, original and creative, who respect the "canons" of the missionary and professional rows they have assumed, are sought, and the Church and the Army can be proud to have such a guard but their work is at least doubled in view of the need to remodel the profile of the new generations who want their socio-professional registration in ecclesiastical or military structures. The crisis of motivation can be overcome by multiplying professional models, reevaluating the treasure of military and church traditions, creating and legislating missionary and military strategies that will reassemble in the minds and souls of the military the attachment to what enlivenes and sacrifices.

The military priesthood is not limited to conjunctural adaptations, the mission challenges in the military environment being much more complex, hence the need for a close collaboration with the psychological, medical, legal and other factors of responsibility in order to prevent and combat hedonistic skirmishes, motivation, staff flow, and reflux as well as other malfunctions that affect the military.

One of the missionary urgency is to recover the non-practitioners and to stimulate experimental religiosity by fortifying the interest and the awareness

of the importance of spiritual life, moving towards a rehabilitative perception of the relationship with God and marked by the experience of meeting him, because without the understanding of faith as an existential modality can come to the true knowledge of God, but only to the assumption that He exists. When the military priesthood manages to create such an alliance of combatants with God, they come with more certainty and speed to professional performance, increase combat capacity, and lead to more effective victorious struggles.

In the theaters of operations, God is invoked with even more insistence to cognize the instruments of violence and to convert them into instruments of peace, for war is nothing more than "a crazy rush to dominion and an unfair craving for foreign wealth"³, and the spiritual training of the combatants before, during, and after the conduct of the military actions becomes a revitalizing component, absolutely necessary and beneficial in making the most appropriate decisions, thus recognizing that "the attendance of the priests in international humanitarian missions in the NATO framework on the battlefield completes the assurance of religious assistance in our army, for military priests remain not only leaders but become devoted comrades who share with fighters the fatigue, the shortcomings and the danger of death⁴.

Preparation of military clergy for participation in international missions

The involvement of the military priests in the foreign missions of the national army, we appreciate it is more than useful, given that the nature of their training and specialization is primarily very good knowledge of the phenomenology of confessional conflicts, their collaboration with non-governmental bodies, other international bodies deployed in theaters of operations, helping to identify, investigate and discourage retaliatory actions and aggression in various conflict zones of the world.

By the methodology of applying the law of the military clergy in the structures of the national armed forces no. 195/2000, approved by the Order of the Minister of National Defense no. M-2/2014 finds that for the participation of military priests in foreign missions the written consent of the hierarchical / canonical local authority to which they

belong is necessary, as well as their testing by the Religious Assistance Department in collaboration with the organizational entities from the categories of forces where the priests to be deployed in the theaters are framed.

From the pre-deployment phase to participating in international missions, military priests must ensure their cultic needs for holy and sanctified services, usually a campaign shrine, and from among the combatants be assigned a Chapel assistant to update their knowledge on the law of the IUU-armed conflicts, in order to accurately recognize the position, the role and the limits of the sacerdotal actions, as well as the knowledge of the international language, at least English, being absolutely necessary for the purpose of dealing with representatives of the Army Chaplains from the joint system of allegations, the authorities and troops of the partner armies, as well as with other officials of international bodies.

The contingents of military chaplains who have already carried out various missions can help with the experience gained in preparing the predisposed, the lessons learned and transmitted to the latIn missions in theaters of operations, therefore, religious assistance to militant military priests is before any analysis that is absolutely vital, because on the background of a fallen morality, with psychological slippages and pressures inherent in war, military actions can be compromised, with consequences even to the loss of human life. Therefore, even from predisposition, military priests engaged in missions in theaters of operations must initiate mobilizing and motivational procedures for the troops accompanying such missions, because the distance to the home, the long stay on the battlefields, the seas and the world's oceans, engaging in repetitive activities, are designed to generate difficult-to-reach states of mind and must be managed with great care and with utmost responsibility. ter are of real use in the organization of religious assistance.

In the conflict zone, military priests from the land, naval and air forces may organize, within the limits and under the conditions laid down by international humanitarian law, religious services, even with the participation of the religious leaders of the adverse party, thus enabling tensions in conflict states, armed, perhaps even giving up military force.

By similarity to the tactical military-FTX military exercises and the solving of a tactical STX situation, the preparation of the military clergy for missions in theaters of operations follows the same trajectory of checking and updating knowledge, practicing pastoral skills, and adapting to constraining environments to achieve the planned missionary objectives, the usual and unwritten ordinance, from the combatants' consciousness, "such a struggle is to be won, after the instruction has been carried out," finally resolving the pauline prescriptions concerning the mobilization of the military sacerdotal: "In all depicting us as his servants God, with great patience in straits, in labor and in vigilance, in pureness and knowledge, in goodness and long-suffering, in the word of truth and the power of God through the weapons of righteousness ..."⁵.

In the specific assignments specific to the foreign partner chapters, there are four organizational directions: planning, preparation, execution and evaluation. From the perspective of the first direction of planning for religious counseling, it needs to be detailed and integrated to support spiritual requirements in an operational environment. The preparation of religious support takes place in the context of operational planning and preparation of troops and phases of an operation. As long as the mission accomplishes this mission, it focuses on supervising and directing combatants to create a psycho-emotional impact appropriate to the increase in operative capabilities, and through the evaluation stage, validation of the missionary standards reached, while generating new working experiences.

By participating in international missions, military priests must turn their attention to counseling to military leaders, who are recommended to have a flexible and principled leadership of troops and crews, designed to value the capabilities of the military and to limit, as far as possible, eliminates the stress and fear generated by the constraining environment, homogenizes the relationships between the fighters, motivates and maintains the spirit of sacrifice of the subordinates. In fact, even military leaders turn to counseling the priest to provide combatants with spiritual resources, trust and moral strength to overcome the hostilities inherent in missions in theaters of operations.

The need for the sacred war thus becomes equal and directly proportional to the mission level of risk, the faith of peace demobilizes the war "belief", with other weapons that are imposed as a constant of military spirituality proclaimed by the Apostle Paul as follows: "Dress with all the weapons of God that you may stand against the devil's devices. For our struggle is not against the flesh and the blood, but against the beginnings, against the rulers, against the rulers of the darkness of this age, against the spirits of wickedness in the air. Therefore, take all the weapons of God that you may stand in the day of evil, and all of them overcome them to stand. Stand firm, having your midst girded with truth, and clothe yourself with the plaque of righteousness. And shoes your feet, ready for the gospel of peace. In all you take the shield of faith, with which you will be able to extinguish all the ardent arrows of the sly. Take also the helmet of salvation and the sword of the Spirit, it is the word of God⁶.

Protection of personnel and cultural goods against armed conflicts

Considering the legal norms for the establishment of the right of armed conflicts as a distinctive and complementary part of international law, the great Christian denominations are interested in the respect for human rights that emanates from the very doctrine they preach about the freedom of expression of religious beliefs in the spirit of tolerance and mutual respect, prioritizing the protection of spiritual identity, staff and cultural goods through international legal regulations.

Referring to special situations regarding the army's forces in land, air and naval missions, the right to religious assistance for and in favor of them has been recognized since 1864 in Geneva, where the representatives of 12 states met, the moment marking in fact, the birth of international humanitarian law, with a first Convention of 10 articles adopted in the same year, namely the "Convention for the Improvement of the Fate of Armed Forces In Campaigns", which denies the old beliefs that war and law would not reconcile, but on the contrary, the rule of law governs all the manifestations of the combatants.

Following the Geneva Convention, at the initiative of Czar Alexander II, in 1874, the Statement on the Religions and Terrestrial Warfare

Practices through which religious personnel is protected was elaborated, establishing according to art. 8 of this Declaration, the application of sanctions for the destruction of religious religious sites. By the provisions of art. 17 of the same Declaration, the occupying military authority is obliged to protect the religious objectives, provided it is expressly forbidden to be used for military purposes, and on the other hand it is incumbent on the injured to indicate the place of these edifices by special visible signs.

Later, in 1899, a Second Humanitarian Law Convention was adopted at the Hague Peace Conference on the Protection of Wounded, Sick and Marines, Reformed and Completed in 1906, for the following year-1907, and at the same time The Hague, at the Second Peace Conference and the Fourth Convention, establishes the situation of prisoners of war and non-combatants, beneficiaries of special treatments during captivity. After the first international conflagration, the International Red Cross initiated diplomatic diligence to complete and refine previous legislation, and the 1929 Geneva Convention established respect and protection of military priests and pastors in any circumstance, would not be treated as prisoners of war, continue to carry out their sacerdotal duties, will not be detained and will be redistributed to the adverse side when the possibilities allow them to be identified with a distinctive sign in the left hand (Articles 9 and 12). The Convention on the Treatment of Prisoners of War deals with the status of ministers of a denomination, whatever its name, specifying that they will be authorized to exercise full service, among those of the same religion with them, 16, par. 2, and the natural consequence of this paragraph is to incite proselytism among the wounds and at the same time to avoid discrimination between cults.

The International Humanitarian Law Initiative is being taken, in particular, after the Second World War, under the auspices of the International Committee of the Red Cross, when consultations of the Joint Medical Commission of October 1945, the National Red Cross Societies and the Government Experts of 1947, Advisory Committees of 1947, ending with the Stockholm Conference in 1948.

On April 21, 1949, delegates from 63 states meet in Geneva, including the Vatican in the Conference for the Revision of Conventions previously

established in this respect. Under the Geneva Convention of 1949, special attention is paid to the right to religious assistance during armed conflicts, hence the obvious role of the military clergy institution in respecting and assuring the right to spiritual assistance through its own qualified staff, under the protection of international humanitarian law, both the recipients and the cultues concerned with more rights included in the four conventional sections

Concluding from the contents of the presented references and the international legislative regulations it follows that the spiritual assistance in the state of peace or belligerence is supported mainly by the military clergy, having assured the support and protection of the places of worship. As regards the right to respect and protection, they are subject to non-involvement in acts of military hostility, in particular exclusive rights granted to priests attached to the army, to military priests, who can not be considered prisoners of war, and their identification being made by distinctive signs. In another order of religious rights in armed conflicts, such as the right to particular treatment or the right to freedom of conscience, these rights are reflected in the facilities granted for the exercise of sacerdotal duties, of spiritual assistance, without any constraint. Subsequently, other rights, such as the right of free access to authorities, correspondence and property, thus accumulate a series of privileges to travel to members of the religious community, even outside prison camps, for which the transport of religious leaders, recognized as being the best placed to represent the interests of those counseled before the occupation authorities. As regards the right to correspondence, it is found that it is not a right subject to censorship and limitation as in the situation of combatants, and the right to property on personal property and values, on means of transport and on other goods is also a sacerdotal privilege, that this right, as well as all other rights listed, does not affect the military interests of the parties in control of armed conflicts. Much later, through Protocol no. 1/1977, in addition to the Geneva Convention / 1949, on the protection of victims of international armed conflict, concerning qualified personnel recertificates the need for spiritual assistance in armed conflicts by religious personnel. In addition to the international regulations to which we refer, the Council The World Churches has continued

and sustains today an intense activity to defend and promote human rights, both in peace and war, through special organizations such as the Christian Peace Conference, whose agenda includes thematic issues to international humanitarian law. The last ecumenical meeting on "the role of culture and religion and dialogue in peace building and support for migrants and refugees" under the aegis of the World Council of Churches took place on 12-15 September 2017 in Lisbon.

NOTES:

1 Metropolitan Daniel Ciobotea, *Confessing the Truth in Love. Orthodox Perceptions of Life, Mission and Unity*, Trinitas Publishing House, Iași, 2001, p. 179.

2 https://ro.wikipedia.org/wiki/De%C8%99teapt%C4%83-te,_rom%C3%A2ne!

3 Saint John the Baptist, *Complete Works*, Doxologia Publishing House, Iași, p. 389.

4 General prof. Mircea Mureșan, "The axiological faith, duty, value in the European Union configuration", in *The Orthodox Church in the European Union, Contributions to European Security and Stability*, University Publishing House, Bucharest, 2006, pp.7-15.

5 *The Bible – Epistle II Corinthians*, Ch. VI, 4-7, BOR Bible and Mission Institute Publishing House, Bucharest, 2005.

6 *The Bible – Epistle to the Ephesians*, Ch. VI, 11-17, Publishing House of the Biblical and Missionary Institute of BOR, Bucharest, 2005.

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CANONICAL OPERATIONAL LAW IN THE CONTEXT OF THE ORGANIZATION AND FUNCTIONING OF NATIVE MILITARY AND ECCLESIAL ORGANISMS

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The organization and functioning of military and ecclesiastical bodies also attract the legal assumption of missions executed for and in favor of the nations and denominations represented, for each of them or in an alliance system, having to observe the norms of operational and canonical law on which we will reflect through What's next.

Keywords: belligerent standardization; interoperability; decident; apostolic; canonical; religious-moral; dogmatic; ecumenical; patristic; liturgical; sacramental.

The existence and functionality of military-ecclesiastical bodies are governed by canonical laws and regulations, and their knowledge represents above all a military and sacramental obligation in resonance with the constitutional, legislative-secular and ecological order, as the jurist consultant Ulpianus entrusts us in this sense (170-228), namely that the law consists of three precepts: "jurispraeceptasunchae: honestevivere, alterum non laedere, suumcuiqvtribuere"- the precepts of law are as follows: to live honestly, not to injure another, and to give to everyone what is his; the same author defining the meaning of religious law: "juristprudencia est divinarum atqve humanarum rerumnotitia, justu atqve injusti scientia" – in the sense of wisdom of law, science consists in knowing the divine and human things and in understanding what is right and what is unrighteous¹.

Operational law

Operational law integrates military-specific missions in the spectrum of legality and legitimacy as an integral part of public law, including necessary and sufficient legislative-military rules, found in treaties, conventions, agreements, international truces, directives, combat orders, specific branch provisions, issued by national or foreign military commanders².

The current conditions of the war at the beginning of the third millennium require the design of military operations, governed by an effective and functional legislative framework for the security of any state, which must not lack the constituent elements of respecting host state law, international human rights law, humanitarian aid, the fight against crime and terrorism.

In the context of the international legal systems, the internal operational law includes the set of norms meant to regulate the situation of the armed conflicts, and by observing them the priority is to limit the loss of human lives and destroy the patrimony of the belligerent states by precisely applying the measures of protection against combatants, wounded, civilian population, prisoners of war, cultural and religious goods. Operational law invites the military body to use the means of armed violence for the purposes of national defense and security, responsibilities, prohibitions and limitations, the rights and freedoms of military and civilian contractual personnel, to achieve "good governance" in the armed forces, as recommended by specialized legal studies³.

Internal constitutional provisions and other laws on the organization and functioning of the national defense system, respectively art. 118 of the Constitution of Romania, the laws 80/1995, 195/2000, 415/2002, 346/2006, with the implementing methodologies, by regulations and military orders, make their acknowledgement and observance compulsory to the military

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professionals, the more so as they have sworn to defend their country, even at the cost of life. After classifying the law enforcement methodologies in the national army, they cover at least six organizational and functional levels: general internal regulations containing the principles and norms related to the establishment, organization and execution of military and military discipline preservation activities in all army structures; regulations of military and operative-strategic actions and troop training; logistic regulations; information security regulations, military security, computer science, topography, hydrography and navigation, and regulations on the organization and operation of military departments, headquarters, command, institution and formation, and military regulation on religious assistance.

In the Romanian army, specialized legal assistance covers the whole range of activities of legal advisers through which the Ministry of National Defense is represented in justice, as well as for the approval of the legality of commands and the orders of the commanders and military chiefs. From among these judicial officers, prosecutors and military judges are recruited within the Prosecutor's Offices, the Military Tribunals in Bucharest, Cluj-Napoca, Iasi, Timisoara and the Military Court of Appeal in Bucharest. There is an increasing need for people qualified as military lawyers for the defense of the personnel of the national defense system, which, although it is found in the partner armies, is still missing from the organizational chart of the functions of the Ministry of National Defense.

In the context of the references presented in the public and national defense system, the implications on operational law are more than obvious, because no commander entrusted with a mission is in danger of planning, preparing it and carrying it out, through the subordinate structures, without real and rigorous legal coverage, the very legality and justice of the command acts in question having a decisive role in the success and victory of the struggle. There should not be any antinomies between the orders of the deciding military authority and domestic and international laws; on the contrary, the subordinate has the obligation not to execute the unlawful orders of his superiors, hence the need for a thorough development of the operational law norms, coordinated with the regulations stipulated by international law and international humanitarian

law, both for the one invested to order and for the forced to execute military orders.

The collective defense missions assumed by the national defense body reflect the training of the combatant personnel from all points of view, including the legal one, and the way how the rules of the operational law have been assimilated has consequences on the ability to react and to implement the international regulations specific to the armed conflicts, the experience in theaters of military operations having an undeniable pedagogical role regarding the adaptation to the conditions of the war, as well as the adoption of effective fighting strategies, which brought to the Romanian military the well-deserved praise of the allies.

Canonical law

The emergence of canonical law as part of the jurisdictional systems is inseparably linked to the need to organize the Church. Thus, the Orthodox Church, which has preserved ratio between the sacred and legal dimensions, has traced its historic path to institutionalization, knowing – in its millenary history – periods, such as the Byzantine domination, in which the state itself declared norms of canonical law as mandatory in the public administration.

In order to legitimize its existence, to be able to function and to organize itself, initially known as a catacomb church and persecuted for at least three centuries, the first millennium Church needed a code of laws to complement religious and moral norms, meant to eradicate social inequities, either in terms of their own internal activity or in relation to the world, the secular state, and other entities throughout a history that was anticipated and actually proved to be extremely agitated, the tendency to divide the world into masters and mastered people being a constant of time, which gradually led to the grafting of the law also on the body of the Church-jus ecclesiasticum, with obvious Roman and Mosaic influences, from the first century of the Christian era.

In the constitution of church administrative law, the canonical norms comprise those principles, rules of general conduct, instituted and sanctioned by the Church, whose observance is obligatory, for the application of which church authority is invested, in order to maintain discipline and religious-moral order, in full agreement with the

opinion of clergy and faithful who make up the Church, including in the general code of church laws: the apostolic canons, the canons of the ecumenical councils, the canons of the particular synods and the patristic canons, recognized by the decisions of the ecumenical councils, with general validity in the Church, the resolutions of the pan-orthodox councils, statutory-canonical norms, the regulation of disciplinary canonical authorities and courts of law.

Until the completion of the collection of apostolic, ecumenical, private and patristic, pan-Orthodox canons, and above any statutory canonical norm or disciplinary regulation, we must mention that the Orthodox Church of the East has always had a canonical consciousness, based on the unmistakable testimony of its Founder: "I am the Way, the Truth and the Life"⁴ and we really find this canonical consciousness as the Church's self-consciousness in the interference between the confessed faith and the lived life of the members of the Church or in the words of priest professor Liviu Stan, PhD "we can speak of canonical consciousness when we refer to what expresses the way of living the faith"⁵.

The Church, like any other institution, was not deprived of situations in which the law had to be restored, the church law being the fundamental basis for the special necessity and importance of canonical law in the ecclesial environment, very convincing in this respect being the trial procedure recommended by Christ, in whose content the Church is mentioned as the ultimate and supreme court of appeal: "If your brother sins, go and show him his fault in private; if he listens to you, you have won your brother. "But if he does not listen to you, take one or two more with you, so that by the mouth of two or three witnesses every fact may be confirmed. If he refuses to listen to them, tell it to the church; and if he refuses to listen even to the church, let him be to you as a Gentile and a tax collector"⁶.

In the apostolic period there were also incidents involving the restoration of justice, mentioning Gamaliel's role of advocate in favor of the apostles, when they were on trial before the Sanhedrin, the situation of Saint Apostle Paul before being converted on the road of Damascus when he was like a prosecutor he made the indictments of condemning Christians, and last but

not least the judgment of the Ananias and Saphiras by Saint Apostle Peter⁷, and such examples are quite consistent to strengthen our conviction that the initial organization and leadership of the Church, the maintenance of dogmatic and liturgical communion in the Church were and remained conditioned by a rigorous discipline that is the subject of canonical law.

Church administrative law or canonical law appears as a branch of study in the practical theology by which the canonical-juridical norms are methodologically and systematically studied, according to which the Church is organized and conducted only in the sixth century, namely first in the west through the canonical work of Dionysius Exiguus +545, canonized by the Romanian Orthodox Church in 2008 and celebrated on September 1 and then in the middle of the sixth century and in the East by the work of Saint John the Scolastic +577, both being recognized as the founders of administrative-church law.

Considering the three Christian dimensions: didactic, sacramental and organizational-leadership dimensions, transmitted through apostolic and patristic succession to the hierarchy and other members of the Church, their exercise is effectively conditioned by canonicity before any other conditions. Thus, we observe that the didactic mission in the Church involves canonical customs on preaching and catechesis, ritual books, sacred songs, iconography, and so on. The exercise of the sacramental mission also includes canonical customs concerning sacred mass and service, the Sacred Sacraments – Baptism, Anointing, Eucharist, Penance, Matrimony, Holy Orders, as well as the canonical rules of the ierurgies. Exercising the organizational and leadership mission in the Church results in the canonical character of a synod, canonical leadership and execution organs, statutory and canonical norms of organization and functioning. Then, all these didactic, sacramental and leadership dimensions are added the administrative-legislative and judicial dimension of the Church under the direct influence of canonical law.

The Orthodox Church in general and the Orthodox Church which has the majority of people in Romania have synodal representation, as a system of communion, exercising their jurisdiction through the three deliberative, executive and

judicial forms, either directly or through bodies having a specific mission, determined by canonical norms and church customs.

Like any other institution in Romania, the Romanian Orthodox Church has always respected the constitutional order and the laws of the rule of law, being autonomous and autocephalous, but not separate from the Romanian state, from which – just like all other cults in Romania – it received consultative recognition, being an ecclesial institution of public utility.

Conclusions

The references to operational-canonical law are reflected both on organizational and functional regulations regarding military-ecclesial entities, with all that pertains to their specificity, which justifies us to conclude that as far as the army is concerned, we could not become credible partners of the Allied countries or within the framework of international peacekeeping organizations, as long as we did not have solid knowledge of operational law and we did not provide legal training for combatant and civil-contractual personnel employed at the level of the operationalized structures. On the other hand, members of the clergy could not assume a missionary role tailored to the demands of the contemporary world, just as they would not be able to engage - with positive results - in promoting irenic and ecumenical diplomacy, without respecting the canonicity of their own actions, without the knowledge and training of clerical and civilian employees on the rules of canonical law, through which they legitimize their assigned missions.

Deepening the knowledge of military and canonical law also provides a clear perception of the ability of military-ecclesial entities to act effectively, applying their own doctrinal precepts within the limits of the law, and also explaining the phenomenology of religious right that differs from to a confession to another, the sharia being applied in Islam - the amount of sacred and categorical laws, which legitimize among other prescriptions also jihad-war against those of another faith.

In the context of these considerations, we finally express our hope that in future which is not too distant, the organizational chart of the

military and clerical functions will be completed with the auxiliary functions of a military attorney and military chaplain assistant, through which even more effective protection of rights military professionals and the constitutional right of religious freedom through ecclesiastical structures designated to provide religious assistance within the national defense system.

NOTES:

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2 Prof. univ. Constantin Iordache PhD, *Operational Law*, National Defense University Publishing House, 2003, Chapter VI.

3 Prof. univ. Ion Dragoman, PhD, *Legal Studies-Human Rights in the Armed Forces-Good Governance*, C.H. Beck, Bucharest, 2006.

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5 PR. Prof. Liviu Stan, PhD, *Church and Law*, Orthodox canon law studies, Andreiana Publishing House, Sibiu, 2012, p. 111.

6 *The Bible*, "The Gospel of Matthew", XXVIII, 17. The Publishing House of the Biblical Institute and the Orthodox Mission, Bucharest, 2005.

7 *Ibidem*, "Acts of the Apostles" V, 1-10; 34-39; VIII.

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CORRUPTION VERSUS THE NEED FOR INTEGRITY

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Corruption is perceived as a factor of instability for a nation and a threat for the national security. In order to correctly assess the integrity of a person, system, or organization, a system of values and principles is required, with a simple but also correct expression at the same time.

Keywords: corruption; integrity; probity; society.

Corruption can be defined as the inappropriate use of the power entrusted for personal benefit¹, being characteristic of all types of society.

Corruption helped trigger crises during the Arab Spring as well as their subsequent conflicts. Also, the corruption is in NATO's vision the main factor that allowed the rise and development of violent extremist organizations such as ISIL or Boko Haram².

Corruption is seen as a factor of instability for a nation and a threat to its security. Former US Vice President Joe Biden noted that there are countries that exploit corruption to exert unfavorable influence and undermine the independence of neighboring countries, giving the example of Ukraine³.

Integrity and fight against the corruption are the two sides of the same coin. However, the emphasis must be on building integrity because it represents, in our opinion, a pro-active approach.

The revitalization of integrity has materialized in initiatives of international organizations and countries as well. For instance, UN created *International Group on Anti-Corruption*, OECD established *Development Assistance Committee*, and as an initiative of a group of states *Group of States Against Corruption* – GRECO was established. GRECO acts in the same manner as the signatories of the OECD against bribing foreign civil servants in commercial transactions. In addition, the OECD

provides expertise in promoting best practices in the field of public sector ethics both in member countries and in other countries around the world.

The notion of integrity has a vast sphere of meanings, namely: "the feature of being integral; honesty, probity; incorruptibility"; "it is a concept that speaks of consistent actions, according to values, methods, and measuring tools, as well as in relation with principles and expectations that can be verified by results". In ethics, integrity is considered as honesty and fairness, being assessed by the accuracy of one's actions. Therefore, integrity is the opposite of certain shortcomings such as inconsistency, hypocrisy or fakeness. Integrity expresses virtues, feelings and the application of personal convictions, without discrepancies between statements and the example of personal experience.

The origin of the word "integrity" derives from the Latin adjective "integer" (whole, complete), and in this context it refers to the array of qualities of an individual, expressed through honesty and consistency of character. When someone refers to another person's lack of integrity, that person is assuming the role of a judge who feels that he possesses those qualities that "integrity" implies, and as such, his or her judgment is an act in accordance with his / her own beliefs and with the values she claims to possess and practice at that time.

In order to properly assess the integrity of a person, structure, or organization, a system of values and principles is required, with a simple but correct expression at the same time. The lack of a system of values and principles can turn into abstract statements which, very easily,

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can be misinterpreted by anyone. The system of values and principles generated by human minds is validated only over time and has an adjustment and review process determined by the results. This statement does not invalidate the need for a system of principles and values, because the lack of such an arrangement invariably promotes inconsistency and confusion.

Probity, a term found in defining integrity, expresses "honesty, fairness, incorruptibility, integrity, loyalty, honesty".

Another term found in the definition of integrity is incorruptibility that conveys the idea of not being prone to corruption.

The phenomenon of integrity is in total antithesis with the phenomenon of corruption. Thus corruption can be defined from the etymological point of view - the word corruption comes from the Latin "corruptio, -onis" and "French" (corruption), meaning the behavior of an official who, in exchange for money or other undue benefits, trades the attributes of the function he holds. In the above sense, the concept also includes debauchery and abdication from honor or one's duties".

From a political, social, legal, and economic point of view, corruption occurs in society at all levels, so that "because of its forms of manifestation and its consequences", it "appears to be indissolubly linked to the evolution and transformation that any society knows"⁴.

Corruption is manifested in all areas. For example, Siemens was accused of bribing with nearly 70 million euro various Greek officials to gain one of the most valuable contracts, namely modernizing Greece's vast telephone network in the late 1990s. Adidas was accused of bribing basketball young players and US coaches to come to the American universities they sponsor. Recently, seven companies, including the German software manufacturer SAP, have been accused of corruption for obtaining government contracts in South Africa.⁵

From a legal point of view, most countries have had, for many years, anti-corruption policies embedded in their legislation and are increasingly applying them. Some have signed the UN Convention Against Corruption, and many have also signed the Anti-Corruption Agreement of the Organization for Economic Cooperation and Development (OCDE).⁶

Corruption is at the forefront of the concerns of international organizations, one of them being NATO. As a result of perceiving corruption as an element affecting the security of each Ally as well as the North Atlantic Alliance as a whole, the program of building integrity was put in place, focusing mainly on issues related to the risks of corruption in the defense domain and supporting existing national anti-corruption programs.

At the NATO Summit in Warsaw it was explicitly mentioned that the defense and security sector is certainly affected by corruption. The fact that NATO agreed to support the international effort to fight corruption and to develop those practical activities that help the Alliance member states in this regard shows that the organization's effort to combat corruption must be coordinated at national and international level, depending on the possibilities and limits of action of every state.

The subject of corruption in Romania is not new at all. The report for 2013 on the situation in Romania entitled "Human Rights Practices" prepared by the Office for Democracy, Human Rights and Labor of the US State Department stated that "Institutional corruption remains a widespread problem that affects all the structures of the society. Systematic social discrimination against Roma affects their access to adequate education, housing, healthcare and employment opportunities"⁷.

According to a 2018 Ernst & Young report, the phenomenon is experiencing a continuous expansion in Europe from North to South, our country being somewhere in the middle of the ranking, while the northern countries have the lowest percentage.

The 2018 survey of Ernst & Young placed Romania among the countries that have had an important impact in the fight against corruption through the measures taken, mentioning the National Anticorruption Directorate as the main engine in this direction⁸.

The report of the Green Group in the European Parliament entitled "Costs of Corruption in the EU" shows that, at national level, damages caused by corruption for Member States' GDP go from 15,6 % in Romania (38,6 billion euro) to 0,76 in the Netherlands (however, reaching 4,5 billion euro, with Italy having a record in absolute terms, losing 236,8 billion euro annually due to corruption, France is the second with an annual loss of 120,2 billion euro due to corruption, and in Germany there is an annual loss of 194 billion euro)⁹.

Romania is cited first because, according to the authors, the ratio between GDP and the estimated value of corruption is the most unfavorable in Europe, thus strengthening the general message well known in Brussels of "a poor and corrupt country". For example, if, in absolute terms, the amount of corruption in Italy is enormous, it represents only a "hole" of 13% of GDP.¹⁰

Let us not forget that Romania is still within the sphere of political-legislative changes, being a society in which change can be seen almost in concrete terms without the need for arguments, no matter the attitudes or behaviors. In a Europe that is becoming more and more consecrated, Romania knows multiple forms of the phenomenon of corruption. Life styles are diversifying, and a category of population becomes more educated or perhaps more eager for power, thus differentiating itself from the rest of society. The political world has major changes almost every moment, and the parties do not seem to resist too much in the same structure.

Corruption cannot be eradicated overnight. There will always be at least a temptation to dodge the law or shorten normal procedures established by the state or the community. Currently, the overall trend is to stop the upward trend of corruption, to find methods and ways of action to raise awareness that an act of corruption affects society as a whole, affects state mechanisms by which it assures security and the welfare of their own citizens.

At the same time, along with the efforts to reduce corruption, a very serious campaign is also needed to build integrity based on a system of common values of the state and society that cannot be interpreted or adapted according to the interests of a person or a small group of people.

Conclusions

As it was mentioned previously in the article, integrity and the fight against corruption are complementary faces of the same coin, and we emphasize once more the need for the two components to be promoted at the same time, with the same weight, the absence of one making the other obsolete.

Promoting a system of values that results in increasing the resilience of society's members to corruption will have to be a joint effort of the entire community; it will have to start during the

process of educating younger generations while, at the same time, adult members of the community become aware of the fact that overlooking even common forms of corruption tends to weaken the whole concept of fighting corruption and building a society based on integrity, trust and honesty. The members of the community must perceive this as a necessary thing for society in order to be able to progress.

In conclusion, the fight against corruption should not be carried out by only a part of society; the whole society must be made aware of it and apply it, because if an act of corruption does not directly affect a certain member of the society, that citizen will feel in an indirect way the effects of corruption together with the entire society he /she is a member of.

NOTES:

1 J.J. Senturia, *Encyclopaedia of Social Sciences*, vol. VI, renders the traditional definition of corruption: "The misuse of public power for private profit", 1993.

2 *Corruption and conflict: hand in glove*, <https://www.nato.int/docu/review/2018/Also-in-2018/corruption-and-conflict-hand-in-glove-nato-defense-security/EN/index.htm>, accessed at 13.02.2019.

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THE EVOLUTION OF THE ROMANIAN INTELLIGENCE SERVICES ACTIONS IN PREVENTING AND COMBATING TERRORISM, ORGANIZED CRIME AND CORRUPTION

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In Romania, the activity of intelligence collection, analysis and exploitation for providing the national security is regulated in compliance with the Law no. 51/1991 (republished) on National Security of Romania. This law stipulates the actions that represent national security threats specific of terrorism and organized crime, as well as the state bodies with responsibilities in the field of national security.

Romania's membership within two organizations (NATO and the EU) that play a decisive role in the fight against terrorism constitutes an opportunity which our state uses efficiently so as to achieve its security and defense goals.

Briefly, it may be considered that the current security environment poses new challenges to the state actors and the intelligence bodies, which are completely different from those known so far.

Keywords: terrorism; organized crime; corruption; intelligence services; threats; vulnerabilities.

In the current international context, the United States of America and most European states have adopted a series of legislative and doctrinal measures to reconfigure and streamline the classic effort against terrorism. "Among these, the following can be highlighted:

a) political-diplomatic measures to widen and strengthen the anti-terrorist coalition and weaken the capacity of action of terrorist actors;

b) closely monitoring the most dangerous active terrorist organizations;

c) adapting conceptual framework (laws, strategies, doctrines, protocols between institutions, instructions, action plans or intervention plans etc.) to the new conditions;

d) restructuring the intelligence services or other institutions or bodies responsible for combating terrorism;

e) establishing, training, endowing and institutionalizing the special forces to combat terrorism;

f) improving the information management system;

g) achieving, at international level, an exchange of information between specialized agencies and establishing the complementary objectives for combating terrorism;

h) improving the protection measures of the state institutions"¹.

Our country, as an allied partner, is in the same note, some of the above-mentioned measures being finalized while others are in progress. The information activity plays a fundamental role in ensuring the security of a country, contributing to the reduction of international risks and threats through its participation in the effort to achieve informational superiority in certain areas of interest. Thus, intelligence is needed both in detecting and defining the intentions of an adversary, and in preventing asymmetric threats against the state, along with the monitoring of crisis areas.

In Romania the activity of collecting, analyzing and capitalizing the information for the accomplishment of the national safety is regulated according to the *Law no. 51/1991 (republished) on Romania's national security*. This law nominates the actions and acts that constitute threats to national security specific to terrorism and organized crime, as well as the state bodies with attributions in the field of national security.

The Romanian Intelligence Service (SRI) is organized and operates on the basis of Law no. 14/1992 (updated) which, in addition to the provisions established by *Law no. 51/1991 (republished) on Romania's national security*, regulates other SRI tasks as well: defense of state secrecy, prevention, fight against terrorism and organized crime, antiterrorist protection of the

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Romanian and foreign dignitaries. SRI is also the technical coordinator of the National System for Preventing and Countering Terrorism (SNPCT), the strategic coordinator being the Supreme Council of National Defense (CSAT).

The Foreign Intelligence Service (SIE) has competence in the field of external intelligence on national security.

The Protection and Guard Service (SPP) ensures the protection of the Romanian and foreign dignitaries during their presence in Romania, as well as the guarding of the working places and their residences.

The Ministry of National Defense (MApN), the Ministry of Internal Affairs (MAI) and the Ministry of Justice organize intelligence structures with specific attributions to their fields of activity.

Information is needed to prevent threats before they escalate. Decision makers must judge the level of risk for the community to be prepared and decide on the timing of action, taking into account all costs and consequences.

The profound changes in the international security environment have had an impact on all areas of life, including intelligence activity. In this sense, it is necessary to adapt the architecture of their structures to the requirements of the current security environment.

The new context of threat is generally non-governmental, unconventional, dynamic, random and nonlinear in scope, with no constraints or hiring rules. It has no own doctrine, it is almost impossible to quantify and forecast, and it is supported by criminals, traffickers and drug users, terrorists, corrupt individuals, extremists and religious fanatics, xenophobes, mercenaries, etc. Today, the model is generically defined with a single word - asymmetric.

Under these conditions, a new structural, functional and behavioral concept is developed, able to explain the multidirectional and non-traditional challenges. The new *intelligence* model includes an architecture that includes and manages the explosion of information and, in particular, the explosion in multilingual digital information, while managing the knowledge of concrete reality through direct observations. The link between understanding the threats and structuring the forces consists of formulating and validating a conceptual architecture that, if necessary, integrates classical

elements, but develops new concepts more suited to the present and future security environment.

"The new approach to architecture of information structures is a thoughtful and balanced change in weighting:

- from secret to open;
- from traditional concern to the concern of non-traditional security factors, including water, energy, food, epidemics and sustainable development;
- from current monitoring to contextual historical and cultural analysis;
- from the fragmented community of secret government agencies to a network that is capable of exploiting distributed information. Above all, the approach to intelligence activity is comprehensive, reliable, flexible and relevant to the challenges of all forms of threat and, in particular, to non-traditional forms"².

Romania's presence in two organizations (NATO and the EU), which have a decisive role in the fight against terrorism, is an opportunity that our state uses effectively in reaching the goals of the security and defense policy.

In order to cope with the new asymmetric threats, intelligence services must adopt an architecture that meets certain requirements, as follows:

1. *To be structurally and functionally adapted to the current missions of NATO and EU intelligence structures.* The efficiency of the architecture of information structures consists of meeting the following requirements:

- early warning about the proliferation of relevant military technologies and weapons of mass destruction;
- countering terrorist actions and those specific to organized crime;
- monitoring and analyzing the developing potential of the multiple interest areas (asymmetric threats, military capabilities that in time would constitute a regional threat to the country and / or alliance / coalition);
- setting up intelligence units to respond to all threats;
- developing multi-source analysis capabilities.

2. *To permit the provision of permanent, timely and effective information to consumers.* Combating risks, direct threats and potential vulnerabilities, including the transnational ones, such as terrorism, requires a full and sustained commitment to

intelligence structures, knowing that "who holds the information, holds the power." Political and military leaders must be kept informed, timely and accurately, with quality information on matters of national interest. The intelligence architecture needs to allow the achievement of a superior management of information requests, which will lead to an economy of resources and an increase in the quality of information reports.

3. *To ensure cooperation with intelligence services and counter intelligence partners.* No state is able to assure its own national security and defend its interests, as demonstrated by existing alliances systems from ancient times to the present.

Alongside coalitions/alliances co-operation, bilateral ties with other partner intelligence services should be developed. Continuing or initiating new ties to co-operation with other intelligence services is a way to increase confidence at regional and even continental / trans-continental levels, as many of the existing dangers in the international environment are common to most states.

In order to respond to this desideratum, the architecture of intelligence structures is configured to be able to provide: superior connectivity to information systems of allied and/or partner intelligence structures; broader information coverage for the areas of their own responsibility, so as to create a balance between information inputs and outputs of the system.

4. *To allow the development of a flexible and modern system for information collecting, processing and disseminating in real time.*

The most eloquent example is the "Network Centric Warfare" concept, which allows the connection of the information system to the sensor and combat systems platforms within a network of networks. The degree of technical endowment is closely related to the level of ambition and capabilities of national services, on the one hand, and the obligations assumed towards partners and allies on the other hand. In order to achieve a modern architecture of intelligence structures, it is necessary to design, if possible, some technical sensor systems covering all monitored environments.

5. *To ensure the professional training of intelligence staff.* One of the defining aspects of the intelligence architecture is the human factor. Its organization, preparation and leadership depend to

a large extent on the success of any intelligence service. In order to achieve performance in the field of intelligence, one of the basic conditions is the level of professional training of the personnel. The training must start from the mission to be fulfilled and from being a member of an alliance / coalitions. This can be done through courses in the country or abroad.

A modern architecture of the intelligence structures contains structures of personnel theoretical and practical training, led by officers with highly training and professional experience, recognized industry practitioners. These structures achieve, on the one hand, the specialized training of intelligence personnel and, on the other hand, the research development in the field of preventing and combating terrorism. During preparation, the field of the fight against terrorism must not be broken by the other areas of specific work with which, moreover, it has many interferences.

Synthesizing, it can be considered that the current security environment poses up to state actors and, implicitly, to intelligence structures, new challenges that are completely different from what has been known so far. In order to be able to respond adequately, the intelligence structures adapt their own architecture to the new challenges of the international security environment.

"In order to meet the requirements for identifying and counteracting terrorist threats, it is necessary to corroborate some short- and medium-term measures as follows:

a) proper functioning of the mixed nucleus (intelligence and counterintelligence) of analysts, terrorism specialists, able to understand the strengths, thinking of terrorist organizations, influence and attraction that they exert on those recruits, the recruitment mechanisms of new adherents, Romania's vulnerabilities internally and externally to the terrorist threat;

b) upgrading the intelligent IT infrastructure (capable of connecting) of this core; efficient use of the database (information and end-product information), with data modules on diverse fields, intelligently related, through connections among events, individuals, groups, or organizations, and the flexibility in the ability to adapt and evolve the team specialists and implicitly the intelligence service, to new requirements;

c) widening the analytical spectrum or, better said, improving the analytical model by encouraging and subsequently enhancing the use of ethnographic, sociological and psychological studies in order to understand the terrorist phenomenon and to streamline the prediction process, while increasing the degree of certainty;

d) enhancing cooperation between intelligence services and academic and scientific environments in other areas (financial, economic, social), in order to increase the vision of the terrorist phenomenon and the degree of certainty in forecasting;

e) Changing the passive or reactive attitude into a pro-active one²³ by:

- the development of specialized structures for tracking and counteracting cyber-terrorism specific actions, which, in addition to the active component, meaning strictly the counterpart, is able to evolve through the inter-related memorization of the "lessons learned" (the use of a storage database for the solutions found, in a form of intelligent relationship, by its examination, to be able to have some statistics and forecasts that can provide quality intelligence activity);

- widening the spectrum of activities of collecting structures from human sources so as to be able to carry out actions such as interrogation or debriefing, along with the development of dialogue techniques, the art of conversation, persuasion and persuasion through the specific methods, means and procedures applicable in various situations.

By making a brief analysis, we can state that terrorism, by its tendency to expand on a global scale and to diversify from an active point of view, requires a great deal of attention from all states, that must consider the establishment of measures and actions, in particular with a preventive role, limiting its development. The lessons learned from previous missions, the frequent terrorist actions of hostile forces that information staff has to deal with, are further arguments for training different structures for such missions.

It is relevant that the Romanian intelligence structures have rapidly modified and adapted their way of thinking and action, in close connection with the evolution of the international terrorist phenomenon and the influences that it has in our country, becoming a factor of internal stability and a reliable, effective partner in dealing with other states in the fight against terrorism worldwide.

It is important, however, that the fight against terrorism be continually improved, depending on international developments.

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No matter how much terrorism has been denounced by the international community, this must understand that its existence and "evolution" are related to the existence and evolution of humanity, which it has accompanied over time. The strength of terrorism is given by hatred, intolerance, religious fanaticism, geographic position of the states with high terrorist potential, as well as the human and material resources they have. These advantages allow terrorist organizations to diversify and intensify their activities, aiming to expand their actions around the world, even if a strong and wide international coalition fights against them.

The terrorist actions of fundamentalist - Islamic nature have a greater recrudescence. The Middle East region remains a true "focus" of international terrorism, with the support of states recognized as sponsors of terrorism. Sources of terrorism also exist in the countries of North Africa (Sudan, Egypt, Algeria, Libya), Turkey, the northern Caucasus countries and even Europe (Bosnia-Herzegovina, Albania, Kosovo and Macedonia) with a high risk of expanding in any moment. These spaces, whose communication routes also interfere with Romania, are a favorable ground both for organized crime and corruption.

A series of urgent measures are to be imposed to countries that sponsor terrorism, countries like Iran, Syria and North Korea; these measures need to have an impact as big as the danger they pose for the peace, democracy, stability and maybe even to the existence of life on Earth.

The terrorism phenomenon will remain tied for a long time, in scale and intensity, to the energy problem of the globe, knowing that much of the oil and gas reserves are "in the basement" of the Muslim world. Therefore, for a long time, terrorist organizations will diversify and intensify their activities, aiming to expand their activities world wide, even if there is an international coalition fighting against them. A greater recrudescence will be made by the terrorist-based Islamist fundamentalist actions motivated by the creed of "defending against the invaders."

In the next period, the danger that terrorist organizations might resort to non-conventional means of action belonging to the nuclear-biological sphere will increase.

“Mega terrorism (the use of chemical, radiological, biological and / or nuclear means as well as cyber-terrorism) represents the terrorist issue of the future, which will become a big concern for the world leaders in fighting against this scourge, as it can change the world’s forces balance by destroying a part of humanity, using: contamination and / or poisoning of the population, animals and / or the environment, the challenge of misery, illness, poverty, famine, panic, stress, etc as well as an information warfare which could baffle the humanity through its catastrophic effects”⁴.

Countries remain very vulnerable to the attacks of chemical terrorism and bioterrorism; the effects being devastating. The main targets are the urban hubs, means of transport and maybe schools, state institutions, and even some of the international institutions, as well as the United States allied countries.

“Organized crime is evolving in close connection with terrorism, providing the entire support, thus becoming its vital support. Situated at the confluence of great interests, aspect that has marked its entire history and development, Romania is deeply marked by cross-border organized crime. After the fall of the communist regime and the free movement, on the grounds of legal or illegal migration due to increasing world instability, organized crime took over the entire Balkan area as well as the former communist countries already deeply marked by another scourge – corruption”⁵.

Internal vulnerabilities, such as the prolonged post-revolutionary legislative vacuum for a long time, political and economic-financial instability, poverty, the ineffectiveness of border control and security measures and means, the proliferation of corruption, the lack of an effective educational system that responds to new challenges favored the deep implementation of organized crime germs in our country, unfavorable results reflecting on many future generations.

For our country, the main internal problem is not terrorism, but organized crime in close connection with corruption, phenomena that have reached all levels and sectors of social life, our country being among the most corrupt in Europe.

Let us not forget that Romania makes the bridge between the Asian, Balkan, African and maritime industries with the famous “green route” of drug trafficking controlled by the Albanian criminal groups that have the monopoly of organized crime in Europe. Moscow, Odessa and Chisinau, but also Ankara, Athens and Sofia are just some of the high-potential points at which Bucharest will remain connected for a period no one can foresee the limit of. Illegal migration is amplifying and will create more and more difficulties in Europe in identifying potential terrorist elements. It can be said that Europe is subject to the threat of Islamization to a greater extent than any other area of the Western world.

Romania’s efforts in the fight against terrorism should be part of the general effort of the powerful opponents of terrorism (USA, Great Britain, Canada, Germany, France, Italy, Russia, etc.), which requires intensive cooperation at regional and global level.

Our country must take into account the terrorist threat and undertake, through specialized institutions, the necessary measures to discover and counteract any terrorist action that could affect its national security. The risk of the occurrence of terrorist events on Romania’s territory also increased when the first allied military bases were installed on our territory.

After the admission to the Euro-Atlantic structures and the securing of Romania’s borders, the attention of the terrorist and criminal elements was directed to the domestic facilities offered by our country with a view to identifying new personnel resources, weapons, explosives and other “equipment”, including through activities of organized crime also favored by internal corruption.

Diplomacy, economic and financial actions, skillfully combined with military coalition actions in theaters of operations, including intelligence, are the necessary ways to fight in the future for success in the fight against terrorism, organized crime and corruption.

International cooperation against organized crime and corruption remains the only solution that if they can not destroy them, at least stops them or diminishes their activities. As a result of effective cooperation, terrorism as the main beneficiary of organized crime and corruption

will receive destructive blows by cutting down the strongest pillar on which it is based - their financial resources.

In Romania, it is necessary to improve the national response system in limited situations, especially the specialized components of research, investigation and combat of mega terrorism. The absence of a terrorist phenomenon in Romania should not give birth to inaction and apathy in the preventive aspect on behalf of the Romanian authorities. Being in the ways of terrorism and organized crime in Europe, and marked by "flourishing" corruption, Romania is and will be threatened by terrorism, in all its complexity. Threats and risks of a terrorist nature to Romania's national security will be favored by a series of internal vulnerabilities.

Romania has legislation and clear concepts on the terrorist phenomenon, legislation that allows it to define the phenomenon, develop strategies, action plans and measures to prevent and combat it, as well as its participation in international alliances against it. The Romanian authorities must take into account the terrorist threat and undertake, through specialized institutions, the necessary measures to counteract any terrorist acts that could affect their national security.

To our advantage, in Romania we cannot say that we have a terrorist phenomenon due to its lack of scale and intensity. The aspect is due, on the one hand, to the fact that Romania is not targeted by the terrorist organizations, being unimportant for terrorist leaders, and the terrorist issue is kept under control by the authorities in a legislative, informative and coercive manner, and on the other hand, to the fact that Romania is regarded by terrorists as a logistic base where clean money is made, and then used for dirty purposes.

However, a number of vulnerabilities and factors generating internal and external risks, as well as the impact terrorism has or may have on Romanian society, must alert all components of the National System for Prevention and Countering Terrorism.

Secret services are required to undertake, in close cooperation, all specific measures aimed at eliminating the terrorist threat, in which a particular emphasis should be placed on preventing, identifying, acknowledging and counteracting actions that could create hazards, such as:

- committing terrorist-diversionist acts;
- actions of enrollment in terrorist organizations;
- attempts to steal weapons, ammunition, explosive, toxic or radioactive material;
- attacks to the life and physical integrity of decision-makers, representatives of other states or international organizations whose protection is ensured during their stay in Romania.

At international level, it is necessary to intensify cooperation with the intelligence structures of other states.

From the analysis of the forecasts formulated by some specialists in the field regarding the evolution of the terrorist phenomenon, there are other less optimistic conclusions such as:

- terrorism will certainly persist as an acute phenomenon in the current millennium;
- terrorism will have a "quantitative and qualitative" upward trend, tending towards mega-terrorism, and large-scale incidents will be more and more frequent;
- terrorism will evolve linearly in terms of tactics, targets and means (armaments);
- even if it is regrettable, there is the possibility that some states in the world may turn to terrorism in the future in order to achieve certain goals;
- terrorists will be able to trigger crises that will force states (governments) and international organizations to allocate more and more resources to combat them.

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CURRENT PROBLEMS IN INTELLIGENCE COOPERATION

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The security environment tends to push states and intelligence services to take important steps towards intelligence cooperation at both bilateral and multinational levels. If at NATO level we can speak of a rather strong integration and intelligence cooperation, things are still at an early stage at EU level. There is also a tendency for NATO and the EU to approach, but the current cooperation is just at the beginning.

Keywords: NATO, EU, cooperation; intelligence; multinational; bilateral.

The security environment in the Euro-Atlantic area seems to be more vulnerable than ever. More or less visible threats emerge daily. Some are widely described by the media, others are only dealt with by niche sites specialized in analyzing certain aspects of security, and others are analyzed and evaluated only by institutions with responsibilities in the area of national security. The fact that they are treated differently does not mean that some are more important than others, but only that they are viewed with different attention depending on the perception of those who care about them.

This is because in the absence of a solid security culture promoted by state institutions with responsibilities in this area, threats tend to be ignored due to the dissimulation of their intentions and their effects.

Therefore, in order to protect itself against the multiple threats to itself and its citizens, any state needs institutions capable of identifying, assessing and countering these threats.

This may seem enough for a state in order to assure its own security, citizens and prevent anything that could jeopardize its functions.

If this was true half a century ago, globalization has completely changed the security paradigm. The threats have become more diffuse, the area where they appear tends to contaminate neighboring areas, or even locations that apparently have no relation to the threat or threatened space.

In order to cope with all these threats, the state needs institutions capable of cooperating with each

other, using judiciously the available resources, but most importantly, avoiding duplication of effort and unproductive competition.

These aspects are much more visible in intelligence services. Almost all threats to the security of a state are primarily the responsibility of intelligence services, both national and departmental. They are the first to identify the source of the threats, to assess the risks to which the state and its citizens are subjected, and ultimately to inform decision-makers about these threats and to propose ways to counteract them.

In order to carry out this continuous process, intelligence services need not only to cooperate with each other, but they must also make effective exchanges of data and information to cover intelligence gaps, allow for real risk and threat assessments, and draw a correct image of the security environment.

In recent years, articles have appeared in the media about the central role played by intelligence services in combating and preventing acts of terrorism, organized crime, arms trafficking and dangerous materials smuggling.

This shows that the range of threats to the security of a state is no longer found only within the traditional threats or on the territory of that state, but most of the times it can spread from its immediate neighborhood to the farthest corners of the world. Accelerated globalization brought multiplicity of connections between long-distance entities, data exchanges, information and products at levels well above those 50 years ago.

But globalization has not only brought better connections and diversification of international relations; it has also led to an increase in illicit activities, an unprecedented development of cross-

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border organized crime activities, new mechanisms used predominantly in money laundering and diversification of forms of corruption, weapons and, as a novelty, the emergence of transnational fluid structures with great capacity to adapt to changes in the environment.

All these aspects have put increasing pressure on intelligence services, forcing them to expand their areas of expertise, to cooperate more and more at both national and international level. Cooperation is not limited only to bilateral relations with partner services from other countries but is also about close cooperation with agencies and organizations that do not have their main activity on the national security field, but which perform activities in the financial, banking, communications, customs, insurance, commerce and stock market activities.

At national level, this cooperation seems quite easy to achieve, a legal framework to regulate this kind of cooperation can be developed, database integration and mechanisms can be made to achieve effective real time cooperation in order to support the decision-making process, from the identification phase of the threats that affects the state and its citizens. This would make it possible to assess the threat as accurately as possible and to take the necessary measures to counteract. Each state has, in principle, a legal framework that enables it to achieve effective coordination of information efforts, timely de-escalation and integrating the efforts and results of intelligence activities.

The real challenge is the exchange of data and information with other states or organizations to which the state is a party.

There are currently many forms of bilateral and multilateral cooperation in formal or informal organizations, whether public or confidential.

Between the intelligence services of two states, a convenient way of cooperation is the liaison officers' institution. They secure a formal and rapid relationship, being in contact with both the service of origin and the partner service. As an extension of this type of cooperation, we also meet institutions where several liaison officers are present. The most common type of such an institution are the intelligence fusion centers, but these are quite rare at the moment.

The most common are bilateral cooperation between states. This type of cooperation involves a

large variety of information exchanges, which can be analytical or finished products, may be punctual data exchanges, may be warnings or even database exchanges.

Most of the data and information exchanged in the framework of cooperation is based on trust between the two parties regarding the safe use of the information made available. The greatest degree of trust is in bilateral cooperation, where information control is easy to achieve by the fact that both the beneficiary and the information provider use similar tools and procedures to protect data and information.

Multilateral international cooperation is difficult to achieve because all institutions or states wishing to participate in this kind of cooperation have to respect a set of rules and some previously agreed standards. The main impediment in agreeing on the set of rules and standards is the different way states choose to protect and use their data and information.

Intelligence cooperation takes place when all parties involved in the cooperation process see potential benefits in this, either by acquiring information that complements the overall picture or by accessing sources and mechanisms which, in the absence of co-operation, would be had to build from scratch.¹

This cooperation takes place under the paradox that information is valuable only when it is passed on to someone who needs it, so it gets a lot of value, but when it is passed on to more and more beneficiaries, there is a risk that it will be compromised, automatically reducing its value. This paradox is exemplified by the need for information services to apply the need-to-know and need-to-share principles, the answer being proportional to the degree of trust given to those to whom that information is given.

The value of information, both nationally and internationally, is also given by the value of the source of the information from which it is obtained. It is perfectly valid if we assert that a valuable source will be protected as much as possible by the organization that controls it and will make it harder to access the information obtained by that source.

It is for this reason that a state or a service will provide the information to the services or states with which they cooperate without the elements that can lead to the identification of the source. By

removing these elements, the information may lose its value.

To conclude, in order to provide truly valuable information, there must be a very strong relationship of trust between the supplier and the beneficiary in terms of its use and protection. This is the reason why bilateral formats are more common than the multinational ones.

One of the best instances of cooperation at the multinational level in the field of intelligence is at the level of the North Atlantic Treaty Organization. Benefiting from a set of well-established rules, the Alliance was able to initially group military and civil intelligence services into two highly effective cooperation formats. By supporting both the military and the political decision-making process, it was only a matter of time before an integration of the two intelligence co-operation structures emerged in the form of the coordination of the NATO Assistant Secretary General for Intelligence and Security.²

Within the European Union, the intelligence co-operation process was initially focused on law enforcement, through EUROPOL and the new European Counter-Terrorism Center, which ensures co-operation between Member States by coordinating actions and exchanging information more easily³.

Due to a number of changes in form and attributions, the current EU INTCEN has become a center to support the decision-making process by developing analyses, early warnings and prediction for the Foreign Action Service, coordinated by the EU's High Representative for Foreign Affairs and Security Policy.

Following EU INTCEN analyses, the EU has decided⁴ upon the need to set up a framework for action to mobilize the tools needed to combat hybrid threats.⁵

At the same time, the need for close co-operation with NATO was emphasized, for the development of complementary mechanisms and not duplicating existing measures, as highlighted in the Global Strategy of the European Union.⁶

Taking all these into account, the issue has been seriously assessed both within NATO and the EU Member States, and this has led to the conclusion that it is necessary to create a center where the analytical efforts on hybrid threats should concentrate.

The approach between NATO and the European Union has been materialized by creating

the European Center for Excellence in Combating Hybrid Threats (CoE Hybrid). It is an expertise center that supports the individual and collective efforts of participating countries to enhance civilian-military capabilities, resilience and training to combat hybrid threats with a particular focus on European security. It is intended that the Center will provide this expertise and collective experience for the benefit of all participating countries as well as the EU and NATO. The center will have a comprehensive, multinational, multidisciplinary and academic approach.⁷

The process of approaching and co-operating between the two organizations is a rather difficult one. Although there is a political will to strengthen the complementarity of the two organizations and to avoid duplication of efforts, the road to the actual realization of this objective is a long one, the challenges to which the two organizations have to face being increasingly diverse.

An eventual realization of this complementarity will certainly disturb other international players with global aspirations, whether we are talking about the Russian Federation or China as independent states or as part of the BRICS or the Shanghai Cooperation Organization.

In addition, the ever-increasing consequences of the United Kingdom's exit from the European Union will put additional pressure on the European Union if only in light of the fact that it is unclear which the impact will be on British services members in already existing intra-Community cooperation formats.

As a conclusion, cooperation in the near future within NATO and the EU will take steps towards strengthening and diversifying its forms, but they will certainly be quite hesitant and small as amplitude.

NOTES:

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3 *Europol's European Counter Terrorism Centre strengthens the EUS response to terror*, 25.01.2016, The Hague, The Netherlands, <https://www.europol.europa.eu/content/ectc>, accessed at 29.02.2016.

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5 European Union response: soft power in action, [http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/599315/EPRS_BRI\(2017\)599315_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/599315/EPRS_BRI(2017)599315_EN.pdf), accessed at 01.11.2017.

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CONTROL AND PREVENTION OF FISCAL CRIME

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Legal evasion is "the taxpayer's action to bypass laws by resorting to an unforeseen combination of them, being forgiven by fleeing." Tax fraud is a form of deliberate evasion, in violation of legal provisions that explicitly criminalize action or inaction with a fiscal consequence as a crime, and the purpose of the act is to hide the tax obligation or to diminish it.

Keywords: evasion; crime; law; sanction.

The Constitution of Romania stipulates, at art. 56, that "citizens have the duty to contribute, through taxes and fees, to public spending"¹, and "the legal system of taxation must ensure the correct settlement of tax burdens"².

Frequently, tax evasion is defined as "tax evasion and tax evasion of taxable income and assets subject to tax"³.

The concept of tax evasion encompasses both illicit practices, forbidden by special laws or criminal codes, which are incriminated as crimes, referred to in specific terms as tax frauds and procedures not prohibited by law, in the sense that, in the absence of explicit legal norms that would incriminate it, they cannot be sanctioned. The latter are called in specific terms tax optimizations.

Legitimate evasion is therefore "the taxpayer's action to circumvent laws by resorting to an unforeseen combination of law provisions, being tolerated by not being taken into account"⁴. Tax fraud is a form of deliberate evasion, in violation of legal provisions that explicitly criminalize action or inaction with a fiscal consequence as a crime, and the purpose of the act is to hide the tax obligation or to diminish it.

Less commonly treated in the literature, although it is frequently encountered in practice, is the case in which the taxpayer reduces tax liabilities by error. It is therefore a form of tax evasion which, although committed in violation of the legal norm, cannot be assimilated to tax fraud due to lack of intentional character. This unintentional form

is also recognized by international accounting standards that divide accounting errors (accounting deviations from the correct financial statement) into frauds, material errors, mathematical errors or misinterpretations of accounting events.

Tax fraud is not just a matter of state law. The European Union, as a European overarching body, has its own budget, tax fraud in each state affecting the Union's financial interests. Taking into account this aspect, the European Parliament and the European Commission are attempting to regulate the fight against the phenomenon by directives, but there is an undeclared but constant opposition of the Member States, both in state interest (the case of Great Britain or Luxembourg) and in the interest of the political class highlighted by the leak of information known as "Panama Papers").

Addressing the tax evasion offense

Tax evasion occurs when an evolved society is born, which involves collecting resources to resolve its problems. The first cases of tax evasion refer to ancient Greece. In city-states such as Athens or Sparta, taxes were imposed on citizens, in particular the city tax imposed on the citizens to finance the expenses of war (eisphora), as evidenced in 480 BC. The contribution was higher or lower depending on household income. The taxpayer's inclination towards diminishing the contribution by saying that he was less wealthy was also noticed in that period.

Also, in ancient Rome, wealthy Roman citizens and owners, senators and patricians made false land declarations to avoid inheritance and land taxes. The Gracchus, Tiberius and Caius brothers, Roman tribunes in the third century BC, tried to make

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reforms against the inequality of land distribution and tax advantages for the rich, in order to protect the people, but their efforts to reform the Roman tax system were successful. This tax evasion played an important role in the social crises suffered by Rome.

A few centuries later, in the Eastern Roman Empire, the "Teodosian Codex" (439 BC) entered into force. It is a written code, with several laws on tax evasion.

At the beginning of the medieval period, the social and political system was completely overthrown. At that time, the peasants' taxation by knights and gentlemen was done in exchange for their protection, but peasants were also subject to tithes (etymologically: tenth), which represented the obligation to give up the tenth part of their harvest to the church. Tithing was a form of taxation appropriated by taxpayers, because at that time the mentalities were greatly influenced by religion, and there was the belief that this charging was truly imposed by God.

The development and improvement of income legislation took place in the era of urbanization and industrialization of developed countries, especially due to the needs of the many wars and their costs, in particular weapons acquisition.

In Romania, upon the unification of the Principalities and the first germs of industrial development, the tax system was modernized, but the phenomenon of evasion became more and more prevalent. The first direct tax reform was in 1921. In 1923, Law no. 661/1923 "for the unification of direct contributions and for the establishment of the overall income tax", which also had a positive influence, establishing a kind of fiscal code and fiscal procedure code, establishing also consistent fines (i.e. the tax on the taxed income) and even the possibility of correction punishment, but it also had gaps, the tax exemption on industrial buildings being one of them.

This law was amended by Law no. 88/1933 "for the unification of direct contributions and for the establishment of the global income tax"⁵. It was very modern for that time, being the equivalent of a current fiscal code. The law tightened sanctions, with separate provisions in Chapter VI "Measures against tax evasion and sanctions". It divided the deviations into simple contraventions, punished by a fine of one quarter of the tax due to the doubled

tax, according to the seriousness of the felony, and qualified contraventions (e.g. double accounting) punished with a fine representing three times the tax evasion plus the criminal and civilian liability of the perpetrators.

Also, this law also provides various anti-corruption and anti-abusive measures for tax officials, namely dismissal and being brought to court.

The first Romanian law dealing exclusively with tax evasion appeared in 1929, under the name of the Law on Fighting Tax Evasion on Direct Contributions.

In 1948 a new law against tax evasion was issued (Law No 344 of 29.12.1947), sanctioning the evasion of taxes and duties in any way, the delay in the legal deadlines, the failure to register traders, the failure to apply tax stamps or falsifying stamps. As an element of novelty introduced in this law there was the specific provision that it repressed illicit speculation and economic sabotage.

Tax evasion is defined in the post-communist Romanian legislation by Law 87/1994 meant "to combat tax evasion" defined as "the avoidance by any means, on the whole or just partly, to pay taxes and other amounts of money owed to the state budget, local budgets, social state insurance budgets and extra budgetary funds made by Romanian and foreign natural and legal persons named ... taxpayers" (Article 1 of Law 87/1994 "to prevent tax evasion")⁶.

The sanctioning regime in Romania

At present, the tax evasion offenses are stipulated in Law no. 241/2005 "for preventing and combating tax evasion".

The law was seen as a breakthrough, even if some gaps were identified – for example, "some acts that continue to present the danger of crimes with special implications for the underground economy should not be disinclined"⁷. The gap was subsequently filled in with changes in the law.

Thus:

a) "The following acts constitute tax evasion offenses and are punished by imprisonment from 2 years to 8 years and the prohibition of certain rights when committed in order to circumvent the tax obligations:

a) *hiding the property or taxable source;*

b) *the omission, on the whole or in part, of the disclosure in the accounting or other*

legal documents of the commercial transactions performed or of the income achieved;

c) highlighting, in accounting or other legal documents, expenditure not based on actual operations or evidence of other fictitious transactions;

d) alteration, destruction or concealment of accounting documents, fiscal stamps or electronic fiscal stamps or other means of data storage;

e) the execution of double-entry bookkeeping, using documents or other means of data storage;

f) the evasion of financial, tax or customs checks, by failing to declare, fictitious declaration or inaccurate declaration of the principal or secondary premises of the persons checked;

g) substitution, degradation or alienation by the debtor or third parties of the property seized in accordance with the provisions of the Fiscal Procedure Code and the Code of Criminal Procedure.

If by these facts more than 100,000 Euro damages occurred in the equivalent of the national currency, the minimum limit of the punishment provided by the law and its maximum limit shall be increased by 5 years.

If by these acts there were more than 500,000 Euro damages in the equivalent of the national currency, the minimum limit of the punishment stipulated by the law and its maximum limit is increased by 7 years²⁸.

b) "The following is a criminal offense and is punished by imprisonment from 3 years to 10 years and the prohibition of certain rights: the taxable persons' misrepresentation of taxes, taxes or contributions, resulting in unrequited reimbursement of money or repayments from the consolidated general government or offsetting from the general consolidated budget. In the case of an association for committing the deed it is punished by imprisonment from 5 years to 15 years and the forbidding of certain rights. In addition, any attempting act of the same sort is also punishable²⁹."

In the case of the abovementioned offenses, if during the criminal prosecution or trial the defendant fully covers the claims of the civil party until the first term of the trial, the limits provided by the law for the committed deed shall be reduced by half, provided that the perpetrator has not committed a tax evasion offense within 5 years since committing the deed for which he benefited from the provisions of this penalty reduction.

c) "The following is a criminal offense and it is punished by imprisonment from one year to 5 years and the prohibition of some rights - to hold or to put into circulation, without right, stamps, revenue stamps or standard forms, used in the tax field with special regime. It also constitutes a criminal offense and is punishable by imprisonment from 2 to 7 years and the forbidding of some rights to intentionally print, use, hold or put into circulation fake stamps, revenue stamps or standardized forms, used in the field of taxation with a special regime³⁰."

d) "The following is a criminal offense and is punishable by imprisonment from one year to six years - the unjustified refusal of a person to submit to the competent bodies legal documents and assets in the patrimony for the purpose of preventing financial, tax or customs checks within 15 days since summons³¹."

e) "The following is a criminal offense and it is punished by imprisonment from one year to six years - preventing in any way the competent bodies from entering on the premises or property of a firm for the purpose of carrying out financial, tax or customs checks³²."

f) "The following is a criminal offense and it is punished by imprisonment from one year to six years - withholding and denial, intentionally, within maximum 30 days from the maturity of the amounts representing taxes or withholding contributions (provision declared unconstitutional)³³."

g) "The following is a criminal offense and is punishable by imprisonment from 6 months to 5 years - the act of the taxpayer who does not intentionally or by mistake restore the destroyed accounting documents within the term included in the control documents³⁴."

As a complementary measure, taking precautionary measures is mandatory. Also, those who have been convicted for tax evasion offenses cannot be founders, directors, managers or legal representatives of the commercial company, and if they have been elected, they are deprived of these rights.

The sanctioning regime in France

Under French law, tax evasion offenses are laid down in the General Tax Code (Code général des impôts), Chapter II, Section I, C - Penalties, articles 1741 to 1753B.

According to the code, the crime of tax evasion is committed by any person who:

- embezzled or attempted to evade fraudulently by setting taxes or non-payment of all or part of them;
- deliberately omitted to make the tax statement on time;
- deliberately hid the transactions subject to tax, all or part of it;
- organized insolvency (fraudulent bankruptcy);
- impeded on the collection action or other tax maneuvers;
- acted fraudulently in any other way.

The punishment for these acts is a 5-year prison term and a fine of 500,000 euros, apart from the fiscal sanction.

Aggravating circumstances, punished with a fine of € 2,000,000 and seven years of imprisonment, are established if the deeds were committed in an organized group or are made, respectively facilitated by:

- open accounts or contracts signed with organizations set abroad;
- the interference of natural or legal persons or any comparable trust or institution set abroad;
- using a false identity or false documents;
- fictitious or artificial tax residence abroad;
- a fictitious or artificial act or the interposition of a fictitious or artificial entity.

The offense shall be withheld if the taxable source is hidden only if it exceeds one tenth of the tax basis or the amount of EUR 153 for physical persons.

As in Romanian law, any person convicted under the provisions of the Code may be deprived of civil and family rights.

The duration of the punishment borne by the perpetrator or the accomplice of the abovementioned offenses is reduced by half if, after having warned the administrative or judicial authority, he identified other authors or accomplices.

In the sense of the code, civil servants or government officials as well as accountants are accomplices.

Also, under the same conditions, the following persons are liable to punishment:

- any person who knowingly omitted or entered in the accounts fictitious or inaccurate operations;

- anyone who, in order to exempt from taxation the wealth of another person, on the whole or in part, takes part in these acts, either by resorting to foreign securities deposits, to transferring coupons abroad to be received or negotiated by issuing and collecting abroad of checks or other instruments created for payment of dividends, interest, or any securities products.

- anyone who knowingly provided inaccurate information to obtain approvals for tax exemptions or reductions or deductions from them.

All persons convicted of the offenses submitted may be jointly liable, together with the person liable for the fraudulent charge, for the payment of that tax and for the applicable tax.

The following aspects are assimilated to the facts that are concurring to the tax evasion offense:

- preventing authorized agents from establishing tax offenses and carrying out their duties, which is punishable by a fine of EUR 25,000 imposed by the Criminal Court. In the case of a repeated offense, the court may, in addition to the fine, impose a six months' imprisonment sentence;

- collective opposition to the establishment of the tax basis is punished by six months' imprisonment and a fine of € 7,500.

- performing concerted and organized maneuvers or attempting to organize them for the purpose of collectively rejecting the tax is punishable by the sanctions provided in Article 1 of the Law of 18 August 1936 for the suppression of attacks on national credit, namely 2 years' imprisonment and a fine of 9,000 EUR.

The person who has incited the public to refuse or delay payment of the tax is fined 3,750 euros and imprisoned for six months.

Also, the person who published or disclosed all or some of the information contained in the tax documents used in the tax investigation procedure or uses this information without legal authorization is also punished with an imprisonment of six months and a fine of EUR 6,000.

The sanctioning regime in the United States of America

In the US, tax evasion offenses are provided for and sanctioned in the Internal Revenue Code, Section F, paragraphs 72001-72012, of the Internal Revenue Code (26 U.S.C., section F, para 72001-72012, as follows:

• "Any person who deliberately attempts to evade or defeat any tax imposed by or obviate from the tax must, in addition to other sanctions provided for by law, if a criminal offense is found and, after conviction:

• be imprisoned up to 5 years, or fined up to \$ 250,000 for individuals (\$ 500,000 for corporations), or

• both, along with the costs of criminal prosecution"¹⁵.

• "Any person required by this code to collect, account and pay any charge imposed by this title, failing to collect or pay these fees, beyond the sanctions provided for by law, if found to be guilty of an offense, may

• be imprisoned for up to 5 years or

• fined up to \$ 250,000 for individuals (\$ 500,000 for corporations), or

• both, along with the costs of criminal prosecution."

• "Any person who, under the code, has to pay any tax or tax estimated or required by code or regulations, must make a statement under his authority, keep any records or provide any information that he does not intentionally pay such a tax or tax through non-compliance with the obligations, in addition to other sanctions provided by law and, after being found guilty may:

• be imprisoned for a period up to 1 year, or fined up to \$ 100,000 for individuals (\$ 200,000 for corporations), or

• both, along with the costs of criminal prosecution"¹⁶.

• "Any person who makes any declaration or other document confirmed by a written statement made under the punishment of perjury and which he/she does not believe to be true and correct in all matters found guilty of offense, must:

• be imprisoned for up to 3 years, or

• fined up to \$ 250,000 for individuals (\$ 500,000 for corporations), or

• both together with the costs of criminal investigation"¹⁷.

• "Any person who provides assistance or assistance, or deliberately advises the preparation or submission of statements or other fraudulent documents on charges, after his conviction must:

• be closed for up to 3 years, or

• fined up to \$ 250,000 for individuals (\$ 500,000 for corporations), or

• both together with the costs of criminal investigation."

• "Anyone who opposes force, intimidates or hinders any US officer or employee acting in an official capacity under the Code or in any other way or by force obstructs or prevents or attempts to obstruct or impede the administration of State revenue after being found guilty may:

• be imprisoned for up to 3 years, or

• fined up to \$ 250,000 for individuals (\$ 500,000 for corporations) or

• both, together with the costs of criminal investigation."

• "If two or more persons conspire to commit an offense against the United States or deceive the United States or any agency thereof in any way or for any purpose and one or more of these persons do any action that to be the object of the conspiracy, each may:

• be imprisoned for up to 5 years, or

• fined up to \$ 250,000 for individuals (\$ 500,000 for corporations), or

• both, together with the costs of criminal investigation"¹⁸.

The sanctioning regime in Austria

Austrian Financial Criminal Law (Finanzstrafgesetz) combats both tax evasion (Article 1, paragraph 33) and tax evasion as well as tax fraud.

Thus, tax evasion consists in the reduction of taxes through:

• violation of the obligation to submit pre-registrations pursuant to the Value Added Tax Act 1994;

• breach of the obligation to comply with the provisions of the 1988 Income Tax Act and the regulations on wage accounts (reduction of income tax, employer's contributions to the family allowance compensation fund or surcharge on the employer's contribution);

• if the fees to be invoiced have not been paid in full or in part;

• granting unfair or excessive tax credits;

• if a fee has been wrongly refunded or an extraordinary fee has been wrongly paid;

• if a tax claim has been erroneously erased, in whole or in part, or a payment charge has been erroneously retained completely or in part.

Tax evasion will be punished by a fine of up to twice the amount of the stolen sum and a term of imprisonment of up to two years.

The sanctioning regime in other states

- in the Romanian law, there is a more severe sanctioning regime for the tax evasion offense, meaning that punishments can reach up to 15 years, while in French law the imprisonment lasts up to 7 years, under U.S. law for 5 years, or in the 10-year Austrian law;

- the Romanian law does not provide for criminal sanctions and fines compared to French law where criminal fines can reach 2,000,000 euros or US law in which they can reach 500,000 USD;

- in the Romanian law no additional penal sanctions are imposed, compared with the Austrian law where the penal fines can reach 10,000,000 euros and in US law can reach 500,000 USD;

- in Romanian law the regulations regarding the hiding of the object or the taxable sources through operations with foreigners are omitted;

- in the Romanian law, avoiding in bad faith tax payment for taxes withheld at the source was declared unconstitutional and was not reformulated according to the decision of the Constitutional Court of Romania, the Austrian system having this legal provision;

- the complicity in committing tax evasion offenses is not regulated by this special law, nor the joint liability for damages, and the provisions of the PCN remain applicable;

- in the Romanian law, the margins of the evolution of the procedures and possibilities of avoidance of taxes and duties are not regulated by phrases such as "or in other ways";

- Romanian law regulations are adapted and have been more explicitly adjusted for some of the criminal aspects frequently found in Romania - illegal VAT reimbursements (the phenomenon has suffered a reduction in the size after the adoption of the regulation), falsification and the use of revenue stamps / stamps for excisable products, their illegal possession (the phenomenon suffered a sharp reduction after the adoption of the regulation);

- Member States of the European Union do not have uniform regulations in the field of criminalization of tax evasion and penalties; no directives are issued, nor tendencies to unify the provisions at least at the level of VAT; tobacco

excises and customs duties are presented in the Commission's Report to the European Parliament and the Council of Europe - "Protecting the European Union's Financial Interests - Fighting Fraud" (2016 Annual Report).

The causes of the crime of tax evasion

The identification of the causes that lead to the occurrence of the offense is a particularly important aspect for the activity of conceiving the methods for preventing the criminal phenomenon. The main causes of the occurrence of the tax evasion offense are:

- *the complexity of the tax system*, settlement, levying, tax deduction and deduction mechanisms, as well as fiscal facilities, which allow and incite tax evasion at the same time;

- *the lack of specialized tax or commercial courts* determines the excessive use of remedies against control, which means long time frames for clearing up the situation and collecting debts to the state budget;

- *the excessive duration of criminal investigation and criminal proceedings, the gentle punishments* applied in different cases and divergent solutions in similar cases stimulate this phenomenon;

- *the inefficiency of fiscal supervision*;

- *shortcomings in the work of coordinating internal and international authorities* and the lack of common, internal and especially international databases. For example, according to the European Parliament Inquiry Report of 16 November 2017 for the purpose of examining the alleged breach of Union law and maladministration in its application in relation to money laundering, avoidance of tax burdens and tax evasion, the "Directive on Administrative Cooperation on Reporting for each country between the tax administrations had to be implemented by the Member States in national legislation by 4 June 2017; notes that there are pending actions concerning 11 Member States (Bulgaria, Cyprus, Croatia, Estonia, Greece, Hungary, Malta, Poland, Portugal, the Czech Republic and Slovakia) "

- *the repeated change in tax legislation and the lack of coherence in regulation*. In this regard it should be taken into account that "The beneficial effect of state intervention, especially under the direct legislative circumstances is immediate and,

so to speak, visible, while the adverse effects of evasion are gradual and indirect, therefore hard to perceive”

- *reduced possibilities to control and investigate international frauds.* “Tax evasion can be considered a phenomenon that can be found at both national and international level. It is also one of the most widespread crimes in the economic and legal field. “ Correspondingly, the cooperative approach of tax havens, which “are ideal for the purposes of those who receive illicit income”, suggests that no matter how many efforts are made, they remain, however, insufficient qualified and specialized human resources. According to the report of November 16, 2017, the lack of resources affects the ability of tax administrations to effectively comply with spontaneous requests for information exchange under the DAC, which is a systemic problem within the EU.

- For example, “out of a 91-million-dollar loan contracted with the World Bank, ANAF used only 23.5%, meaning that 23,5% of the allocated money was spent, instead of a leu on IT systems”. Absolutely all the money, equivalent to 60 million lei, was spent on consulting only “.

Conclusions

Tax evasion is one of the worst antisocial phenomena, since it has a direct effect on the good functioning of the state, namely on the assurance of its functions, starting from social protection, social cohesion and ending with the protection of independence.

It is the role of the state to ensure through regulations the limitation of “legal” tax evasion, which has the same effect as tax fraud.

Regarding the prevention and combating of tax fraud, in the sense of diminishing it to a reasonable level (complete eradication is virtually impossible and has not been carried out by any state), legislative and institutional measures are necessary to constantly adapt to the evolution of the criminal phenomenon.

In a world with rapid economic globalization trends and the exponential growth of international goods, services and capital flows, there is a growing need to speed up the development of internationally harmonized state laws, especially because the immense sums of money obtained through frauds of fiscal nature that intertwine with

other criminal offenses (smuggling, counterfeiting, money laundering, trafficking in human beings, drug trafficking, etc.) are intended to finance terrorism at international level. This risk must be made aware to global policy makers who, due to private interests, accept the current insufficient and inefficient regulatory situation in the world and even situations of failure to regulate the fight against tax evasion. It is only a lack of political will that does not isolate states and territories that refuse to cooperate in the implementation of unitary fiscal measures and who accept the complicity, from their own financial interests, with criminals operating in the black and gray economies of other states.

At the same time, an important factor generating significant tax frauds is also the inconsistency of EU-level regulatory action to increase efficiency in the fight against fiscal fraud, as the free movement of goods and services at Union level is possible. It is true that unitary regulation is extremely difficult to achieve given that at the level of the union each state has its own interests, which often come in collision with the general interests. Another aspect is the existence of a fracture between the French and Anglo-Saxon law systems at the level of the traditional justice systems, and the legal systems of the Member States with some hybrid systems resulting from their adaptation through the transition to a system with former communist influences towards a somewhat hybrid system.

As a consequence, it is urgently necessary to create opportunities for preventing and combating crime at legislative and organizational level, the Union’s interest being to have the largest budget to ensure the cohesion of the Member States.

Regarding tax evasion internally, although it appears to be low in the case of a taxpayer, given the hundreds of thousands of taxpayers or potential taxpayers who obtain income from sources other than salaries or other income for which taxes are retained at source, the total of tax evasion becomes really relevant in the phenomenon of tax evasion.

In post-communist Romania the anti-fraud legislation was conceived late and with minimal regulations. The same thin happened with the forced capitalization policy of small entrepreneurs. With preparations for joining the European Union, due to the increased need to combat this phenomenon, several improvements have been made to both the legislation and the fiscal apparatus.

Preventing and combating tax evasion has become an obligation due to the fact that it affects not only our state but also the interests of the European community.

At present, the improvement of the fight against corruption has become a necessity at international level and both international bodies and the European Union are in the process of identifying the causes, consequences and techniques for combating tax evasion.

Following the studies and reports requested, recommendations and directives have been issued at European Union level trying to harmonize national legislation on the control and prevention of tax evasion.

Both national and community decision makers need to be made aware of the legal framework in the field of taxation and the awareness of all Community citizens that tax fraud affects their long-term interests, even if they seem to be beneficial in the short term.

It is also necessary to raise the awareness of all officials who have the attributions of identifying, identifying and investigating cases of tax evasion, as well as those judging the tax fraud offenses, of extreme gravity for this phenomenon and the need for active and sustained participation in the struggle to combat it.

NOTES:

1 *The Constitution of Romania*, modified and completed by the Law for the Revision of the Romanian Constitution no. 429/2003.

2 *Ibidem*.

3 *Law no. 227/2015 – Fiscal Code*.

4 *Conceptual Aspects of Fiscal Fraud*, Issue no. 4, 7-13 February 2017.

5 *Law no. 88/1933 “for the unification of direct contributions and for the establishment of the overall income tax*.

6 *Law 87/1994 “on combating tax evasion*.

7 *Ibidem*.

8 *Law 296/2009, Criminal Code*.

9 *Ibidem*.

10 *Ibidem*.

11 *Ibidem*.

12 *Ibidem*.

13 *Ibidem*.

14 *Ibidem*.

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ASPECTS ON THE IDEOLOGY OF THE FUNDAMENTAL ISLAMIC TERRORISM IN EUROPE

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The need for security throughout Europe is one of the fundamentals of modern societies. In particular, the technological and industrial development has led the contemporary communities to new directions in terms of their economic, social, political, cultural or other kind of evolution. Taking these into consideration, worldwide fight against terrorism has become a primary objective for most of the world governments. The Islamic fundamentalism is a justificatory reason for decoding the security realities.

Within the present article, we formulate hypotheses that might be starting points for the integrated approach of the Islamic fundamentalist terrorism phenomenon and several viewpoints concerning possible future solutions.

Keywords: terrorism; attack; Islamic fundamentalism; separatist ideologies; Jihad.

"Allah is our purpose, the prophet – our model,
The Quran – our constitution, the Jihad is our way,
and dying for Allah is our utmost desire."

Hassan al-Banna – founder of the Muslim Brotherhood¹

The beginning of the third millennium is characterized by an unprecedented scale of global terrorism and a great diversity of its forms of manifestation. In this context, the issue of analyzing the phenomenon of terrorism has acquired new dimensions and valences under the very controversial sign of the security systems globalization.

The concerns of the security structures responsible for terrorism suggest that an interdisciplinary approach is needed to understand the motivation of the actions of the organized terrorist groups. Studies and reports on terrorist events show that terrorists are motivated not only by psychological factors but also by social, political, religious or economic ones. Therefore, the motivations, the goals, the ethnic separatist, anarchist, revolutionary or religious fundamentalist ideologies differ significantly, and the ideological influence in the context of socio-economy, culture,

demography and other realities becomes extremely relevant and dangerous. In spite of all the difficulties, we can say that terrorism consists in the deliberate and systematic use of means capable of provoking terror in order to reach the most diverse purposes, which ultimately have a political agenda. Terrorism promotes interests, ambitions, and messages based on intimidation, threats, coercion and violence. It is the conscious exploitation of terror, the degree of fear being generated by the very nature of the crime in question, by the manner of committing it, by its absurdity and its uselessness regarding the number of human casualties and material loss².

General Features of the Phenomenon of Terrorism

In the light of their asynchronous hierarchical and dogmatic structure, the terrorist organizations have long stopped mistakenly being dubbed as rampageous uncritical religious factions of overzealous fanatics, as the literati arguably distilled the causes of the convoluted terrorist phenomenon and surmised that their intrinsic ontologies have multiple similitudes with various types of worldwide organizations, to each with their own peculiar characteristics. The indoctrinated ideologies and

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personal common beliefs of their faithful members reveal their antithetical and asymmetric traits, in antithesis to the other worldwide organizations in which their members share ubiquitously legitimate beliefs. Ultimately, the ambitions of the terrorist organizations in polarizations to the other existing myriad of international organizations in the usage of exacerbated violence as one an oppressive tool crafted to inflict fear and cause public havoc and panic in order to accomplish their goals. Metaphorically speaking, violence is a honed "saber" in the hand of the terrorist organizations and shall not be mistaken for their main purpose of existing as their supreme goal is always a political one.

Having an overt advantage over the army forces which are overtly more numerous and built on the grounds of the international treaties flanked by rigorous national and international laws and principles only operating under the strict rule of Law, the following characteristics in contrast to the military forces, perfectly mirror the image of the terrorist organizations: surprise in action, a generally strictly determined area of operations, a very good knowledge of the area of operations, one or more logistics support areas within their area of operations, often under very good conspiracy conditions. This entails a major difficulty in finding and destroying them by the police or the military forces in whose area the terrorist organizations act. In this context, it is worth pointing out that terrorist actions have become much more particular in the sense that they require relatively minor material resources, simple and remotely efficient communication systems that provide certain autonomy or even operational independence from the logistic requirements, which are much limited³. An important feature of terrorist attacks is that they usually end up with innocent and casual victims. By killing or injuring people, the terrorists promote their goals or shock the audience of the target. In many cases terrorism is regarded as the weapon of the weak against the strong, since the reasons behind their actions are political realities of the Western world. In addition, even if a suicidal terrorist act fails, or even if the government's anti-terrorist structures kill a terrorist leader, the results of an assault are often in favor of the terrorist group by martyring the fallen and praising his cause.

In order to achieve the intended objectives, the terrorist organizations and groups resort to a wide variety of action forms and procedures, each with its own characteristics. The statistics of the last thirty years show that nearly 95% of the world's terrorist acts fall into the following basic tactics: bombings, assassinations, suicide attacks, armed attacks, kidnappings, hijackings, and hostage-taking. In the joint sense, any terrorist action is ultimately nothing more than a variant of the above. At the beginning of the 21st century, the essence of terrorism remained equally primitive in relation to the state of civilization, while, however, its methods and means of putting it into practice, as well as the capabilities of targeting strategic level targets have known a dramatic "development" for mankind. The variety of methods and procedures used in the terrorist actions determines the year-on-year increase in the number of terrorist acts and the danger they pose. They are in a way diametrically opposed to the characteristics of modern democratic society and symmetrical to them by the fact that the strategies and the tactics used by terrorists are part of the ingenious, violent, brutal, vindictive, surprising and cold asymmetry. It can also be added that in today's globalized world, terrorists can engage their targets much faster, since the potential targets are permanently exposed and the subversive news and ideas that can determine people to become partisans of the terrorist causes can be easily and quickly spread through global communications networks.

Today's terrorism has gained a global dimension in at least two aspects. The first is the possibility of terrorists, including known leaders of terrorist organizations, to move unhindered to any part of the world, and use false identities for this purpose and benefit from travel facilities similar to those of tourists or businessmen from the democratic countries. This allows them to study in detail the targets they aim to attack, to execute various banking and monetary operations, to attract proselytes to the cause of the terrorist group they belong to, etc. The second aspect of the globalization of terrorism lies in the fact that the terrorists have fully expanded their own logistics activities as well as the operative actions, making it difficult to monitor their organizational and planning efforts by the terrorism prevention agencies⁴. The terrorist is an invisible, dissimulated enemy, lost in the

crowd, without distinctive marks. He is part of a networked command and control system with an undefined, unclear geographical location but with secure, efficient and sustainable connections, the training in special camps having provided him with patience and care in the choice of targets and the execution of the attacks. It is very likely that, in the future, terrorism will mainly focus on targets in the field of information, in the system of common values of the world, and especially in the systems of values of the nations. Concepts of "net war", "cyber insurgency" and "information terrorism" create a dramatic image of an undeclared war in the undefined world of cyberspace – a "fourth dimension" created by the endless chain of computers. Indeed, war by means of computerized networks is both a new way of penetrating the range of economic, social and political conflicts, as well as a military conflict in itself^f.

Conceptualization of the Phenomenon of the Islamic Terrorism

The basis of terrorism is the Islamist organizations and the communities formed around the mosques that plant the seeds of radicalization, not necessarily through the actual recruitment of terrorists, but by politicizing the sermons, which give a sense of victimization to the Muslims. In the same train of thought, hatred has been widely inculcated in the Islamic population towards the non-Muslims and other social segments such as the homosexuals or the women, manifesting itself through mass demands of social equality and refusal to wear the veil or the burqa. In this regard, we note that a fundamental distinction must be made between Islam and Islamism. The Islam is the belief of a billion and a half people from all over the world. The Islamism is the political ideology that demands the enforcement of the sharia or the holy Islamic law throughout the world. These Islamists, individuals who believe that the Islam is a political and governing force can generate behaviors of the typology of social issues. However, an observation must be made in the fact that there are also moderate Muslims. They are the reformers who want to make Islam compatible with the freedoms and rights of all citizens and the society of the 21st century. Also, their status can become a serious duality in the sense that they are also the victims of the Islamists who believe that

they are not Muslim enough⁶. On the other hand, we can consider that the Islam perceives Western civilization as the seat of evil, illegitimacy and decadence, rejecting any other religion, including the pre-Islamic one. The fundamentalist Islam – as a religion that is supposed to be synonymous with politics and government – is incompatible with the rights of the Western world and with freedom in the sense that we understand it and with all the institutions familiar to the Western way of life, namely with the human made laws and the rights of the humanity to adapt, to progress and to modernize. In a democracy, the laws are a creation of man, as a result of their subjectivism, thinking, judgment and reason, or Sharia is the Word of Allah, therefore it is not a creation of man, which eliminates subjectivism, humane and free thinking, which leads to the conclusion that there is a total incompatibility between democracy and Islam.

For the Islamists, the foundation of the Caliphate is another sign that the End of Times is approaching; the success of the ISIS terrorist organization by founding the Islamic State is irresistible and draws young recruits from all over the world, including Europe and the United States of America, fighters who want to participate in the battle before the final apocalypse, giving them an ideological sense. Every murderous act committed by ISIS, each barbarous assassination that appears on social pages becomes legitimate because it announces the beginning of the apocalypse. Cruelty is the core of their governing method, the basis of their strategy, in order to shock, draw media attention and discourage enemies. Their actions aim at fulfilling Mahomet's prophecies about the coming of Judgment Day. The Mahomet's doctrine materialized in the Word received from God transposed into the Quran becomes the basis of the Islamic fundamentalism, and the fact that it has come directly from God makes this Word immutable; it cannot be changed, interpreted and passed through the filter of thought and subjectivism. What the Islamists blame today and what Mahomet condemned is the corruption and the immorality (depravity) of the Western or the whole world. Al-Qaeda and its Islamic Sunni allies have not only removed from power the most important secular government in the region, the one in Egypt, but also managed to incite a civil war in Syria against the Bashar al-Assad regime, which is part of the Alawite (non Sunni) majority.

Syria, is the area where Dabiq is located, the place considered by many Muslims to be the place of the final confrontation between the forces of the Islam and the infidels. Equally important is the threshold to be crossed in order to destroy Jordan and Israel, a good reason why Syria enjoys special attention in the 20-year plan drawn up by Al-Qaeda. We are about to witness the merger between Al-Qaeda and the Islamic State. Before the Islamic State there was ISIS, and before ISIS there was the Al-Qaeda wing in Iraq. Al-Qaeda has evolved from a terrorist organization to a model ideological movement, to which ISIS and dozens of other Jihadist groups have sworn allegiance⁷.

Mixing the Sharia fundamentals in the area of justifying the terrorist actions is that corrupted codification of Allah's life rules, which can be interpreted as a perfect expression of his will and his divine justice. That is why, in this environment of religious, it is considered the supreme law governing over everybody and everything, everywhere people lives. There is no aspect of life that Sharia will not handle; it governs and dictates everything. As the law of the Islamic State, Sharia goes beyond the religious domain and goes into the public one (holding control over all domains). Approaching the ways to disseminate the concept, we can say that the Muslims do not accept another sovereign or authority unless they guarantee the enforcement of the Sharia laws in their entirety. In this sense, any other legal system, no matter how attractive it may seem at first glance, is rejected by the Muslims and is unlikely to be the solution to their problems and it would be compromised from the beginning. It is therefore deduced that one thing can unite every group of the Islamic terrorism worldwide, and that is the desire to make Sharia the law of the place everywhere on the surface of the earth. All the propaganda messages through the media mention the obligation to impose Sharia, primarily in the Muslim-controlled places and then all over the world. The Quran orders that Sharia will always guide all the Muslims from all the corners of the world, says Abdur Rahman Doi, an Islamic law researcher from Malaysia. The Jihadists do not distort their religion, and without an obviously fundamentalist support, the shocking violence of the beheadings, the crucifixions and the murders of women and children cannot be meaningless. They have a particular meaning, which justifies the

appearance of fear and the creation of a persistent impression that the foundation of the Caliphate is inevitable, that its supporters will resort to every means necessary for founding it. The Islam as a religious justification is becoming increasingly intolerant not only to those who seek to support freedom and the human rights, but to millions of Muslims. People favoring moderation and a classical liberal approach that consider faith a connection between God and man, not something imposed by the authorities, are silenced and, in some situations, hunted and killed. This is the problem which requires a necessary and rapid reform of Islam. If the Islamic advocates systematically reformed their religion - dissociating themselves from its former barbaric forms, we would no longer be in a situation where religion itself would be at the core of the debate and, unfortunately, of terror and deaths everywhere in the sense of committing acts of terrorism.

The total rejection of the Western values is their declared openly expressed intention. The war is declared against Christians, Jews and all non-Muslims, because there are no Muslims and true Muslims, Islam being based on conquests and violence, rejecting the Western ideas. The Jihadists take Islam very seriously, which is a religion of war, not of peace. Islamic radicalism has become the most serious threat to Western secularism and capitalism. For those who feel disappointed with the Western materialism, disoriented and lonely, groups like ISIS come with a full offer: jobs, acceptance, dignity, and the feeling of being in the winning camp. The so-called Islamic State, self-proclaimed Caliphate, needs people, faithful supporters, ready for any sacrifice. ISIS requires men to fight and rule over the occupied territories. It recruits even young women, to become the wives of the fighters then settle them in the ISIS-occupied territories where they form families. Thus they manage to attract those who yearn for action and are indifferent to notions such as patriotism or duty towards the community. They would have the chance to see their fantasies come true and to live in a world where the main attraction is war, and they are the heroes. Foreign fighters also serve the propaganda goals of the organization, playing an important role in the psychological warfare. First of all, ISIS uses them to prove that the Islam is more appealing than the Western materialist

culture. ISIS is not an insurgency movement born in Iraq or Syria, even though most fighters come from this region. More accurately, ISIS is a mixed organization of Jihadists from the Middle East, Afghanistan, Pakistan, the former Soviet Union, the Balkans, North and West Africa, which tries to impose its rules and values on a vast territory regardless of the religious or political beliefs of the locals. Expansion is part of the ISIS ideology. So are rape, slavery, torture and genocide. In addition, ISIS invented something revolutionary, recreating the strategy of terrorist combat, by transforming the social networks into a psychological, offensive warfare, whose power will now be an important battle tactics⁸.

The Islamic world is a complicated one. The tribal and national alliances are twisted, and the interests of the non-Muslim powers in the region are directed to the oil existing here and the center of influence given by the Saudi Arabia, which complicates things even more. Yet, from the origins to the present, Muhammad's followers have not beheaded men nor did they throw grenades or missiles on cars in which people were blocked. These crimes are committed with the purpose to shock and intimidate and deepen the moral gulf that separates the terrorists from the rest of the world. The ties that these atrocities create are strong enough to last a lifetime and survive after the cause has already been lost. Terrorists hope that through the image they provide, they will attract many followers, funds and other forms of support. Guerrilla fighters and organized crime practitioners, as well as terrorists, generally want to have positive relationships with the population they come from, whose interests they defend or serve. There are also cases where terrorist groups attack and kill civilians without making a difference between "friendly" and "enemy". Thus, Al-Qaeda has probably killed more Muslims than Christians and Jews, being unable to avoid collateral victims, or even deliberately targeting the Shiite Muslims (the case of the Al-Qaeda organization in Iraq, led by 2006 by the leader Abu Musab Al-Zarqawi, a declared enemy of the Shiite)⁹.

Specific Aspects of Islamic Terrorism in the European Space

The European Union is faced with the development of the Islamic terrorist groups also

within its borders, which is mainly due to the high number of Muslim immigrants who have found refuge on its territory. The issue of the re-Islamization of the Muslim population from the European territory is also due to the "protectionist" policy of some European states, which is manifested by the preservation of the national traditions and the religious precepts. The West, as a rule, has a position of rejecting everything that is foreign influence, whether it originates in the East or in Eastern Europe. This is the circumstance under which the Muslim immigrants are usually isolated, not so much by political will, but by the attitude of the citizens in the country of immigration. Muslims are not assimilated to the European civilization, being considered incompatible with the traditions of the European democracies. In this regard, it should be noted that numerous terrorist attacks in Europe have been committed by young Muslim European citizens educated in the European values system. Thus, the Western governments must also manage the threat posed by the Jihadists raised in their own countries who have been inspired by Al-Qaeda or ISIS but cannot travel to Syria. ISIS claims that rebuilding the Caliphate has awakened the extremists around the world. Most likely, the conscious use by the fundamentalist organizations resorting to some barbarous forms of violence resonates with a single audience of people who not only that lack embarrassment to such atrocities but who might even try to participate in such activities. The large-scale publicity of terrorist attacks such as those in Brussels, Ottawa, Sydney, Paris, London and Copenhagen, where the victims were stabbed or there were cars that simply crashed into crowds, excite the fanatical Jihadists even more.

In the context of what has been said above, Europe can be both a target for attacks and a possible base for training the terrorist groups. However, the threats to Europe were mainly due to the involvement of certain states in the wars in the Middle East (Iraq, Afghanistan, Syria) and not to a continuous and proclaimed aversion of the Arab world to the European states, as in the case of the US – the fundamentalist terrorist attacks are seen as the main forms of aggression against the number one enemy of the Islamic world. As a result of the terrorist attacks in Europe, a worrying truth becomes more and more obvious, namely that the terrorist threat does not come from the religious

schools in the Muslim states, but it is represented by the citizens of the Islamic religion in the Western States, the second generation of Muslims, who are European citizens. They have never been in a training camp of a terrorist group; they have not fought in Iraq, Afghanistan or other Jihadist fronts, and yet adhere to the preparation and committing of the abominable acts. The identification of "religious conceptual balance" brings Westernism to its forefront with its role in the European physical space, especially since the westernizing did not produce the expected results in the 20th century. Just as fascism or communism combined masses of dissatisfied individuals, the Islamic fundamentalism unifies the traditional religious symbols with the ideology of revolutionary action. "Opposition Unity" allows all Muslims dissatisfied with dealing with a globalized world they are about to lose, to embrace the Islamic fundamentalism - an ideology that has gained its legitimacy as the only alternative to the deterioration of the living standards, to the dissolution of the cultural, political and social system of the Muslim world¹⁰.

On the other hand, the Islamic terrorism is vulnerable to several counterattacks right from within. The most convincing comes from the educated Muslims who can bring arguments against the simplistic and violent interpretation of the Islam. It is already happening, but there must be more Muslims involved, who also need to develop communication skills through media networks to be able to confront the terrorist organizations in the virtual environment. Also, the moderate Muslims must ensure that the mosques and their social communities are not dominated by the radicals. At the same time, the state authorities have to support these people and do more than arrest those suspected of terrorism. Due to the existence of the Muslims who feel intimidated by the extremists, the former need to be protected in order to speak openly. Companies with socializing platforms have already improved their protection methods. We consider that resources should be allocated to these companies to be one step ahead of the terrorists. On the other hand, Europe will have to spend substantial sums of money in this direction. Programs devoted to young people - immigrants and non-immigrants - from the Western countries are needed to help them find a decent job, to help them have a say on how the

country in which they live is governed and to stay optimistic about the future. Thus, the alternative to a military response of the West to terrorist attacks is the operationalization of a strategy based on dialogue and not on intimidation, on implementing the democracy and on supporting the economic progress rather than on territorial domination, on multicultural approach and not on border controls. In other words, a strategy that provides an answer to the phenomenon of the radicalization of the Islamic world is not given by a world that believes it has no chance in the face of the hegemonic West. Although terrorism appears to be an ever-present threat or a system of chaotic action that generates an apparently hopeless situation that expands to almost all areas of political, economic and social life, it cannot be controlled and countered by measures lost in a vicious system. Solving this situation involves multiple solutions, some direct, radical and categorical, even violent, intended to nip the evil in the bud, other indirect consisting of well-designed strategies to reduce the discrepancies and the effect of fracture, to harmonize social and international relations and on this basis to improve the human condition.

However, in our opinion, the only solution that can be used to resolve conflicts of any nature must be dialogue and compromise. Unfortunately, when terrorism occurs, reason disappears; it is replaced by fanaticism, the loss of logical thinking and of essential human values. Although terror means crime, no matter what motivation is given to it, crime has to be severely sanctioned by mankind, being considered not only a serious violation of the natural morality, but it can be religiously viewed as a capital sin sanctioned by the Divine Force, no matter how it is called throughout history. Therefore the challenge of terrorism as an act that pleases Allah is a monstrous mistake. Europe is made up of diversity: there are Christians, but also Europeans who have another religion or have none and all must be respected. We defend the freedom to embrace a religion, as well as the freedom to have no religion. This characterizes Europe: freedom of choice and tolerance. Europe is a multiethnic, multicultural and multi-religious continent, from which we cannot exclude the Muslim, Hindu or Buddhist communities which live together, giving it a new physiognomy.

Conclusions

Few peculiar characteristics outline the contemporary terrorism/the terrorist phenomenon and anticipate their impending future evolution as a volatile asymmetric entity with its new form of manifestation, the super terrorism and mega terrorism and recently, the nuclear terrorism:

- The imminent ascension and enhancement of the ideological contemporary terrorism as a target to the main global mass-integration processes, such as the European policies of integration and immigration policies;

- The terrorist phenomenon caresses a tremendously exacerbated psychological impact-oriented strategy. Its devotees aim to attract more aspiring adepts, new forms of external funding and other means of support, by emphasizing and augment their revolting savage image of extreme violence, assaulting every form of mass-media, actively targeting their enthusiasts on the social networks;

- By exploiting the psychological impact produced by their violent actions and augmented by the massive exposure in the mass-media, they successfully reach to the minds and hearts of the specific branch of the population, with tremendous consequences; the political and ideological segregation of the population within a society with heftier chances of attracting new recruits and more external support;

- The flourishing of the new forms of contemporary terrorism, such as cyber terrorism, as a chain reaction of the technology breakthrough and the emerging of the new cyber-technologies.

In the light of the contemporary international context in its compelling complexity and versatility, one of the major concerns is the universally acclaimed freedom of the people to a harmoniously seamless self-development governed by the rule of Law and the international human rights principles. The international protection of the human rights is imperative for a universal climate of democracy, freedom and evolution in the light of an intertwined world marked by the phenomenon of massive globalization. Thereupon, amorphous phenomena such as the cross border terrorism – which have no respect or consideration for the human rights and the healthy democratic principles of the society

and their orderly values and use extreme violence and forms of terror and repressive force to reach their own goals, pose a serious threat to the world peace and the imperative respect for the principles of fundamental human rights.

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DATA REGARDING MEDICAL SUPPORT OF THE MEDIEVAL ROMANIAN STATES' ARMIES

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In the paradigm of the famous assertion by Winston Churchill, quoted as "The farther back you can look, the farther forward you are likely to see". I considered necessary, useful and relevant, a short synthetic analysis regarding the workings of the sanitary service in medieval Romanian state armies. I judge that the errors, mistakes and the successes in the medical field, of the great battles and past military campaigns can serve as history lessons as well as life and practice lessons to the new generations of military doctors.

Keywords: Medieval times; wars; armed conflicts; medics; surgeons; barbers; conjure men; military medical support; medical chariot; provisional military hospitals.

In the first historic mentions of conjure men on the territory of the Romanian Countries the notion and name of "surgeon" was associated with the respective conjure man¹. However this occupation began to gradually decrease in spreading, in favor of the often disloyal competition, presented by the barbers and surgeons of that time².

A number of historiographers of the Romanian military medicine claimed that on the territory of the Romanian Countries there were establishments similar to military hospitals even as early as the 15th century. In this sense, Aron Pumnul, the great linguist, philologist and literary historian, professor of Mihai Eminescu, recorded in 1865, in his work "A Quick Glance on Two Hundred Sixty-Seven of Properties or So Called Monastery Estates" a legend according to which Stephen the Great built in 1487, at Pătrăuți, a shelter (hospital) for "the cripple of the many wars he fought". This, however, was not confirmed by any other historic source of the time.

Likewise, in the summary of the accounts of patriarch Macarie of Antiohie's travels through the Romanian Countries, drawn up by his archdeacon, Paul of Alep, and best known from the English translation by F.C. Balfour, there was a mention of a true military hospital called, "military hospital depot", which had existed during the reign of Vasile Lupu (1634-1653), in the village Pravicea from Moldova³. A thorough subsequent technical

analysis of a translation from Arabic into English invalidated this hypothesis, the information in fact, textually referring to a fief of sipahi, members of a Turkish cavalry corps⁴.

From contemporary written sources we can find out that conjure men, surgeons and barbers had an important role in the healing of the sick and wounded and would accompany armies during military clashes as they would follow in the cases of some wounds firstly, to remove the object protruding into the fighter's body. Sometimes, the wounds that presented hemorrhaging were treated with calcined alum, copper sulphate etc. A universally accepted principle was that of delaying the scaring through the prolonging or provoking suppuration on the wound's surface, the substances applied locally in these cases being: turpentine, Saint John's wart oil, egg yolk or other plant based ointments, honey, salve and other anti-putrid substances.

In the case of wounds caused by firearms, the surgeon would first seek to remove the bullet. On the other hand, wounds associated with blood loss would be treated with anti-hemorrhagic substances, amongst which we could mention: calcined alum, copper sulphate, lead acetate etc. Wounds to the joints made in battle were treated with "astringent or desiccative"⁵ substances. They had vessel-constrictive, contractive or drying properties and could reduce secretions and when applied on the wound would absorb the puss. Another type of substance used was "hot sambucur oil"⁶.

For the first time in the Romanian Countries, the barbers, a particular category of people with healing abilities, appeared at Brașov, towards the

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end of the 15th century, and later on, in the course of the 16th century, they took the places of the conjure man, bringing with them a new perspective on the rudimentary medicine of the time⁷.

Another class of people with medical abilities was constituted by the surgeons who were similar to barbers and conjure men, with the distinction that they sometimes had certifications obtained in foreign countries or documents that proved their training in the field from the guild of barber-surgeons. They were often called upon to tend to the health of rulers⁸.

Regarding the appearance of the first doctors with academic medical education in the field, on the territory on the Romanian and Moldavian countries, it must be highlighted that the title in question was first mentioned only in 1540, in the frame of a Slavonic text attributed to Radu Paisie, ruler of Wallachia in 1535-1545, where the phrase "dohtor"⁹ was used.

From a numeric standpoint, we should point out the fact that barber-surgeons and surgeons met a rapid growth in the feudal age, most of them being foreigners that arrived in The Romanian Countries. They would practice their craft in an open space, for everybody to see and besides their practical training they also possessed a certain body of knowledge, practicing their craft in the cities as well as in the countryside. And so in "The Moldavian Codex" from 1646, to the Great Wallachian one from 1652 or in "Hieroglyphic history" by Dimitrie Cantemir, we find information referring to conjure men, barbers, surgeons and their abilities. However, unfortunately, a number of facts referring to the conjure men of those times have remained entirely unresolved by history.

In the light of what was mentioned above, we can conclude that in the territory of the Romanian Countries, the medicine of the early feudal age was a purely empirical one, many times reduced to chants and spells, to the random and senseless administering of drinks and herbal salves, to anointments and stretching of different parts of the body, following groundless techniques passed down by word of mouth from one person to another. Subsequently, similar practices were used by the orthodox priests from these lands, creating the so called "ieratic medicine".

Later, the establishment of Romanian feudal states led to the improvement, to some extent, of

the population's health, with higher life expectancy, and the feeding of the population became easier with the prioritized cultivation of wheat instead of barley and millet and through the raising of small domestic animals (sheep, pig). All of these elements lead to an increase in birth rate. Despite all of these, the health of the population continued to be seriously threatened by infectious and contagious diseases such as: plague, tuberculosis, scabies, erysipelas, furunculosis, tach and leprosy. The most important of the aforementioned disease was the plague, which affected this territory for almost 500 years, the spread of epidemics being favored by wars, population movements, traveling, invasions or trade.

The first documented mentioning regarding the emergence of plague on the territory of The Romanian Countries dated back to 1438, when the disease appeared at Braşov, then following through the territory of Moldavia, to later spread in all three Romanian states in 1476-1480. In those times, the only known defense was fleeing from the path of the disease. As such, in 1588 the Moldavian ruler, Petre the Lamé, left in hurry the country's capital to move away from the path of the terrible disease, together with the entire staff of his court for four months¹⁰.

The first objective and rational measures of combating the plague on today's territory of Romania were taken only around the middle of the 18th century when, beginning with the year 1728, in Transylvania and Banat quarantine zones were established¹¹. In Wallachia and in Moldavia it was not possible to take quarantine measures and close the borders because sanitary protection between states would have been interpreted as an act of treason. Despite this situation, the authorities were compelled to take measures in the face of the havoc caused by the great plague epidemic of the 18th century.

In the historic writings of the time, it was confirmed that in that period special hospitals were built for combating this disease, among which we can mention: St. Visarion and St. Pantelimon hospitals in the Bucharest of 1735, or the Hermitage from Iaşilor Hillock in Moldavia, place in which the diseased were quarantined in 1734.

In the time of the Russian-Turkish war of 1769, the plague epidemics became more severe. The Russian military doctor Gustav Orraeus described

at large the evolution of this epidemics at Iași, in 1770, his record being the first medical document in regards to the disease, which at the time, spread across the whole of Moldovia, with particular emphasis on the way the disease could move through the movements of the troops¹².

The plague of those years was very often accompanied by epidemic typhus, disease that moved to the Romanian Countries from Ukraine and initially reported in Transylvania. They were often mixed up, especially because they would appear simultaneously, after the end of wars and were followed by similar signs and symptoms, manifesting in high fever and high mortality rates.

The 18th century brought important developments in the field, such as long term hiring of court doctors and the significant increase in the number of healers that were settling in the cities. In reality, firstly the ruler and members of his family benefited from qualified medical assistance and then boyars, high priests, and rich merchants and shopkeepers. Only after medical care had been provided to these privileged groups, would the aforementioned healers care for the health of the rest of the ailing population. Most notably in time of war, beside the care for the ruler, his house hold and their suite, they would also provide medical support for the fighters of the country's armies¹³. Usually a doctor employed at a royal court, after fulfilling his duty, would not leave the country before going through some of the more populated cities and regions, both for the benefit of the people as well as for his own material gain.

A famous doctor, often called to court either in Bucharest or Târgoviște during half a century of service, was Paulus Kyr, who tended for the rulers Radu Paisie, Pătrașcu Vodă, Vintilă Vodă and Petru Cercel. Other rulers as Matei Basarab, Vasile Lupu, Grigore Ghica, Radu the Great, Neagoe Basarab, Ștefăniță Vodă, Radu from Afumați or Petru the Lamé also had foreign doctors, hired at their ruling courts.

From archives of the ruling house kept at Alba Iulia, it was shown the first known military doctor who served in a Romanian army while practicing groundbreaking military surgery was Marco Vraci, from Michael the Brave's¹⁴ army. Referring to the battle of Brașov on the 1st of July 1603, Radu Șerban's army avenged the murder of Michael the Brave by defeating Bathory's troops. The columnist

Mihail Seybriger states that "the wounded in battle were taken to the barber"¹⁵.

Likewise, the Greek doctor Ioan Comnen, originally from the Greek island of Lesbos, would always accompany vaivode Constantin Brâncoveanu's army. He would ride in a "medical chariot"¹⁶, which was a luxurious carriage with spring suspensions, pulled by a number of horses, which is considered the precursor of today's military ambulance.

Historic sources of 1630 talk about Brecht von Brechtenberg, a doctor who came from Alsaceto the Transylvanian region, which offered a series of medical services to rulers of Wallachia and Moldavia¹⁷.

In the last part of the 17th century, in Wallachia there could be mentioned somewhat of an interest in the sanitary organization, including also the field of the ruler's army. There were several public serving doctors payed from the countries treasury to solve the population's medical needs, while the ruler had at his court doctors paid from his own fund, also known as "the royal pantry".

The ruler's army was permanently accompanied by doctors traveling by "army wagons", veritable rolling ambulances of the day, which would be set up in some villages and would act as "hospitals". Here the surgeon would take care of the wounded soldiers, only when the ruler or the higher staff would not need him. The rest of the wounded or ill would be left in the care of the female population in the settlements through which the armies would pass.

Constantin Brâncoveanu had a notable preoccupation for the organization of the military sanitary service, in this sense standing as proof an entry in the royal treasury's registry of 1697, for 30 thalers "for a medical chariot bought for Iacov" and for 33 thalers "for a medical chariot made for Ianache the Doftor"¹⁸.

Similarly, we find out that Ianache the Doftor accompanied the reigning army in military campaigns with a "medical chariot" and an "army wagon", receiving 100 thalers as "army expenses", together with another doctor, Iacob Pylarino, originally from the Greek island Kefalonia and known as the one who discovered the first cure to smallpox¹⁹.

In the aforementioned doctors' "medical chariots" therapeutic medical substances could be

found, rudimentary sanitary instruments while the "army carriages" probably transported the conjure men and barbers of the company, as well as the sick and wounded who after being given first aid would be left in the care of the inhabitants from the villages they passed through.

Noteworthy is the fact that from Brâncoveanu's two doctors only Ianache received money from the ruler's treasury for his sanitary servicing of the army, while Iacov was paid from the "royal pantry" and would primarily take care of for the ruler and his family's health.

Later, in the first half of the 18th century, the existing hospitals had a very low capacity of at most forty beds – St. Spiridon hospital from Iași, proved to be too small during times of epidemics and wars. Therefore, temporary hospitals would open when needed.

During the last decades of the 18th century, plague and typhoid epidemics, social diseases as syphilis and tuberculosis, as well as large scale military clashes heavily affected the health of the population as well as that of the soldiers. Consequently, the Romanian Countries were forced to draw up sanitary protection measures. As a way of social and judicial reflection of the economic situation aspect, we should mention that the most important anti-epidemic measure was the setup of quarantine zones.

From this period, there were also accounts referring to the numerous field military hospitals installed by the Russian and Austrian armies in The Romanian Countries during the wars against the Ottoman Empire. As such, during the Russian-Turkish campaigns of 1768 and 1774, "a temporary Russian military hospital was born in Bucharest"²⁰. Similarly, during the Russian-Austrian-Turkish war of 1792, the Austrian troops that entered Wallachia under the lead of prince Coburg set up provisional military lazarettos in Bucharest, one of which was placed at St. Sava Monastery²¹.

In February 1803, Constantin Ipsilanti, phanariot ruler of the Romanian Countries, took up the first army restructuring measures, along which arose the idea of setting up the first permanent military hospital in Bucharest. Thus, on the 18th of April 1803, the ruler wrote to his Vel Spătar, being the supreme commander of the countries armies, to rent a house where the sick Trenck's Pandurs could be cared for. This infirmary was established

in May 1803, in a house rented by the ruler in the Mihai Vodă District, area situated close to today's University Square in Bucharest. The medical aid in this establishment was coordinated by the "arhiatros" Emanoil Persiano, a kind of sanitary inspector at that time, as well as by a military surgeon named Droslovici²².

Later, in the autumn of 1803, a Romanian military doctor's presence was mentioned in Ipsilanti's army called Caloian or Kilian, and in the same year, the doctor Constantin Lambrino was "tasked at Craiova with caring for the sick soldiers"²³.

During the time of the Russian-Turkish war of 1806-1812, Bucharest was considered the center of medical aid for the Imperial Russian Armies deployed in the Danube's area. Hence, in the autumn of 1807, the extremely high number of wounded and sick that were coming to Bucharest from the battlefield determined the Russian command to request from the Wallachian Divans new buildings to receive and care for them. Not being able to meet these demands, in the following year, according to the order given by the Russian general Miloradovici – the commander of the Tsar's troops, the sick were even housed at The Royal Court from Spirii Hill. In addition, because of the intensification of military operations in 1809, even the buildings in Dudeștilor District were used for sanitary purposes. However, the main temporary hospital in the city was the one organized and set up in the houses of the ban Manolache Brâncoveanu.

In these conditions, the ruler decided in 1810 to carry out the necessary repairs at the soldiers' hospitals and ordered the construction of a building capable of housing a number of 700 sick and wounded, following which, they would be evacuated from the Royal Court, because of the unfavorable and unsanitary conditions found there²⁴.

In the same period, there were signs of a lazaretto with one hundred beds at Radu Vodă Monastery, as well as the establishment of other two lazarettos, with sixty beds each. In September 1811 six big inns and eleven boyar houses were requisitioned in Bucharest, the divan giving out orders to prepare backups that could house two thousand ill people²⁵.

In the period following 1811, because of the strong intensification in military action, the existing Russian hospitals became insufficient. Thus other

ones were created in Bucharest, Focșani, Brăila, Bucov, Ploiești and Craiova, reaching a point when in Bucharest there were "no less than nine hospitals in which care was provided for the pandurs of the Wallachian armies as well"²⁶.

Conclusions

The medieval era in The Romanian Countries regarding the sanitary service of the army is characterized by a rudimentary, basic medical aid, with a minimum of organizational and operational principles. The personnel involved were usually unqualified or semi-qualified, often allogeneic, and has a temporary and only partially regulated relation with the ruling of the states of those times.

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COMMANDER VICTOR (NIȚĂ) VOINESCU – FROM A HERO TO AN AMERICAN AGENT

Lect. Florian BICHIR, PhD*

One of the greatest figures of the Romanian Royal Navy was the commander Victor (Niță) Voinescu. First commander of the "delfin"¹ submarine, Commander Voinescu was both a moral and a professional reference for generations of navy officers. By this article, we bring him a tribute, regretting that his name is unfortunately omitted from the monumental work "The Romanian Army in the Second World War 1941-1945"².

Commander Voinescu deserves our gratitude even more since, after the installation of the communist regime, the intelligence services are constantly investigating him for his "reactionary" attitude, as you will see in a document of Security that we publish for the first time. The life of the legendary commander Voinescu should be examined by military historians in detail, because the Romanian Navy has what to be proud of.

Keywords: Commander Voinescu; Romanian Navy; american agent; Romanian Army; Ministry of War.

"A good and reliable officer at sea"

Though his life might fill up a few tomes, we are forced, due to the lack of space, to be content with a fiche made by Commander Marian Moșneagu, Chief of the Army History Service, a reputed naval historian who published the monumental "Dictionary of Romanian Mariners"³.

Voinescu, St. Victor, commander (b.: May 2/15 May 1900, Ploiești – d: ?). Parents: Eufrosina and Stefan Voinescu. Studies: He graduated primary school in his hometown, Military High School in Dealu Monastery (1918), Artillery School, Genius and Marine School (July 1, 1920), Navy School of Applications (1922), submarine specialization in the Italian fleet (1927), the Upper School of War (November 6, 1935), the Naval War School of Paris (1937), graduated as an "excellent officer" and appreciated by the commander of the High Naval Studies School and Center, the Vice Admiral Odend'hal, as a "calm and well-balanced officer, who already possesses the basic elements and has approached all the tactical problems in depth. Very good officer."

Grades: Ensign (May 1, 1920), Lieutenant (May 1, 1924), Captain (May 10, 1930), Lieutenant Commander (March 31, 1938).

Career: On August 1, 1920, he was assigned to the Canonical Division. After a brief activity in the

Danube Division, on October 13, 1921, he began the Navy School of Application, demonstrating that "he has a fair and solid reasoning based on beautiful theoretical knowledge." After graduating from the School of Application, he was assigned as an officer with torpedoes on the destroyer Mărăști and subsequently Mărășești.

On 1 June 1924, he was appointed commander of the rapid speedboat of safety no. 4 Maior Giurescu. On March 5, 1928, he was appointed to the Romanian Naval Inspection Commission of the Fiume yard, responsible for the construction of the base-ship and the submarine DELFINUL, respectively for the fitting of the tubes for torpedoes. "He promises to become an exceptional sailor and commander. It is worthwhile to choose him. He succeeded in controlling the execution of launch-torpedo tubes at the submarine. He is a very good officer and an asset to the institution.", said the chairman of the commission, Commander Gheorghe Koslinski. In November-December 1931, he worked as a member of Delfin submarine reception committee.

At the end of 1931 he returned to the country. By Note St. M. M. no. 1734/1932, at the beginning of 1932, he was appointed member of the Commission of Regulations and Manuals, which operated alongside the Navy General Inspectorate. In 1934 he was admitted to the Upper School of War, where he was rated "among the best elements in the classroom." On 25 July 1935, he was appointed to the submarine reception committee. Embarked on the base-ship Constanta, together with the

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students of the Naval School, he participated in all the submarine reception tests, returning to the country on December 5, 1935. Through the decree no. 2154 of September 19, 1935, starting with October 1, 1935, was appointed commander of the first Romanian submarine Delfinul.

In January 1936, he sailed on the base ship, along with the entire crew now under his command, to Fiume, where he conducted the facility's practical assimilation program of the submarine, helped by officers and engineers in the works supervision committee. On May 9, 1936, the solemnity of the raising the Romanian pavilion aboard the submarine Delfinul took place in Fiume harbor. In his speech, Rear Admiral Victor Schmidt, representative of the Romanian Royal Navy, said: "I entrust you this pavilion destined to wave on top of the first submarine of the Romanian Navy. You will lead it with dignity and honor to the glory of the country and the Romanian people, and when the hour of supreme sacrifice comes, you will defend it to the last drop of blood." On June 27, the submarine arrived 5 miles south of the Tuzla lighthouse, where it was greeted by the destroyer Regina Maria and Navy commander, Vice-Admiral Ioan Bălănescu.

"Captain Voinescu will be the commander of our first submarine, where there is much hope in the formation of future submarine sailors. In the reception committee, he worked intensely and with sufficient independence to prove the qualities of the submarine that he commanded", predicted the Commodore Petre Bărbuceanu, the Commander of the Great Division.

"He worked a lot with a lot of technical skill in the Reception Commission, trying to make sure that the submarine corresponds to his missions. He is a reliable commander", said the Navy commander, Vice-Admiral Ioan Bălănescu.

In 1939, he was patented as a major state officer and officer of the Romanian Military Navy. He was the Chairman of the Diesel and Electric Engines Reception Commission, bought from Germany in 1939 for the construction of the two submarines built in the Galati Shipyard. In the second half of 1939, he was sent to England as President of the Commission for the reception of the three Vosper torpedoes. On this occasion, since November 1, he received the "Whitehead" model torpedoes needed for the stars. "He puts a lot of soul into service, especially dealing with the Submarine and Rapid

Star Groups. A good and reliable officer at sea.", said the commander of the Military Navy, Vice-Admiral Petre Barbuneanu.

In the first part of the war, he was the head of the Submarine and Torpedoing Group because since on July 23, 1944, he was disciplined to move to the Țândărei Fluvial Deposits, subordinated to C.F.F.I. Between 1942 and 1943 he was the Chairman of the Commission for the reception of the torpedo stars and led the Commission for receiving the Marsuinul and Rechinul submarines, built in Galați.

Between September 13 and October 20, 1943, he was sent to Turkey to prepare the Transilvania and Basarabia motor vessels, which were to be brought to the country and to be converted into auxiliary cruisers and used on the East Front at the imperial demands of the Germans of ASM.

Whereas he delayed the operation, the German Military Mission accused him of sabotage and ordered his investigation and punishment. By a resolution of the Romanian Ministry of War, he was sent to the Honor Council, but it was found that "the measures taken against the officer as a result of this reference remain the finding that the officer's behavior was wrong."

Distinctions / decorations: "The Crown of Romania" in the rank of knight (H. R. D No. 7306/1931), "1916-1918 Commemorative Cross", without bears (1932), Commemorative Medal "King Carol II", class II (August 15, 1936, Patent No. 68 of August 15, 1936).

By H. R. D. no. 1768 on October 3, 1944, was awarded with the Mihai Viteazul Order "Third Grade" "for the courage, the cold blood and the capacity with which he ruled the destroyer KING FERDINAND and the Torpedo Stars Group. During operations with the Speedboats Group, he attacked a submarine in the Mangalia region and, in operations against enemy naval forces blocking Odessa, he managed (against the much higher enemy force) to attack with the torpedoes and surrender to save the situation of his ships. On December 1, 1941, he comes to help the destroyer Regina Maria to repel submarine attacks and to submerge a submarine.

"On December 16, 1941, the enemy submarines counterattacked the convoy and sank a submarine through daring maneuvers and attack. During 32 missions, crossing over 7,000 miles between Constanța South-Odessa and Bosphorus, through

mined areas under the control of the enemy, faced with submarine attacks, managing by maneuverability and the impetuosity of his counterattacks to save the ship and speedboats under his command and leading to the glory the ship and the crew"²⁴.

After 23 August 1944, "anti-soviet, anti-democratic and anti-governmental activity"

Almost naturally, we could say after the Communist regime was in power, Commander Victor Voinescu came into the sight of the Romanian intelligence services controlled by the Soviets. We publish below a document from the Commander's Tracking (Informative) File.

Dos. S.S.I. 0145 Tabs 4, 5 and 6⁴

April 21, 1948

"Commander Voinescu Victor, born on 15.05.1900 in Ploiesti, son of Ștefan and Eufrosina, residing in Craiova.

Married to Ecaterina Paula, of Greek ethnicity; they have no children.

He studied the Upper School of War in France and Upper School of Submarine in Italy.

Class of July 1, 1920, "Good" qualification upon the graduation diploma.

The right to become state officer was obtained in France.

He was part of the following units and had the functions shown below:

Command. Of Naval Forces – Navy General Staff

Department of Transportation – General Staff Officer

Upper School of War – Subdirector

Commander of the Destroyer King Ferdinand I

Commander of the Submarines and Torpedoes Training Center

Major Division – Chief of Staff

Commander of the Submarines and Torpedoes Speedboats

Maritime Forces Command – Chief of Staff

From a professional point of view, he is qualified as a good navy officer, good shipmaster and good organizer.

In terms of morality, he has certain drawbacks which may impede on his professional value.

For the way he exploited a vegetable garden of the Maritime warehouse, he was punished with a disciplinary move and 30 days of arrest.

He is bawdy, taking great care generally speaking because he cares much about what can be said about his person.

He has the desire for high functions, it makes him use any possible means, only to be in a good situation. He is the indifferent type, the sort of man who does not care too much about nature and who does not care much about the affairs of the service, either.

In the eastern campaign, he took part in Black Sea naval operations as shipmaster (destroyer) for which he was rewarded by the Germans with the German Eagle Cls. I and the Iron Cross Cls. I and II.

Regarding his political ideas, Commander Voinescu had the cult of good relations with all political parties."

After August 23, 1944, he conducted a reactionary activity based on the influence he had on the Officers and especially on the young ones, being a good orator with the gift of persuasion. He is a member of the group C. Admiral Roman August, C-Dor Niculaescu C-tin, C-Dor Eng. Dimitriu Traian and Commander Mocanu Gheorghe, who, for their anti-soviet, antidemocratic and anti-governmental activity, were all put on unlimited leave on 25.10.1945 by the Minister of War. From the date of leave, Voinescu went even more actively to action, seeking by various warnings to intimidate officers who started on a democratic line.

He is part of the Romanian Royal Club Yacht together with the entire group above, seeking to polarize as many Navy officers as civilians and officers from other branches. On June 14, 1946, several Navy officers, including Voinescu Victor, for their antidemocratic beliefs, made propaganda statements among young officers, asserting that the Royal Navy will receive war vessels from Anglo-Americans and those who want to oppose the current spirit of today's naval command, will receive ship orders and other promises in the future. On June 17, 1946, Col. Voinescu V. went on with his propaganda in Constanta, where he has his agents and he contacted C-dor Ghezzo Eduard, formerly involved in the vegetables garden business of the Command and material storehouses, in whose house Commander C. Hristu, C-dor Simionescu Gh. and Lieutenant Marghilotu lived and were also contacted.

He has frequent meetings at his home, where he invites the navy officers and especially the young ones to whom he recommends continued

resistance, dividing them into new ministries, and telling them that soon the war will start and the country will be saved from the Soviet corps and the traitor government. On July 6, 1946, he visited the Martial Court Military Prosecutor's Office, where he presented his case at S. S. of the Navy on May 20, 1946, and asked the instructor prosecutor, with a commanding air, to let him see the people involved referring to them with the words "my boys".

He is also active in the meetings of the Academy of Sciences (Negreanu Amphitheater), at Military Sciences Department, where, on November 27, 1946, he held a conference seeking to show the enormous damage suffered by England due to the German submarines. Her Royal Highness Ileana also participated in this conference.

On February 1, 1947, The C-dor Voinescu from C.D., had a dinner party in his apartment at the School of War, attended by navy officers in C. D. known as notorious reactionaries. The next day, Voinescu, speaking to the War School officers, brought insults and threats to the current leadership of the Army Command, saying: "Their days are counted."

On March 23, 1947, he was in charge of setting up the foundation and organizing the headquarters of "AMEROM" Transportation Society, in the recruitment of the sailors who will serve the ships of this society. Commander Voinescu took care to choose those who militate in the political parties of the opposition. To this goal, he organized an unauthorized syndicate of C. D. sailors, where he maintained a strong reaction focal point.

He has connections with big industrialists and capitalists. He supports and promotes their interests. For ex.: Furnurache, Tudor and Caranfil Factory (Anonymous Society).

On March 26, 1947, it was reported that Victor Voinescu worked with some navy officers along with several officers from the American Red Cross in helping Moldova and other various issues. They wanted to help the famished population.

It is noteworthy that both the leadership and members of this committee are military officers from C. D., known as notorious reactionaries, some even militants in the NLA⁷⁵.

Suspected by "espionage in favor of the US", the Commander Victor Voinescu will be pursued steadily until 1958, according to a marauder entering the Securitate's ill-minded mentality. All allegations proved to be incorrect. The Commander Victor Voinescu was only a navy officer who loved his profession and country.

Commander Victor (Nita) Voinescu from a hero to an American agent

Commander Victor (Nita) Voinescu was one of the emblematic figures of the Romanian Navy. After the glory in the Second World War the communist seizure of power meant his being non-stop followed by the secret police. Suspected of "spying for the US" – according to an unhealthy mentality Marot entered the Securitate, Commander Victor Voinescu will be pursued assiduously until 1958. All allegations proved to be false. Commander Victor Voinescu was only a naval officer who loved his profession and country.

NOTES:

1 Florian Bichir, *The forgotten corsairs of the depths. Dolphin, Shark, Marsuin*, Military Publishing House, Bucharest, 2014.

2 Alexandru Duțu, Florica Dobre, Leonida Loghin, *The Romanian Army in the Second World War 1941-1945*, Encyclopedia Publishing House, Bucharest, 1999.

3 Marian Moșneagu, *Dictionary of Romanian Mariners*, Military Publishing House, Bucharest, pp. 503-505.

4 *Ibidem*.

5 CNSAS Archive (ACNSAS) – Information Fund, File I 549747, two volumes.

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