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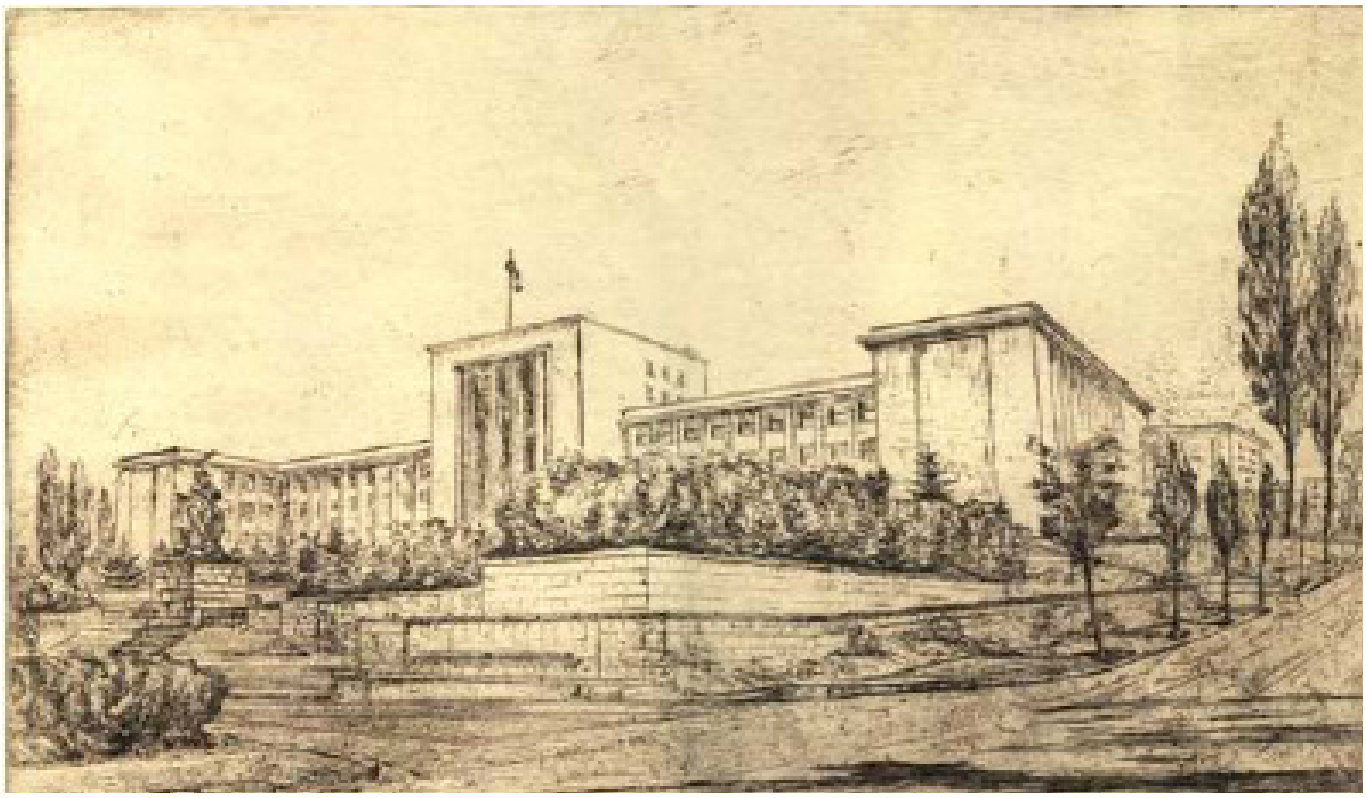

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AFGHAN NATIONAL POLICE – PILLAR WITHIN THE NATIONAL SECURITY SYSTEM

Lt.Col. Traian MAGHERCĂ, PhD Student*

The confrontations in Afghanistan, which began in the autumn of 2001, created the premises for starting a process of reforming the security system, in the context of the intervention of the international military force. The evolution of this process was marked by the influence of foreign advisers in all fields of society. The institutions that opened this way of transformation were the army and the police. In the conception of the international community, the police was considered the younger sister of the army, so the efforts to reform the two segments were not identical. The development of the police forces was more difficult, the funds allocated were less, and these aspects contributed to the creation of large discrepancies between the two institutions. Frequent changes in strategy have led to a lack of consistency and continuity. The secondary role assigned to the police sector, within the national security system still has an effect today when it seems that the Afghan national police has remained far behind the army on the way to reform.

Keywords: security environment; Afghan National Police; reform; international coalition; Afghanistan.

The fall of the Taliban regime in the autumn of 2001, as a result of US intervention in Afghanistan, and the establishment of an Afghan interim government created the premises for triggering the state's reconstruction and reform process. In order to achieve this goal, stabilization and a secure security environment were needed to encourage international institutions to join this effort. Thus, the first sector that began restruction, reformation and development was the security system, more specifically, the Afghan national army and police.

In order to guide and advise the national authorities in their reform efforts, lead-nations for the important sectors have been established at the international community level. Following this decision, Germany took over the responsibility of supporting the development of Afghan national police. This choice was related to the long-standing support provided by the country to the Afghan police, prior to the intervention of Soviet troops in Afghanistan in 1979.

Although the European model applied by German advisers naturally emphasized the basic tasks of the police institution, emphasizing the role of this structure in solving the problems of citizens, at an international level, was not fully appreciated. The US, as a leader in the international coalition operating in the Afghan theater of operations, wanted a police which would carry out military operations against members of insurgent groups. Even though in 2007 the nation-specific tasks of the leader were taken over by EUPOL (European Union Police), in parallel, the USA implemented some measures to turn the police into a fighting entity.

The adoption of a new approach that required a rapid militarization of the police upset the driving factors of this institution, and the changes imposed by the parallel nation-leader, coupled with the low level of financial investments in this sector, led to a very slow development rate.

The reform of the Afghan national police according to the German model

The Afghan National Police (ANP) is a very important structure within the security system subordinated to the Ministry of Internal Affairs along with two other departments, the counter-narcotics police and the counter-terrorism department. Over the years, the ANP has had several branches, of which we mention Afghan Uniform Police (AUP) – responsible for law enforcement, Afghan Highway Police (AHP) – responsible for traffic safety on the main communication route in Afghanistan, Afghan National Civil Order Police (ANCOP) – responsible for establishing public order, Afghan Border Police (ABP) – responsible for state border security, Afghan Local Police (ALP) – initially responsible for fighting insurgents locally, subsequently, responsible for the first local investigations,

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the Afghan National Police Auxiliary (ANPA) – responsible for supporting local authorities in the fight against insurgent groups.

As mentioned above, the country that undertook the reform and restructuring of this sector was Germany. Even the Afghan Ministry of Internal Affairs at that time acknowledged the need for international assistance for police reform.

During the second[1] international donor conference held in Berlin on March 13,2002, the German government decided to set up a special structure (The German Police Project Office – GPPO) to manage the Afghan police reconstruction effort. In this regard, an agreement was signed between the German Ministry of Internal Affairs and the Ministry of Internal Affairs of the Afghan Interim Government, through which the German side committed to provide financial and material advice, assistance and support to the ANP forces.

The GPPO focused on five areas of activity: counseling and assistance for the structural reorganization of the police, rehabilitation of the Kabul Police Academy, renovation of facilities belonging to the police institution, endowment with equipment and coordinating the actions of international partners.

The first contingent of ANP advisers deployed to Afghanistan from Germany was made up of 10 police officers from different departments, and its staff increased over the years to about 45 officers in 2007[2].

Their initial dislocation was in the capital city of Kabul, and subsequently they worked in the provinces of the north of the country, an area in which Germany began to dislocate forces within the army that contribute to stabilizing and maintaining security environment until the Afghan Armed Forces full operational capacity is achieved. The main task of the German team was to coordinate the efforts of international police advisers (there were other states that joined Germany in the effort to rebuild the police sector) and to provide equipment to the ANP structures.

This early period was marked by some deficiencies in monitoring the actions of ANP forces at district and community levels caused by GPPO members moving strictly to areas where German armed forces were able to provide them with permanent close protection. This aspect led to the impossibility of verifying the information required for the evaluation process of ANP actions and the elaboration of erroneous assessments regarding the progress, registered by the police structures in the process of reconstruction, reformation and development. The correct results could only be recorded at the ministerial and regional levels, at which the interaction with the Afghan partners was immediate.

The Kabul Police Academy was renovated and opened in August 2002 as part of a ceremony attended by Hamid Karzai, the president of the Afghan Transition Authority, an institution whose main task was to coordinate actions for the reconstruction and reform of the Afghan state. The German police officers contributed fundamentally to the implementation of a new concept of education of the future Afghan police officers and sub-officers by modifying the curricular area and by applying the "train the trainers" concept.

The project proposed by the German Police Academy team was a rapid success. After a short period, when the German side managed the transformative activities necessary for the educational institution, the responsibility for managing the educational process was transferred to the Afghan authorities, as the German advisers remained solely responsible for monitoring the leadership process of the academy.

After the Taliban leadership regime in which the police did not receive specific training, many of them being former mujahideen during the Soviet-Afghan conflict, and the vast majority subordinated to local warlords, Germany stressed the importance of reopening the academy that trained annually around of 1,500 officers (five-year study programs) and about 500 non-commissioned officers (three-month study programs)[3]. The stated goal of the Afghan Internal Affairs Ministry at that time was to reach an effective 70,000 police force in all branches of the sector.

The material and financial support provided by the German side was considerable and very necessary as the infrastructure, equipment, weapons and means of transport were in a deplorable and insufficient state. Thus, the main investments of the German government and of the associated international donors were directed to the reconstruction of the buildings and facilities necessary for the normal activities of the police activities (office buildings, police stations, checkpoints), the purchase

of special vehicles, motorcycles and installations, maintenance equipment, X-ray equipment, metal detectors necessary for the control of persons and baggage at airports, computers and programs for them, modern means of communication, uniforms and specific equipment for staffing, etc.

The main effort during the German-Afghan cooperation in the police field was the personnel counseling and training, a lasting process that shows its effects over time. The intention of the German authorities was that the total transfer of responsibility to the Afghan authorities would occur as soon as possible, but the obstacles that slowed down the normal course of the reform process were not foreseen. As in all other areas where the international community has provided support to the Afghan party, a major impediment has been the regular replacement of the advisers (depending on the country from which they came, they have been in office for six months or one year).

Another major obstacle was the high level of illiteracy of the police employees for whom literacy courses were needed, but after completing all forms of training, due to the low level of pay, many of the members of the police structures left the system and employed in private security firms, very wealthy individuals or deserted and enrolled among insurgent groups. Most of the time, they left with their uniforms, weapons and equipment.

A vital area of the reform was the change of the organizational state, and the main divergence between the lead-nation and the Afghan authorities was related to the reduction of the large number of functions in the organizational chart. This aspect was hardly accepted by the Afghan side, and following the discussions, in 2005, President Hamid Karzai adopted measures to increase the salaries of the police, reduce the number of important functions (generals) and increase the number of small functions and set up the system of promotion on the basis of meritocracy instead of promotion based on giving and taking bribes or nepotism.

The reorganization of the border police (ABP – Afghan Border Police) has been a challenge for international experts, but after many attempts it has been found to be organizationally effective, but less effective in terms of action. Illegal border crossings and trafficking in arms, drugs and military equipment were frequent, especially at the Afghan-Pakistani border, and these activities favored the actions of insurgent groups in the area.

We can conclude that the German project was the right one to initiate the Afghan police reform process if we consider that it involved a number of important and necessary measures in the areas of education, organization and endowment. The pace of development that was not the anticipated one did not allow a faster transformation in action plan, and the local human resource selected for this job disappointed and did not rise to the level of involvement of the members of the international community in the reconstruction effort of the Afghan state.

The contribution of EUPOL to the reform of the ANP

Since June 2007, Germany's leadership in the process of reforming the Afghan police has been taken over by EUPOL-A (EUPOL – Afghanistan), an international body that aims to continue the approach of training Afghan police officers on the civilian aspect of specific actions. One of the initial objectives of EUPOL-A was to increase the number of police officers and international civilian experts to 400[4], but the assignment of the positions provided in the organizational chart of the advisory structures has always been a problem of the international community.

The proposed strategy was based on six main directions: developing hierarchical relationships at all levels of the institution, optimizing the process of collecting and managing information, setting up crime investigation structures, fighting corruption, improving relations between police and justice structures and developing the idea of compliance of human rights in general, and of women, in particular, both within the institution and in police relations with the population.

The new leader-structure reaffirmed the need to train the police in order to solve situations in the areas of public order, to combat crime, human beings trafficking, weapons, drugs and illicit materials, investigations and to support the authorities in applying the laws specific to a rule of law and less in the field of fighting armed against insurgent groups.

Since the beginning of the mandate, EUPOL-A has expanded the representation network locally, opening offices in no less than 16 provinces. This aspect underlines the fact that this institution wanted a deeper involvement at the tactical level,

at smaller levels, in the area of the provinces and districts.

EUPOL-A's main concern was to interact with the management factors at the level of the Ministry of Internal Affairs to guide and contribute to the unified professionalization of the police and to the institutional reform of this sector. At the same time, it sought to make connections with structures from other institutions whose actions have implications in the activity of the Ministry of Internal Affairs.

Some of the eloquent achievements of EUPOL-A were the opening, with European Union funds, of the Afghan Police Staff College in 2010, an institution that contributed substantially to the training of a large number of Afghan policemen and to the implementation of the institution of the sole emergency phone number.

It also contributed to increasing the authority of the Ministry of Internal Affairs within the state institutions by contributing to the establishment of structures to investigate corruption, inappropriate behavior and police abuses. During the management of the support given to the reform process, EUPOL-A has contributed to the reorganization, transformation and development of ANP institutions, professionalization of police members and improvement of leadership, raising the level of confidence of the population in ANP, recruitment of female persons and their acceptance in managerial structures, awareness of respect for human rights and laws adopted by the central boards.

The EUPOL mandate in Afghanistan ended in December 2016, with the closing of the last international offices in this country, transferring the responsibility of monitoring the ANP actions to the members of the Resolute Support Mission, an international mission led by the North Atlantic alliance since January 2015.

US support for the reconstruction of ANP

The U.S. assumed the support of the Afghan National Army (ANA) reform as a lead-nation, but they monitored the evolution of the police sector reform and, in the initial phase, they appreciated the German approach regarding the ANP which, from the point of view of the Americans, focused strictly on the educational and training side of leaders and less on the operational side.

That is why, in 2003, in parallel with the programs carried out by the German authorities, they started a training program for the members of the ANP who were occupying functions at the base of the institution. "The US State Department set up, in the first phase, a police training center in Kabul, which later served as a model for seven other centers set up throughout Afghanistan"[5]. In these centers, the ANP members attended different types of courses (the basic course for the staff with the minimum level of education, the course for the illiterate staff, the training course for the personnel with experience in the police field).

The efficiency of these courses was not the expected one, and the causes can be easily deduced. The quality of the educational act was very low because the US contributed a very small number of instructors, their number being supplemented by Afghan instructors who had no knowledge of methodology and pedagogy. The high level of illiteracy among the course participants did not allow them to accumulate knowledge by reading or writing, and the fact that the information was transmitted through interpreters who were not familiar with the terminology (the course support was in English) decreased to the maximum the efficiency of the courses. Also, the large number of police officers who needed a minimum of basic training forced the decision-makers to shorten the course period and to opt for quantity at the expense of quality.

One reason invoked by the US for the slow pace of ANP development was the lack of involvement of the international community, in the initial phase, in providing the necessary funds to an institution that was in a deplorable situation. Yet, through the United Nations (UN) development program for Afghanistan a LOTFA (Law and Order Trust Fund for Afghanistan) was established for all international donors. In 2004 only $11.2 million of those 65 million requested had been gathered[6]. This led to large delays in the payment of the salaries of police officers who committed corruption acts, and had negative consequences in terms of the confidence level of the population in the ANP members.

In 2005, the US government transferred responsibility for the Afghan police assistance program from the Department of State to the Department of Defense, which in turn delegated this task to the Combined Security and Transition

Command – Afghanistan (CSTC-A), which was dealing with the assistance program of the Afghan army in the reform and development process.

Although this measure increased the number of personnel destined to train the ANP and reform the Afghan Ministry of Internal Affairs and increased the amount of funds allocated to this program, it seems that the yield was not satisfactory to the US authorities.

Another program was started by CSTC-A in 2007, and it sought closer monitoring of the performance of Afghan policemen in the communities they served. A previous report underlined that there was not enough visibility at the level of the police structures on the small steps, and the assessment made, based on the information received from the Afghan partners, proved to be inconsistent with reality. Through this new program, mixed teams of US military and civilian policemen traveled to district level in order to obtain accurate data on the effectiveness of the measures implemented. In addition to the fact that the ANP members did not carry out their specific tasks for which they had been trained, the Afghan authorities reported very high numbers of staff compared to the actual ones to receive larger amounts of money from international donors.

The support given by the US to the Afghan police reform effort continued with the deployment, in 2009, of an additional 4,000 troops destined to train the ANP and ANA. The intention of the US authorities was that the ANP members be able to act in the operations against the insurgents as a support force of the army. This can also be deduced from the organization of this institution, which consisted of structures similar to the army (platoons, companies, battalions).

Despite all these efforts and a colossal sum invested ($6.2 billion by 2008[7]), a report by US government authorities highlighted that although police numbers had increased to 70,000, CSTC-A reported that no unit had reached full operational capacity level.

The main causes that led to this unwanted situation are the inability of the American authorities to provide more trainers, the major deficiencies in the management process practiced by the Afghan authorities within the Ministry of Internal Affairs, the massive spread of corruption and the huge gaps in the salary system at ANP level.

As part of the strategy of the international counterinsurgency coalition, the police were used to maintain the territories in which the influence of the insurgent groups had been annihilated by occupying control points located near the localities and along the main communication routes. After leaving the areas by the main forces, the insurgent cells came back and set fire to these isolated locations, causing numerous losses among the police. Moreover, the insurgents captured weapons, ammunition and equipment from the conquered facilities that they subsequently used during attacks against international and local armed forces.

In order to increase the efficiency of the fight against insurgency locally, the U.S. launched a new program to create another branch of the ANP called the Afghan National Police Auxiliary (ANPA). Through this program, the governors of the provinces in which the level of insurgency was higher were offered money to recruit staff from the local population who received weapons, uniforms and salary to fit the new structure.

Basically, this initiative encouraged the formation of former local militias that opposed the actions of insurgent groups against the communities they belonged to. After only two years this program was terminated because it proved to be inappropriate as it offered the possibility of enrolling the people who fraternized with the insurgents, it created dissatisfaction within the members of the ANP who declared themselves outraged by the fact that the members of the new structure wore the same uniforms and took the same salary although they did not follow any form of training and it was shown that most of the funds were used by local Afghan leaders for personal prosperity.

In the context of the above, we are entitled to assert that the US approach to supporting police reform had as its main objective the militarization of this institution to support the joint effort to remove insurgent groups. At the level of 2010, the ANP resembled a military structure, endowed with armament and equipment specific to the armed forces, but with a level of training far below them. This triggered reactions among European states that had another vision regarding the reform of the police sector. At the same time, suspicions arose regarding the final status of the ANP at the time of the conclusion of the International Security and Assistance Force (ISAF) mission.

Will it be a structure with specific police tasks or will it remain a militarized institution that will continue the counterinsurgency fight?

During my participation in the Resolute Support Mission, within the international headquarters in Kabul, in 2017, I found the answer to this question. The police reform continued in the same manner with the emphasis on the fighting side. Efforts to change the strategy in this sector had partial results, and the police continued to perform both specific tasks and combat tasks. Moreover, in 2018, ANCOP was transferred to the subordinate of the Afghan Ministry of Defence[8] considering at that time that the level of training and endowment will allow their members to perform military operations together with the army structures.

At this moment, to a large extent, the police perform specific tasks in the areas of public order, fighting corruption, fighting against cultivation, production and trafficking of narcotics, but continue to participate in counter-insurgency actions, which produces large losses (injured and killed).

ANP has four main and three secondary structures. The first category is Afghan Uniform Police (AUP), Public Security Police (PSP), Afghan Border Police (ABP) and Afghan Anti-Crime Police (AACP), and the second category is Afghan Local Police (ALP), Afghan Public Protection Force (APPF) and Counter Narcotics Police of Afghanistan (CNPA)[9].

The most effective police component is the Police Special Units (PSU), a structure directly subordinated to the Ministry of Internal Affairs, similar to the special operations forces in the army. Due to the success of this structure, it is desired to expand such units and to apply the concept of 'big brother' (already existing units, with full operational capacity and experience in the police sector, will provide assistance and advice to those established under direct monitoring of international advisers).

Conclusions

From my point of view, the initial approach in the field of reconstruction and reform of the police structures adopted by Germany and the partner countries was an appropriate one in relation to the purpose desired by the international community, but it seems that the slow pace of development of this sector has led to the parallel involvement of the US in this process. Judging from the reports prepared by the US Department of State on the evolution of Afghan security institutions, it seems that the strategy applied was not the most effective. The security situation that existed at that time could somewhat justify the decision of the US authorities if we consider that since 2004 insurgent groups have increased the level of violent actions against local and international security forces. The small number of specialized personnel determined the decision to involve the police structures in the military operations, which led to the failure to meet the objectives set by the lead-nation within the stipulated time intervals.

The latest periodic reports[10] indicate that an effective organization of the Ministry of Internal Affairs and ANP has finally been reached, and Afghan National Police components have begun to perform tasks specific to the areas for which they were set up. Participation in counter-insurgent military actions has a very low weight in the spectrum of police activities, and this allows police officers to interact more with the local population and to contribute to the extension of the authority of government institutions and to their efforts to implement reforms and measures that have the purpose of a better life in a state that effectively combines the values of tribal culture with the values specific to a rule of law.

NOTES:

1 The first international conference, after the fall of the Taliban regime, took place in Petersberg (near Bonn), November 27 - December 5, 2001, as a result of which the international support for the reconstruction of Afghanistan was laid. The following year, three international donor conferences were held in Tokyo, Berlin and Geneva, which aimed to coordinate the international effort on support areas.

2 Markus Feilke, *German experiences in police building in Afghanistan,* 2010, p. 7, http://www.grips.ac.jp/r-center/wp-content/uploads/10-02.pdf, accesed at November 17, 2019.

3 Robert M. Perito, *Afghanistan's Police – the weak link in security sector reform*, published in "United States Institution for Peace Special Report", August 2009, p. 3, https://www.usip.org/sites/default/files/afghanistan_police.pdf, accessed at January 27, 2020.

4 Markus Feilke, *op.cit.*, p. 14.

5 Robert M. Perito, *op.cit.,* p. 4 (translation).

6 *Ibidem*, p. 5.

7 *Ibidem*, p. 6.

8 https://rs.nato.int/news-center/feature-stories/2018-feature-stories/ministry-of-defense-takes-command-of-police-unit.aspx, accessed at January 28, 2020.

9 [Department of Defense], USA, *Enhancing security and stability in Afghanistan*, June 2019, p. 76, https://media.defense.gov/2019/Jul/12/2002156816/-1/-1/1/ENHANCING-SECURITY-AND-STABILITY-IN-AFGHANISTAN.PDF, accessed at February 3, 2020.

10 [Department of Defence], USA, *Enhancing security and stability in Afghanistan*, June 2018, December 2018, June 2019, December 2019.

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ASPECTS REGARDING THE USE OF PASSIVE SENSORS ON AIR SURVEILLANCE MISSIONS

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Passive remote sensing is used to obtain information on objects and phenomena at land surface in order to get their well-defined objective image by means of special and temporal coordinates. Observing land surface represents an on-going activity for the scientific community which is directed towards the understanding of processes and phenomena on our planet as well as towards the monitoring of the impact of natural or human activity on the environment. Passive sensors have technical parameters that help them detect the phenomena and changes on land surface, ensuring the necessary data for the mapping and monitoring of biophysical and geological characteristics of the surface in order to understand the impact of human activity on ecosystems.

The military use of passive sensors is to create detailed maps of areas under surveillance, including the urban ones, to detect early threats, and to ensure the information support for the planning process as well as for the coordination and execution of precise strikes on objectives.

Keywords: remote sensing; passive sensors; air surveillance; surveillance.

Human history has been marked by the use of armed forces as efficient means to solve disputes among conflicting states. Even if the war is a social phenomenon with disastrous impact on belligerent states and peoples, the humanity has not renounced it when solving disputes. Understanding war as a social phenomenon is based on different research criteria which underline its essential characteristics, pinpointing it among other social phenomena. The evolution of war has been marked by the capacity of decision-makers to understand the impact of military resources and means on the conduct of military actions at a certain moment.

The conflicts of the last decades have demonstrated the role of the air component on meeting the objectives of the war, forcing relevant military powers to develop their air forces according to the new operational demands. Accomplishing this involves a constant effort and use of resources to identify and implement new technologies in order to obtain the superiority over the enemy.

In this respect, air forces will be supplied with sophisticated weapons, with high disruptive potential, with great impact on conducting violent armed activities[1].

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At the same time, the evolution of information and communications technology fosters the integrated and unitary use of air forces to accomplish specific missions. The integration of arms systems is possible through the command and control system which provides the necessary information so that the air forces will exercise their influence in the designated space of interest.

Obtaining the information needed to accomplish the air force specific missions involves creating a network of sensors, which includes sensors placed on space, air, ground, and maritime platforms. The information obtained after processing the data furnished by sensors will contribute to building the real image of the area of interest, thus ensuring the rapid identification of objectives and the efficiency of the decision-making process.

The history of military art has demonstrated that war is "the realm of uncertainty; three quarters of the factors on which action is based are wrapped in a fog of greater or lesser uncertainty"[2]. The uncertainty on the battlefield amplifies the potential of actors involved in the conflict to undertake asymmetrical actions. This potential will increase the possibility of surprise by the actors involved in the conflict, while diminishing this risk which is dependent upon the capacity of surveillance and collection of data from the area of interest. The information obtained will ensure the optimal decision-making processes and coherent actions

against the enemy. Obtaining control over the information will lead to decreased uncertainty of the battlefield, contributing to early warning of organic forces when threats occur.

The early discovery of threats to the air environment and the provision of the necessary information to identify and neutralize are the reason why states created and developed systems which are capable to prevent organic forces from being surprized by the enemy.

In this respect, networks of sensors have been created, spread on large geographical areas so that they will enable the permanent surveillance of the areas of interest. Technological advancement has led to the creation of a more sophisticated architecture of sensors in order to meet superior surveillance requirements. Sensors for mission surveillance use remote sensing as a means to obtain data. The data thus obtained are analysed by specialized personnel and equipment, the products resulted being used to create the real image of the battlefield.

Surveillance through remote sensing builds a veridical image of the area under surveillance. Due to better surveillance possibilities, spatial and aerial platforms play an important role in surveiling the areas they fly over by using remote sensing.

Remote sensing is "an array of technologies used to process data related to objects or phenomena"[3], on Earth or in space. Remote sensing is the sum of physical and engineering applications used to create images of bodies and phenomena, using electromagnetic radiations generated naturally or through different technical devices mounted on spatial and aerial platforms. Remote sensing can be active or passive.

Active remote sensing is meant to obtain data on objects and phenomena on the land surface using, in this respect, specialized instruments to generate electromagnetic radiation. Remote sensing uses as emission means: radar and LIDAR. Regardless of the instrument used, the data obtained are processes and analysed based on a set of elements that allow their qualitative and qualitative analysis obtaining, in the end, a detailed copy of the studied objects and phenomena.

Passive remote sensing is based on complex physical applications that ensure the capture, analysis, and processing of electromagnetic radiation reflected by objects on land surface in order to obtain the information needed to build their image. The evolution of technology fostered the creation and development of sensors that have diversified remote sensing by using different technical principles and methods. Remote sensing uses the following principles[4]:

- The principle of satellite TV;
- The principle of multispectral scanning;
- The principle of radiometry;
- The principle of thermal scanning.

Satellite TV involves the use of TV cameras built for remote sensing. There cameras capture light emitted or reflected by bodies on land surface. Images are obtained by recording simultaneously, on more spectral bandwidth, the data which are then transmitted and processed by ground-located specialized centres [5].

Multispectral scanning is based on the properties of objects and bodies to generate radiations whose wavelengths are dependent upon their physical and chemical properties. Multispectral sensors will record the electromagnetic radiation simultaneously on more spectral bandwidths, the data obtained in the process being transmitted to the processing centres. The images of the targeted objectives have the best spatial and spectral resolution, being obtained through the processing of registered data on all spectral bandwidths in which the sensor can detect the radiations of the specific bodies detected[6].

Radiometry uses special sensors to this purpose, named radiometers, which detect the radiation emitted by bodies located on the land surface, both simultaneously and selectively, on different bandwidths, comparing the wavelengths captured with the standard ones, determined in a lab, for each natural substance or elements. Radiometers ensure the identification of objects according to the recorded spectral behaviour[7].

Thermal scanning refers to the intake of caloric radiations emitted by bodies on the land surface, using sensors which are sensible to their temperature variations and which can record wavelengths that correspond to the thermal infrared. The image of bodies is obtained by processing data, obtained by sensors, in specialized centers located on ground[8].

Sensors located on aerial or spatial platforms ensure passive and active remote sensing of bodies, phenomena or actions undertaken in the air or on land surface, using remote sensing sensors that include the afore-mentioned theoretical principles.

The sensors located on these platforms can supervise extended surfaces, without influencing the remote sensing possibilities of the geographical features. The images obtained as such have superior quality, ensuring the information support necessary to the decision-making processes and to the increased efficiency of organic troops. Mastering the information that is useful for the decision-making process ensures the proper framework for planning and conducting coherent actions with impact on the way and the rapidity in which success is obtained on the battlefield.

Aerial platforms with remote sensing sensors on board are: the planes, helicopters, aerostats, and drones. Aircraft used to this purpose are characterized by increased autonomy, in accordance with the dimensions of the area they have to surveil. Space platforms used in this respect are: satellites, spaceships, space stations, etc.

Designing a spatial platform for the surveillance and early warning has been a constant preoccupation of military powers in the last decades, being focuses on the development of space programs in order to meet this aim. The possibility of using these platforms for civilian activities, for detecting and monitoring the evolution of phenomena, calamities and natural or manmade catastrophes, with impact on the population in the area, contributed to increasing the importance of remote sensing sensors and to the need to build a spatial surveillance system of the land surface.

The developed programs in this respect are the following:

- *Landsat program* is a program launched by the USA and which used a series of 8 satellites, the last one, Landsat 8, being launched on 11th February 2013 and including active and passive sensors to surveil the land surface;
- *IRS program* is a program of surveillance satellites developed by India, which has onboard passive and active sensors, compatible with the detection possibilities of those from Landsat program;
- *SPOT program* is a program developed by France, which includes a series of 7 satellites, the last one, SPOT 7, being launched on July 2014, having onboard active and passive multispectral sensors, which are used in missions of mapping the land surface;
- *ERS program* is a European program with the surveillance satellites ERS 1 and ERS 2, that include remote sensing with infrared, ultraviolet and visible spectrum sensors, sensors to determine the atmosphere composition and radar sensors for the surveillance of land surface;
- COSMOS program includes espionage satellites and was developed by the former USSR, being continued by the Russian Federation, having onboard passive and active remote sensing sensors;

Observing the surface of the Earth has been a constant preoccupation of the scientific community in order to understand the phenomena that take place on our planet, thus building sensors with very good remote sensing, based onboard satellites so that they will permanently keep an eye on the areas of interest. From the afore-mentioned programs, the LANDSAT one was a real success. Launched in 1972, the satellites ensured global, synoptic and repetitive coverage of the land surface, detecting the natural and manmade changes, the data obtained being a very good resource for mapping and monitoring the biophysical and geographical characteristics of the land surface.

From this perspective, we will detail further the aspects regarding passive sensors placed on aerial and spatial platforms. These sensors use specific principles and methods of passive remote sensing in order to provide the data for building the real image of the surveilled area.

In the analysis of passive sensors, we will use the sensors from the LANDSAT program, respectively, those onboard the satellite LANDSAT 8.

Landsat 8 has two imagistic tools that ensure the surveillance of land surface: Operational Land Imager (OLI) and Thermal InfraRed Sensor (TIRS). The approximate dimension of the satellite coverage area is 170 km north-south and 185 km east-west, having a cycle of collecting images of 16 days[9].

Operational Land Imager (OLI) built by Ball Aerospace & Technologies Corporation is a sensor that uses a photosensitive detector capable of detecting wavelengths from 443 nm and 2200 nm. The focalization of incident radiation is performed through an anastigmatic telescope with four mirrors which provides a 15-degree field-of-view covering large land surfaces. The spectral interval on which detection is performed is divided into 9 spectral bands, from which, eight ensure multispectral detection and one panchromatic detection. The

images that correspond to these bands have a resolution of 30 meters for the multispectral ones and of 15 meters for the panchromatic one. The incipient radiation is directed to the light detectors, placed as modules aligned with the focal plane, with a special pattern of a "push-broom" type which will increase its sensibility. The modules are made of 7.000 detectors for each spectral band and 13.000 detectors for the panchromatic one, thus providing very clear images of the land surface[10].

Thermal InfraRed Sensor (TIRS), built by NASA Goddard Space Flight Centre, uses a new technology which applies the theoretical fundaments of quantic physics to detect heat in the form of quantic infrared photodetectors which detect wavelengths between 10-12,5 μm. TIRS detects thermal radiation on two spectral bands with a spatial resolution of 100 m. Quantic infrared photodetectors are arranged in a matrix form, on three modules, with a "push-broom" design, close to the one of the OLI sensors. The focus on thermal radiation is done with refractive optical telescope with a 15-degree field-of-view, ensuring the surveillance that corresponds as dimensions with the values provided by the OLI sensor. Satellite coverage is ensured by three modules which contain, each of them, 640 quantic infrared photodetectors, ensuring a spectral response for the thermal radiations detected on the two dedicated spectral bands[11].

The Landsat program furnishes data with moderated resolution, being not only an important source of scientific research, but also a necessary one for the decision-makers to monitor, make efficient and undertake activities in different fields such forestry[12].

The images obtained provide information on the existence and location of water resources, surveillance of coastal regions, urban zones, farms and agricultural areas, forests, as well as the identification of different types of rocks and lands in geology, the monitoring of changes in ecology, etc.[13]

OLI and TIRS are used to measure the temperature at land surface and provide the data for studies regarding the physical and biological processes, the impact of temperature variations on their behaviour as well as for the understanding of other processes such as evapotranspiration, lakes' hydrology, monitoring fresh water resources, the impact of climate phenomena on the environment, etc. These data will be an invaluable source of information to manage water consumption, its division into individual consumption and economic one, especially in agriculture for irrigation[14].

The evaluation of agricultural productivity needs data obtained by sensors placed on-board satellites because the refreshing time of data, their precision and accuracy is of great importance in designing accurate prognoses on the behaviour of cultures. The images obtained with passive sensors about the use of fields contribute to the development of important fields of science, from the social point of view, related to the management of natural resources or the change in the use of farmland. The images from space are essential because they ensure the information support for making decisions or for developing programs to improve and diminish the impact of human activity on the environment.

Understanding the changes produced while using land as well as the expansion of human communities has become increasingly important both from the perspective of decision-makers and from the one of the public audience as beneficiary of social and economic activities.

In the last decades, the data provided by the satellites from Landsat program have been applied in different fields such as census, monitoring of urban areas at global level or the evolution of coastal areas as a result of erosion and human activity. The data are used as grounds for making decisions in different fields such as: health, climate, energy, prevention and protection against fire, natural disasters, ecology by tracking the evolution ecosystems and biodiversity [15].

Passive sensors are placed on aerial platforms and have technical parameters similar to those from spatial platforms, the differences residing in the changes that are necessary for them to function in the aerial or spatial medium.

The passive sensors for certain military missions have superior technical parameters than those used on civilian surveillance missions. An example in this respect are the surveillance sensors used within the COSMOS program, which have a special resolution between 0,7 m and 3 m[16].

Air surveillance performed through sensors onboard aerial or spatial platforms ensure the permanent monitoring of established areas and will provide the necessary data for the identification of the objects of interest placed on land surface.

Passive sensors are invaluable to the military due to the quality of the data provided which ensure, after processing, the design of a detailed map of the areas of interest, including urban ones, the detection of combat means and the timely identification of the enemy's intended actions. From the military point of view, an accurate image of the area of interest will ensure the efficiency of the command and control actions of organic forces. Obtaining detailed and accurate images of the battlefield will result in the detailed planning of actions, the increased degree of adaptability of organic forces to the real situation from the theatre of operations as well as in the coordination and execution of precise strikes on identified objectives.

In this respect, surveillance sensors on aerial and spatial platforms are integrated with the equipment that processes the data obtained, with equipment that has access to information and information distribution networks. The integration of these sensors will result in a complex image of the observed phenomenon and will provide decision-makers with the possibility to manage this in all its evolution phases: evaluation and prevention, prediction and alert, intervention and assistance.

As a result, we notice that passive sensors can accomplish both military and civilian missions, ensuring the timely identification of signals preceding the occurrence of a phenomenon or event and ensuring the information support that is necessary to the authorities to perform optimal actions in order to maintain an adequate security level.

In conclusion, we can state that passive sensors mounted on aerial and spatial platforms are useful and efficient tools for the permanent surveillance of land surface. The data contributes to obtaining a real image of the area of interest, in real time, ensuring the information support that is necessary to the efficient decision-making process at military level and of command during the conduct of operations.

At the same time, the data furnished by passive sensors contribute to the understanding of impact of human activities on the environment, thus playing an important role in writing prognoses or in other projects that are meant to reduce the negative influence on ecosystems and to ensure the efficient management of resources. The timely identification of events with impact on the life and activities of humans inhabiting the area where they produce has been one of the purposes for which sensors were created to have superior performances meant to benefit human society by maintaining the security environment adequate for human activities.

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THE IMPACT OF UNMANNED UNDERWATER VEHICLES TECHNOLOGY ON COMBAT SITUATIONAL AWARENESS

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The domain of underwater has represented for a long time a challenging environment for the implementation of technologies for discovering threats represented by submarines. Passive hydrolocation equipment on board warships have historically been confronted with technological limitations caused not only by the low acoustic imprint of submarine targets but also by a high threshold of false positive alerts due to industrial activities in coastal areas. In addition, the technological constraints and the high costs imposed by the fixed positioning of the active or passive detection sensors allowed submarines to have a wide variety of operating spaces for insidious maneuvering. However, the technological impact of the new combat systems adapted to the submarine environment, mobile and equipped with active sensors in the field of autonomous underwater vehicles, changes this status quo and creates major vulnerabilities on the infallibility of the submarine's secret actions. These new discovery capabilities, combined with intel information processing systems and programs to support decision making will have a significant impact on understanding the operational-strategic situation in the underwater combat environment.

Keywords: undersea warfare; submarines; unmanned underwater vehicles; technological impact.

Unmanned underwater vehicles (UUVs) are an emerging class of autonomous maritime vehicles, with huge potential for transforming the field of Anti-Submarine Warfare (ASW). The technology used by these underwater drones is based on the use of active type sonar for the discovery, classification, identification and tracking of submarines, with the help of mobile platforms arranged at immersion. Autonomous underwater systems represent capabilities intended primarily for shallow-water maritime areas or which have geographical features that make it difficult to use trailed sonar or keel sonar.

The main operational feature of the UUV is represented by the complementary character of the military actions, in relation to the classic aero-naval platforms dedicated to Anti-Submarine Warfare (ships, ASW aircraft, submarines).

The technological progress in the field of military capabilities leads to a conceptual transformation regarding the knowledge of the combat space, mainly in the direction of providing certified, high quality information, available in a short time and with potential in the field of achieving the planned effects at the operational level and strategically. The new operational and strategic environment has the potential to help policy military decision-makers not only determine the threat indexes and provide the optimal tools for responding to the threats of the adversary, but even foresee and prevent the enemy's actions, by using the architecture of new emerging technologies based on general management, advanced management of data and information, communications and artificial intelligence elements.

The future architectural models of knowledge of the employment space have the potential to offer an unprecedented perspective on the capabilities, actions and intentions of the opponent, so that the decision makers will have the opportunity to act proactively and pro-cyclically with a consistent anticipation component. Analyzed together, these capabilities offer a number of characteristics – namely the operational-strategic advantage, the scope, the precision, the persistence, the resilience, the reliability and the operation tempo – which allow the re-thinking of the operational-strategic environment from new perspectives.

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Considerations on the maritime combat space from the perspective of autonomous underwater systems

The analysis and interpretation of the security environment has undergone profound transformations, mainly on three main directions: the accelerated pace of technological innovations, the degradation of the international security environment and the increasing geopolitical tensions. The beginnings of this negative evolution that are hardly predictable at the level of international relations have their origin in the late 1990s and the end of the Cold War. This period was marked by remarkable military technological developments, culminating in the implementation and use of the concept of Network Centric Warfare (NCW) during the Gulf War.

At the conceptual and operational level, this war underpinned the concept of C3I (communications, command, control and information) and made it available to the commanders structured and shared tools regarding the integrated understanding of the employment space on the strategic, operational and tactical levels. The satellite systems allowed the fusion of images from the theater of operations thus opening the perspective of a new approach regarding the optimization of the information cycle.

The network-centric information architecture of the *Network Centric Warfare* has made the lines of separation between operational and strategic level not so clear. The knowledge and interpretation of the characteristics and facts of the combat environment make a translation to the use of unconventional capabilities, in which elements of artificial intelligence acquire an increasingly important position. From this perspective, the introduction in the areas of operations of the autonomous maritime systems represents capabilities that bring not only a new philosophy regarding the conduct of the naval war, but emphasizes the secret and insidious nature of collecting information to obtain the strategic advantages.

The quasi-unanimous feature of the current modern war, from the perspective of introducing in the space of employment of unmanned underwater systems is represented by "merging the data in an architectural concept characterized by distributivism and the creation of an integrated maritime picture"[1]. Through the action of autonomous underwater systems in the emerging information ecosystem of the employment space, as well as by their specific insidious way of action, we can identify significant risks regarding the escalation of the operational situation from the perspective of a conventional approach to the conflict. The risks are associated with the invasive ability to collect information, the secret nature of the actions of the autonomous systems and the limited measures of discovery, identification and recognition of the underwater vehicles starting from their reduced acoustic imprint.

From the starting point of characterizing the autonomous underwater capabilities regarding the advantages of the operation, from the perspective of knowing the battle space, it is necessary to determine precisely the positions in the sailing plan and the intervals for transmitting the information collected from the maritime area[2]. The use of autonomous underwater systems has a considerable influence on reducing the time between the adversary's decision, his action, the discovery of this action and the transmission of relevant information to the decision maker. This factor is determined by reducing the time allocated to the sequences to discover, to orientate, decision making and action in the chain of command and control.

A series of military technologies whose main purpose is the rapid collection of information and data and their processing in a very short time determines the reduction of reaction times on the multiple levels of the military planning process. The implementation of systems specific to artificial intelligence on autonomous underwater systems has led to the processing of large volumes of information, much faster as compared to human operators[3]. The autonomous nature of underwater systems is closely linked to their ability to collect and provide information in the area of interest. An increased autonomy of unmanned underwater systems allows a long presence in the proximity of the opponent's maritime communications lines and the possibility of transmitting an increased flow of information regarding his presence and patrol routes.

The operational picture and strategic ecosystem of nowadays specific to the knowledge of the combat space includes a wide and diverse range of platforms, sensors and capabilities that are connected in the network through complex and highly efficient

communications architectures. The resilience and reliability of autonomous systems refers to the capacity of the technologies used to design and build this equipment regarding the implementation of redundant and robust capabilities for their action in a hostile environment. Autonomous underwater vehicles can be launched in large numbers to form a network of ISR missions.

New systems related to discovery and tracking submarines using capabilities such as autonomous underwater systems are dependent on the development of silent propulsion systems, batteries feed systems, communication systems, and composite construction materials. The achievement of efficient propulsion systems must also be realized from the perspective of increasing the range, the speed of movement through water, the duration of the missions and the preservation of the insidious nature of the actions.

The major challenges associated with using unmanned underwater vehicles come from the constraints of the communications equipment that must be operated in the undersea environment. At this point, autonomous systems must come to the surface of water to transmit the information collected to other warships or observation posts from the coastline. The present studies are focused on the development of technologies that involve the development of submarine antennas that transmit low frequency electromagnetic impulses. Other directions of development include the development of energy sources for the installation of high precision sensors and the optimization of propulsion systems by taking the kinetic energy of the waves.

The complex approach of the threats from the underwater combat space

The active nature of the emerging information ecosystem of operational and strategic level of the knowledge of the employment space includes the capacity of the littoral navies to infiltrate into the territory of the adversary (terrestrial, air or maritime) and to obtain precise information and with high operational potential. All these capabilities are instruments of action on the limit of the interpretation of international law, because they directly challenge the political principles of the sovereignty of the states.

A sub-domain of knowledge of the maritime combat space is that of the underwater environment, which is composed of a conglomerate of concepts, actions, processes and information related to the maritime environment:

- monitoring and evaluation of industrial underwater civilian entities or own military capabilities;
- determining the underwater environmental characteristics of the maritime areas of interest;
- monitoring the maritime transport routes of the merchant fleets.

Autonomous underwater systems can be used in an integrated architecture for detecting submarine threats from a maritime area of interest. The small size of these systems and the ability to act secretly make these capabilities the optimal tools for carrying out research and surveillance missions in an area controlled by the adversary forces. Autonomous underwater systems can be disposed of at mandatory crossing points or in shallow waters, where submarines have a high vulnerability in being detected.

Starting from the current challenges in the field of underwater transmissions regarding the establishment of stable linear encrypted connections between autonomous underwater vehicles and specialized naval platforms in the processing of information collected from the combat space, the optical or low frequency communication fields represent the directions of development in increasing the capabilities of autonomous systems. The maritime environment represents a complex space from the point of view of the propagation of the waves emitted by the underwater sensors mounted on the autonomous vehicles, this bringing with it major constraints on the detect, tracking, identification and classification of the submarines. In addition, the geomorphological anomalies of the maritime space, the variability of the environmental factors and the limitations regarding the operation in coastal regions with shallow water are both concerns for the planners of the operations using the autonomous systems as well as for the designers and manufacturers of this equipment.

The major interest regarding the development of technologies regarding the discovery and tracking of submarine contacts is currently oriented towards obtaining information from the maritime areas under the control of the adversary.

A review of the specialized literature on autonomous underwater systems clearly indicates that the detection, acquisition, integration and analysis of target information must be carried out within the concept of common operating picture (COP), this product being intended for all decision levels. It is of particular importance that the COP be used by all relevant actors in the employment area for the knowledge of the situation and for the exchange of information between their own structures.

Particular attention should be paid to the large volume of information processed and to their collection from various sources, this leading to delays in making useful information products. To overcome these drawbacks, autonomous systems perform their modeling of information processing on artificial intelligence technology, thus achieving interoperability in data sharing and timely dissemination and in an accepted standard format.

The discovery and tracking technology mounted on unmanned underwater vehicles is increasingly being used for disputed areas of action, mandatory crossing points, straits, opponent's ports and its coastal districts.

In the current security analysis of the maritime battle space, these geographical locations become crucial for gaining the strategic advantage and will therefore be increasingly disputed by the relevant regional actors. In this way, the deployment of autonomous underwater vehicles in the space of employment and the transport warships of these capabilities are priorities in the planning and use of effective countermeasures.

The main purpose of autonomous underwater systems is not necessarily a destructive one (based on the concept of combat loading vector) because it is not limited only to missions aimed at neutralizing or intercepting the adverse submarine, but rather one of the ISR domain, mainly oriented towards collecting and transmitting information on the actions of the submarine as a target of interest. The technology used for autonomous underwater vehicles may have dual civilian-military use. Thus, at this moment we have positive results regarding the successful use in scientific fields such as: marine biology, prospecting of the continental shelf resources, monitoring of environmental factors or the fishing industry.

From this perspective, we consider that the dual development of these capabilities is a resource still insufficiently exploited. Developing the civil dimension of autonomous systems capabilities is obviously to the advantage of the military component, if we were to analyze only through the extension of the battery life, the increase of the autonomy or the miniaturization of the navigation sensors.

From the point of view of the expenses related to the research and development of autonomous underwater systems, the sharing of costs between the actors of the national defense system and the civil operators could be a win-win approach for all involved.

The setting up of an underwater traffic monitoring architecture, consisting of hydro-acoustic sensors and autonomous underwater vehicles, has as its main purpose the shortening of the sequences of detection and identification of the threats existing in the maritime areas[4]. The miniaturization of the components of the unmanned underwater vehicles, together with the reduction of the acoustic footprint of this equipment, make these capabilities the optimum instruments to be inserted in an employment space in dispute or in the A2 / AD (anti-access / area-denial) areas.

We can notice that both the high volume of information gathered from the battle space and the quality and the reliability of this information have the potential to tilt the balance of the operational and strategic balance and to cause a rapid escalation of the situation in the theater of operations.

From the perspective of the internal security space, it is considered that a large variety of information and a higher quality of information lead most often to feasible and sustainable decisions. However, there is a risk that the information flow from the command and control architecture will be oversaturated and the essential elements of the evaluation of the employment space will be omitted or analyzed too late to have relevant inputs.

From this perspective, unmanned underwater vehicles equipped with capabilities in the field of artificial intelligence represent the tools that military analysts need to optimize analysis and decision times. Overcoming the bottlenecks at the decision level, arising from the information inflow, can be achieved by introducing the elements of artificial intelligence in the chain of command and control, under the decisional control of the human factors[5].

Finally, the operational and strategic knowledge of the maritime security environment, especially of the underwater space through the introduction of autonomous systems has the potential to provide decision makers with extremely precise information, with a pronounced anticipatory character, especially on the configuration of the concept of operation of the opponent. The development of the opponent's courses of action on the underwater dimension is made much more efficient starting from the attributes offered by the presence for a long time of autonomous underwater vehicles in its maritime areas and the ability offered by this equipment to benefit from the advantage of disruptive technologies.

The specific factors that offer advantages through the view of these technologies are: the systematic action within the A2 / AD areas, the destructive character that autonomous systems can develop, the predictable nature of the actions, the anticipatory nature of the missions of the autonomous vehicles, the dual civil-military nature of the equipment on board, the low level of vulnerability, the secret nature of the actions taken and the reduced acoustic footprint. The deployment into the depth of the adversary territory carried out by the unmanned underwater vehicles represents a specific feature of the autonomous systems that can penetrate the air, sea or land space, but also the command and control architecture of the adversary.

The striking ability available to autonomous underwater vehicles on the adversary's objectives refers to the action of destroying or neutralizing pointed targets, through temporary or systematic actions, in their own or enemy's sectors. Depending on the purpose and objectives pursued, autonomous underwater systems can be configured as hit vectors and can be launched from the boundary of enemy controlled zones. The versatility of autonomous underwater capabilities in the execution of a wide spectrum of missions provides these systems with operational and strategic advantages superior to conventional capabilities, such as warships or submarines.

The action of autonomous maritime systems in the maritime areas is difficult to predict from the perspective of the analysis carried out by the opposing forces. The predictability of the actions of the autonomous systems can be evaluated by the way in which the forces and the capabilities of the enemy can carry out a complex anticipatory analysis. On the other hand, autonomous underwater systems operating in the spectrum of ISR equipped with subsystems from the artificial intelligence domain are capable of carrying out predictive analyzes leading to information products relevant to the knowledge of the security environment at operational or strategic level in a very short time.

The risk is represented by the fact that some of the predictive capabilities of autonomous systems can generate situational risks if the information produced is not properly evaluated by human operators. Complex situations may arise in which the information products offered by artificial intelligence systems generate false threats regarding the actions of the adversary and may ultimately lead to escalation of the security environment based on erroneously interpreted premises.

Autonomous underwater vehicles have the ability to react to different factors in the underwater combat space and to prioritize tasks based on new operating conditions. This ability of autonomous systems, to initiate actions according to the changes in the engagement area is possible due to the contribution of artificial intelligence in carrying out preventive measures without necessarily being predictive. For example, the information received by the autonomous systems from the satellite surveillance systems regarding new actions of the enemy can be defining elements in the modification of the missions or of a new prioritization of them.

The potential of dual use of unmanned underwater systems both for civilian and military purposes can be exploited by achieving common development directions, mainly on the monitoring component of the physical factors of the undersea environment.

The identification of areas of common civil and military interest is an important direction in significantly reducing the R&D costs for a number of components or sensors onboard autonomous underwater vehicles. It is well known the fact that "the reports and information specific to the knowledge of the operational environment are designed to respond to emergency situations or from the perspective of crisis management scenarios"[6].

These information products are developed through collaborative analysis structures that disseminate the final results to civilian and military

decision-makers. Accurate identification of the operational requirements of naval combat missions must be done by analyzing the possibilities of configuring a secure flow of information dissemination in relation to the transfer time and the decision-making process. This process is done by analyzing the elements that define the communications infrastructure, the rate of data transfer, the ability of the underwater systems to position themselves favorably in the maritime battle space.

Perspectives and future guidance

The capabilities represented by the autonomous underwater systems from the perspective of their use for the realization of the integrated maritime image have the potential of an instant warning signal about the danger represented by the adversary forces, achieving a long presence in the maritime area due to operational and strategic interest, substantiating the decision-making processes based on algorithms specific to artificial intelligence.

However, some functions may have the potential to trigger escalation of contextual situations starting from the complexity of understanding the security environment. Autonomous underwater systems contribute to increasing the knowledge of the maritime combat environment. This combat environment is defined by several principles and items which include, among other things, identifying surface and submarine targets, target positions, directions of movement, activity of warships and submarines, load of the merchant vessels, information about weapons and navigational hazards in the area of interest.

We appreciate that the design and development of the use of autonomous underwater systems in the Naval Forces should be mainly oriented towards ASW (Anti-Submarine Warfare) and ISR (Intelligence, Surveillance and Reconnaissance). The need for permanent knowledge of the current situation of the combat space represents an absolute necessity both from the perspective of ensuring the security of the maritime space from a national perspective but also from the collaboration with NATO member states. This is fundamental from the point of view of exercising sovereignty and is essential in meeting the security and security objectives at Alliance level. Obviously this fact is also reflected on some reasons related to the monitoring of the marine environment, the industrial, economic and trade area.

Autonomous underwater systems have the ability to expand the scope of classic naval platforms and to perform a series of missions with minimal cost and without endangering the crews of ships. The accelerated development of technologies for reducing the acoustic footprint of this equipment and the possibility of being launched in the vicinity of the adversary's coastal areas represent serious challenges regarding the detection and identification of the contacts of interest.

To achieve these objectives, the main issue to achieving technical interoperability is given by the inconsistencies between the standards regarding the data typology and the specifications between the military and the civilian environment, this aspect being fundamental in improving the data dissemination capacities between the operators of the autonomous systems.

In our opinion, an important direction for the realization of the inter-institutional information exchange at national level is represented by the capacity of Naval Forces to realize a maritime recognized picture for the areas of responsibility and its sharing to other structures in the national defense system architecture. In this regard, we consider it appropriate "the complementarity of an anti-submarine sensor system that will increase the ability to detect underwater targets"[7]. Such a configuration of the systems will provide much more precise information, regarding the position and motion vectors of underwater targets, of any kind.

In this article we have highlighted how the information collected by the autonomous underwater systems can be used to configure the maritime security environment, with the prospect of considerably improving the operational situation of the warfare space. For a comprehensive understanding of both the information architecture and the content of the information collected from the maritime areas, the commanders from all the structures involved must carry out a detailed analysis of the following aspects:

- identification and integration into a cohesive concept of operation and tasks in which autonomous underwater systems can play a decisive role. In the specific context of the area of responsibility of the Naval Forces, missions from the field of ISR,

ASW or MCM offer obvious advantages from the perspective of using autonomous underwater vehicles;

• developing an integrated conception of using the autonomous systems in terms of streamlining the information flow and making operational and tactical decisions, by integrating specific information structures;

• conducting some opportunity studies applicable to the area of responsibility of the Naval Forces and to the specific of the maritime interests of Romania, regarding the use of underwater systems;

• correlating the needs of developing the use of autonomous underwater vehicles with the general framework for developing and using these capabilities at NATO level;

• identification and use of generally accepted standards for sharing information between several agencies and organizations, as well as developing a typology of data formatting and sharing;

• carrying out an integrated approach to the data and information processed regarding the specific challenges of the submarine environment and analyzes regarding their transfer between the decision-making structures.

In view of the above, in order to maximize the effects of using autonomous systems in the underwater environment, the design of the missions established by the commanders must be analyzed not only from the perspective of the volume of information that these systems can provide but also from the point of view of the achievement of the information flow and especially of their integration in a dedicated center to processing of data collected from the areas of interest.

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ESSENTIAL FACTORS INFLUENCING THE APPLICATION OF THE SEA DENIAL CONCEPT

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The modalities of applying the concept of sea denial are of high complexity due to the diversity and intensity of the naval tactical actions in the combat environments on the surface of the water, under the surface of the water and aerial. If denial of certain maritime space for the enemy fails, there is the possibility that the enemy will project his force on the shore and destroy the economic and military objectives. The need to prohibit certain maritime space for the enemy arises when the control of the sea cannot be achieved or lost in that maritime space. As a rule, sea denial is intended to be carried out near its own coast in order to thwart the enemy's efforts to attempt an amphibious landing or to interrupt the maritime communications routes. Sea denial can be complementary to the control of the sea in certain areas of the ocean where the control of the sea cannot be maintained. The main factors influencing the application of the concept of sea denial are space, time, forces and means available, the technological development and the degree of instruction of the crews. In the application of the concept of sea denial in addition to the naval forces, the air forces and the ground forces play a particularly important role. The joint characteristic of the combat actions requires a concept of unitary action, most likely, prepared from the time of peace or during the crisis development.

Keywords: sea denial; control of the sea; naval power; obligatory crossing points; tactical naval actions; force projection; amphibious operations; freedom of navigation; semi-enclosed seas; communication channels.

In this article I set out to highlight the main factors that influence the possibilities of applying the concept of sea denial. Usually when analyzing the application of the concept of sea denial, the realization of this concept is attributed to a lower naval power, which in most cases is not able to obtain and maintain control of the sea in a certain maritime space and then uses its forces and its means to deny the enemy access to that maritime space. With the technological development of the naval platforms, the means of discovery and the vectors that can be launched from these platforms, the concept of sea denial can also be implemented by the great naval powers, most probably, in order to avoid direct naval confrontations.

Conceptual approach

The definition given to the concept of sea denial by Joint Doctrine Publication 0-10 / UK Maritime Power: "a way of not allowing the enemy access to a certain area of the sea that no one who forbids the sea can control"[1], is relevant for the type of naval tactical actions to be performed in order to achieve this concept.

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The main feature of the concept of sea denial is that this concept applies mainly during war time but is prepared in time of peace. The application of the concept of sea denial is mainly influenced by the factors of space, time, available forces, technology and crew instruction.

Applying the concept of sea denial for a certain maritime space can be a strategic objective at any stage of a conflict[2]. In the semi-enclosed seas, such as the Black Sea and the Baltic Sea, during the Second World War the application of this concept was a strategic objective and the application of this concept was achieved especially by planting the dams of marine mines.

The concept of sea denial in a maritime space can be carried out partially or totally in air combat environments, on the surface of the water or under the surface of the water. I consider that from the point of view of the time factor, the concept of sea denial is carried out temporarily, and from the point of view of the force factor the application of this concept is limited. The use of forces and means in combat, the technological equipment of the ships as well as the degree of training of the crews contribute significantly to the dimensioning of the maritime space and the duration for which the concept of sea denial is applied.

In the analysis of the space factor for the application of the concept of sea denial an important role is played by length and the configuration of the coast. Thus, an island or peninsular state with a considerable length of defense coast cannot achieve sea denial in most of the maritime space to defend, especially if it does not have a developed military technology. Effort to control the surrounding maritime space requires a great deal of resources and a developed naval power with action capabilities in all combat environments.

On the other hand, an island or peninsular state is obliged to develop its naval power for the protection of the communication paths and its own coast. The control of obligatory crossing points, such as straits, ensures the state that controls the possibility of banning the crossing of ships or submarines considered hostile, from one side to the other, thus applying the concept of sea denial.

The most popular obligatory crossing points in the European area are the Turkish Strait (Bosphorus and Dardanelles), which ensures the communication between the Black Sea and the Mediterranean Sea, the Gibraltar Strait connecting the Mediterranean Sea with the Atlantic Ocean, the English Channel and the Danish Straits (Kattegat and Skagerak) provides the connection between the Baltic Sea and the North Sea.

Usually the application of sea denial concept has the role of protecting the shore from a possible projection of the enemy's force on its own coast. The military actions of force projection, especially in the case of amphibious operations, are influenced by the aircraft actions[3]. That is why the length of the coast, the characteristics of the land in the coastal area, the arrangement of military and economic objectives, as well as the depths of the coastal area largely determine what forces and means are required to prohibit a certain maritime space. A maritime space in which the depths are small and the land in the coastal area is flat without pronounced forms of relief is conducive to performing amphibious combat actions. In this case, for the sea denial, most likely, actions can be taken to mine certain areas, attacks with fast boats, covering of the maritime space with coastal missiles and execute aviation attacks.

Implications

The application of the concept of sea denial through the use of large-scale marine mines was successfully used by the Iraqi navy after the occupation of Kuwait, in August 1990, by launching some mine dams at a distance of 150 nautical miles from the Kuwaiti ports and other mine dams in the coastal area to prohibit the possible landing of allies on the coast. Over 1.300 mines were launched, and the result was the damage of several ships and temporarily blocked the logistical flow necessary to support Operation Desert Shield[4].

It is known that during the Second World War, between June 15 and 19, 1941, the largest mining operation in the history of the Romanian Navy known as the "Constanta Mining Operation" was executed by the Romanian Navy. Mine dams were installed in the Capu Midia - Tuzla district, about 28 nautical miles long, for the protection of the Romanian coast and ports against surface ships and Russian submarines[5]. The Romanian Military Navy has also executed a series of mining operations "Varna mining operation", "Capu Midia-Sfântu Gheorghe mining action", "Odessa mining action". The mine dam system has proven effective by sinking the Russian destroyer Moskva and over 10 Russian submarines.

In the case of the use of marine mines to carry out the sea denial in a certain maritime space, several aspects must be considered.

First of all, it limits the freedom of navigation on the routes of communication, remaining to be used recommended routes and passes known only to those who built the dam system of mines. The maneuvering of the ships is also limited, and their own submarines forced to use a much-reduced maneuvering space. There is the possibility of affecting the marine environment by sinking vessels with large quantities of fuel on board, the discharge of fuel at sea can lead to ecological disasters. Also, after the conflict is over, the dams must be removed to ensure the freedom of navigation at sea, which requires specialized forces for dredging and hunting of mines, the demining actions stretching for a long period of time.

Most mining operations took place in the semi-enclosed seas because the size of the maritime space and the depths allowed the execution of the mining actions on almost the entire length of the coast of a state.

In support of the above assertion, I can bring as examples the depths in the Baltic Sea which are about 45 meters on more than 60% of its surface,

in the Persian Gulf the depths do not exceed 100 meters, the continental shelf of the Black Sea has a width of about 50 of kilometers where the depths do not exceed 100 meters, and the average depth in the North Sea is 95 meters.

The space in the operations of sea denial is determined especially when aviation acts in support of naval forces. In the semi-closed seas, the lines of operations are short, often being overlapped, so that the use of aviation can cover in a very short time several lines of operations (surface, submarine, and logistics). The short reaction time and the precision of the actions taken in support of naval forces make aviation a decisive role in applying the concept of sea denial in the air combat environment and on the surface of the water.

Of course, the action of aviation is limited in space and time, but the effects resulting from the aviation attacks are decisive through the effects produced in the general framework of the operations of sea denial. The maritime space in the semi-enclosed seas is characterized by a high density of friendly, potentially hostile, neutral vessels, combat vessels, commercial vessels and fishing vessels, which often makes it difficult to identify potential threats especially in time of peace and crisis.

It is possible that during the escalation of a conflict the enemy will act with various forces and means to execute offensive mines in order to prohibit the entry and exit of ports, the mining of communications routes or of concentration camps. In this case it is necessary that the specialized demining forces act in a short time, so that the freedom of navigation is restored as soon as possible.

From the previous examples it follows that the space factor and the time factor influence the mode, the forces and the means used to apply the concept of sea denial.

Next, I will analyze the importance of the technological factor in the effective application of the concept of sea denial. Obviously, the concept of sea denial cannot be applied without the specific forces and means for carrying out naval actions. Mainly submarine, coastal rocket and aviation combat ships are used to prevent the enemy from entering a certain maritime space.

Ideally, the structure of a naval force should be tailored to the military strategy, technological progress and capabilities of potential adversaries. Technological progress develops opportunities to increase the efficiency of naval actions by exploiting the vulnerabilities of the enemy. The development of autonomous intelligent vectors and autonomous vehicles without a pilot allows efficient actions from long distances on the enemy without endangering their own platforms.

Naval theoreticians believe that in order to act efficiently, it is necessary to have vessels that are difficult to discover (stealth technology) that offer reduced fingerprints in the electromagnetic spectrum. Even with advanced building technology, combat ships will not be able to become totally invisible, "stealth" technology contributing to the delay of discovery and identification by the enemy. A warship equipped with "stealth" technology offers a diminished footprint for acoustic, magnetic, radar, thermal or optical detection equipment[6]. When implementing the emission control plan, the level of emissions of a combat vessel shall not be higher than that of the environment.

The building of new ships equipped with modern "stealth" technology, with efficient detection and hit systems are among the priorities of any naval force. The accomplishment of the endowment programs depends to a large extent on the economic factor and on the security threats. The endowment programs are difficult to fully realize even for countries with developed economic possibilities and that is why in many cases it is decided by the decision-makers to modernize the existing platforms with new generation technology.

The main focus is on discovering targets as far away as possible, identifying them and combating them from a distance large enough so that they do not pose a danger to their own forces. In confined maritime spaces, each party in conflict carries out continuous surveillance so that for large battleships it is difficult not to be discovered. An advantage for fast boats is the presence of commercial traffic, which offers them the possibility of concealment and freedom of maneuvering.

In applying the concept of sea denial in the context of water surface of fighting environment, as a rule, the mostly used forces and means are the fast boats, the aviation and the rocket launching devices from the coast. Each of these forces and means has advantages and disadvantages depending on the degree of enemy's action. The fast boats have the advantage of being equipped with new-generation

rockets and torpedoes, they can operate in many directions, they are difficult to detect especially near the shore, and the production cost is not very high.

However, fast boats have a number of disadvantages. They do not have high autonomy (they cannot be maintained for a long time at sea), they cannot act under heavy weather conditions, due to lack of space, they cannot install complex systems of close and anti-aircraft defense, and they have the possibility of discovering and identifying a limited number of targets.

In the semi-enclosed seas, the lack of maneuvering space for maritime platforms is a disadvantage, especially for frigates or destroyer vessels. The loss of such a ship in combat would significantly diminish the fighting power of a state through the effects produced on the physical component and the moral component. However, the possibilities of conducting combat in the three combat environments (aerial, on the surface of the water and below the surface of the water), firepower, high autonomy, the systems of discovery and launch necessarily include the presence of these types of ships in the structures of a modern fleets.

Submarines can also be used to apply the concept of sea denial. The submarine is a very important weapon for any naval force, especially for its ability to act secretly, away from its own shore, sometimes even in enemy-controlled waters. In addition to gathering information on enemy naval movements, launching and recovering diversion research teams, the submarine can also perform combat actions such as offensive or maneuver mining and attack on major naval targets.

However, I consider that for the submarines, the application of the concept of sea denial is more likely to occur in the open ocean, complementary to the application of the concept of control of the sea. I argue this claim through the actions of German submarines during World War II operating in the Atlantic Ocean, where German battleships did not have control of the sea. In limited maritime spaces, submarines that perform specific tactical combat actions must be very maneuverable and stable in order to be able to adapt quickly to environmental conditions.

By achieving an effective system of striking from the shore, the concept of sea denial in the fighting environment can be applied to the surface of the water in the maritime space delimited by the range of the anti-ship missiles used. The coasting or coastal defense system has the advantage of launching from predetermined positions, based on its own information or on the basis of information received from the forces with which it cooperates. The possibility of rapid change of launch positions offers the system of hitting from the coast mobility and the possibility of taking the enemy by surprise. The disadvantage is the very weak air defense and vulnerability to the actions of the diversion research teams.

The use of aviation in the application of the concept sea denial is especially necessary to ensure a certain airspace control fence in the area of action of the naval forces. Surface ships, especially fast boats and ships used for mining actions are vulnerable to enemy air strikes and therefore, during their specific combat actions, their own aviation action is required. The effects produced by aviation following the attack on a group of enemy ships are very important. In addition to the damage of certain categories of technique and weaponry, aviation attacks can also cause the enemy combat device to change, delay or change the direction of movement. The aviation resource available and the short period of time during which aviation can act in support of naval forces can count as a disadvantage.

In order to reduce the risk of loss of human life, technique, armament and even ships, technological discoveries offer solutions for the use of autonomous unmanned vehicles in actions of discovery, recognition and even of hitting the enemy in all areas of combat. In the actions against mines there are autonomous underwater vehicles (AUVs) capable of discovering mines, transmitting information about the type of mine used and even destroying them. Unmanned Aerial Vehicles (UAVs) are widely used for a long time, especially for research, monitoring, target identification, bacteriological and chemical attack detection, enemy target hit actions[7]. Autonomous unmanned vehicles can be used from ashore or embarked on ships and submarines depending on the autonomy of operation and the type of mission to be accomplished.

The technological development is carried out at a very fast pace and sometimes certain categories of technique are replaced in a relatively short period

of time with more efficient ones. Therefore, the way they are used depends very much on those who operate it and on the new tactics of use in combat that need to be developed in order to integrate them effectively. Crew instruction is essential for any type of naval action and in the operation of any technical category on board. Sensors and armament aboard ships may not function properly if not operated at the appropriate parameters. Forms of training through courses, on-board or offshore instructional activities are meant to enhance crew skills and increase confidence in technique and weaponry.

Considering the technological evolution, the means used, the methods and the procedures for conducting military actions during a conflict, in which the main objective of a participant is to limit the use of sea environment, the typology of such a confrontation, sends me thinking at a majorly asymmetric action. This characteristic is given by the methods of putting into practice the principles of armed struggle, under the conditions of a much stronger and more technologically developed enemy. Asymmetrical conflicts are characterized by a difference between forces, manifested at the level of the employed forces, organization, goals, methods, processes and mode of action[8].

Currently, the Romanian Naval Forces are undergoing a period of transformation derived from the security context in the Black Sea area, and the full application of some concepts, specific to the maritime domain, such as the concept of sea denial, is not possible especially due to the insufficient forces and means for the application of such a concept. Therefore to avoid any confusion regarding the application of the concept sea denial, the phrase "Limiting the use of the sea" is agreed. This specific concept for the Romanian Naval Forces derives from the concept of sea denial and expresses very clearly that if it is not possible to prohibit the sea simultaneously in air combat environments, on the surface of the water and under the surface of the water the concept of sea denial does not apply, but only limits the use of the sea.

Conclusions

Naval confrontations, in general, are short-lived and very intense, the party which is lower numerically trying to focus the effort on banning a certain maritime space. From the above stated facts, it can be deduced that sea denial cannot be carried out over a very long period of time, nor on a very large area of the sea. It is important that the time during which the application of the concept of sea denial has been achieved ensure that the planned tactical or operational objectives are achieved.

The Romanian Naval Forces through the forces and means available to them are not able to apply the concept of sea denial, but they can apply limiting the use of the sea through a narrower range of measures, mining being the most efficient action, given the length of the Romanian coast.

The application of the concept "Limiting the use of the sea", from the point of view of the response modalities regarding the methods and procedures for the use of forces, does not differ from the application of the concept of sea denial, the difference lies in the way in which the concept is realized in the three fighting environments (aerial, at the surface of the water and below the surface of the water), the size of the maritime space and the period of time as long as the application of this concept can be maintained.

From certain points of view, the ways of applying the concept of limiting the use of the sea are very similar, but on a smaller scale, with the guerrilla warfare, the main methods of action being the tactics of hitting the enemy by surprise or deterring its actions.

From the point of view of the main characteristics of the confrontation, the application of the concept of sea denial or of the concept of limiting the use of the sea, particularizes the maritime actions in a conflict rather than asymmetrical, disproportionate, dissymmetric, than in a symmetrical confrontation.

Both the application of the concept of sea denial and the application of the concept of limiting the use of the sea require a joint leadership of the forces, a unitary concept of action in which the naval forces have the main responsibilities being supported by the air forces and the ground forces.

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THE SUNNI-SHIA CONFLICT AND ITS STRATEGIC SIGNIFICANCE

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With the invasion of Iraq by a US-led coalition, the West found itself operating in an environment they little understood. Military forces, coming from countries where religious differences did not matter politically, were forced, in planning and executing even the smallest of tactical operations, to take into account the religious specificity of each area, modeled by Islam and by the rift between the two main branches of Islam – Sunni and Shia – rift that can go down to family level.

The same thing is true at strategic level, where the Sunni-Shia conflict, if not correctly understood and assessed, has the potential of making irrelevant or pushing into failure even the most detailed Western plans.

Keywords: Islam; Sunni people; Shia people; oil; Saudi Arabia; Iran.

For the unsuspecting observer from the West, where different churches, moreover, different religions exist side by side in such a harmony that the Thirty-Year-War has disappeared from memory and seems to have never happened, the existence of two different Muslim *churches* seems a normal fact, resulting in benign diversity and plurality of views. Yet the Western lenses could not deform reality more. Provoked by events that occurred in 632 and materialized for the first time in open conflict in 680, the Sunni-Shia rivalry equals a long line of confrontations, even wars, all extremely bloody, that stretches to the present days and shows no sign of calming down in the near future. Moreover, nowadays societal trends in the Muslim world seem to harbinger its intensification.

This article sets out to achieve two objectives.

Firstly, it will present the relevant historical data needed to understand the current state of the conflict between the two parties.

Secondly, it will proceed to assess the way, or ways, in which this conflict might affect Western policies in the region. This enterprise, even though focused on a phenomenon almost fourteen century-old, is deemed opportune now, when the Arab Spring, far from bringing more democracy in the Middle East, has in fact brought but more sectarianism[1].

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Religious differences

In 632, Prophet Muhammad dies and leaves the young Muslim community a problematic inheritance. On the one hand, the Muslims were on the heels of a series of military successes, won by a redoubtable fighting force which, in a matter of years, would conquer the entire Arab Peninsula, and over the next decades would push the boundaries of the Muslim world from the shores of the Atlantic Ocean, in the West, to the steppes of Central Asia and into the Indian Subcontinent, in the East.

On the other hand, the Prophet was leaving behind a religion without scriptures, based solely on the oral transmission of the revelation. Moreover, Muhammad had not been successful in clearly establishing either a successor to lead the Ummah, or a procedure based on which a successor might be chosen.

In order to solve the succession crisis, the most important Muslim leaders decided to choose, along pre-Islamic Arab line, that man among them who, besides piety in religion, was able to ensure the young community its unity and its strength. Thus, according to this procedure, the first to become Caliph, was chosen Muhammad's father-in-law, the elderly but respected Abu Bakr[2]. This way of reasoning about choosing the leader found the most supporters, and it would evolve into what we today know as Sunnism, vision of Islam that represents a majority of 80-85% of Muslims.

There was also a parallel view which maintained that Allah would not have revealed Islam to a regular mortal, but to one that was exceptional. Thus, the Muslim leaders should not have been

chosen based on political qualities, but should have been chosen from among the Prophet's blood relatives, starting with his nephew, and son-in-law, Ali, followed by the two sons the latter had with the Prophet's daughter, Fatima. This competing view would develop into Shiism, currently remaining in minority in the Muslim world to this day.

After the imposition, for the moment, of the pre-Islamic successionist approach, Abu-Bakr, the first Caliph turned out to be a strategic genius. Immediately after the death of the Prophet, many of the tribes who had sworn allegiance to him declared that the bond died with Muhammad and they owed nothing to the Muslim state or its new leaders. Abu-Bakr declared them apostates and immediately launched against them the campaigns known as the *Wars of the Apostates (Harub al-Ridda)*. The outcome was a series of victories which, after two years brought inside the Caliphate the entirety of the Arab Peninsula, pushing the Muslim law in territories today known as Iraq and Syria, at the moment mere provinces of the Sassanid (Persian) and Roman Empires.

In 634, Abu Bakr died, leaving behind a state vaster and stronger than, probably, Muhammad had dreamt of. Moreover, the Caliphate was neighboring on the Persian and Roman Empires, at that moment nothing more than decadent political entities. In 634, the man who became Caliph was another one of Muhammad's former companions, the terrible Umar ibn al-Khattab, named *al-Farouk (The one who separates the good and the bad)*. On the one hand, Umar continued the campaigns started by his predecessor and before his death, in 644, the Caliphate had swallowed the entire Maghreb, Egypt, the Levant, a good part of Anatolia and almost the entire Persian Empire. On the other hand, Umar started the building of an administration, necessary to control the enormous territory and, along with the administration, he started the draconic imposition of the Muslim law. His own son, surprised imbibed received a punishment of eighty lashes, after the application of which he died.

In 644, Umar was killed by a Persian slave and the reign was passed on to the third Caliph, Uthman ibn Affan. Uthman consolidated control over the territories he had inherited and continued the campaigns, the Muslim armies arriving in Sindh, the current Pakistan. In parallel, Uthman proceeded to a light decentralization, allowing the consolidation of power of local leaders like Muawyiah, the governor of Syria. Another great success of his tenure was the codification, in writing, of the Islamic revelation, known as Quran. In 656, Uthman was killed by a group of Muslim soldiers, during a revolt, and his blood was spilled on the pages of the Quran he was reading, fact which shocked the believers[3]. As a Caliph was supposedly chosen for his express quality of ensuring unity, the mandate of the Caliphs seemed to weaken. The supreme power was passed on to yet another companion of the Prophet's, his nephew, Ali ibn Abu-Talib.

Ali's Caliphate, from a military standpoint, did not bring great surprises, his tenure being affected by civil wars and other political problems, his power being strongly contested by Muawyiah, cousin to the defunct Uthman. The Syrian governor had publicly requested Ali to punish the killing of the third Caliph, fact that had only deepened the social problems. Completely disappointed with the situations, members of the Islamic sect of the Assassins *(Khariji)* planned attacks against the two competitors. Ali was killed, while praying in a mosque in Kufa, the current Iraq. Muawyiah survived the attack and became Caliph, position from which he founded the Umayya dynasty, located in Damask.

By that moment, 661, it had become a custom that the Caliph be only a political leader, able to ensure the unity of the *Ummah*[4] and to defend its interests. The Caliph, according to that conception, was elected by the community, or by its representatives, upon the vacancy of the position, and he would rule for as long as he was able to meet the stated criteria. His authority was only political. Muhammad's aura had not been passed to anyone, the religious authority being a purely formal one, exercised by a priesthood called *Ulama*[5], constituted like a functionary body. However, the rule, instituted with the election of the first four, was that the Caliphs come from Muhammad's tribe, Quraysh, and as much as possible be a former companion of the Prophet's.

With the ascend to power of the Umayya dynasty, the rule changed and the Caliphs were no longer elected, the power being passed from one generation to another, inside this bloodline. The power of the Caliphs would not be threatened as

long as they were able to guarantee unity, stability and protection of the Muslims' interests. The Umayyads, however, members of the Quraysh tribe, stemmed from the lower clan of Banu Abu Shams, feeling inferior to the members of the upper clan of Banu Hashim, from which stemmed the Prophet, Ali and his offspring. Thus, the first Umayya Caliphs dedicated themselves to annihilating Ali's bloodline, in order to eliminate the possibility of a legitimacy crisis. And the Umayyad were right to fear.

Having passed through the trauma of seeing three of the first four Caliphs killed, many Muslims had started to believe that the way the Ummah was founded was maybe not the right one and that maybe the truth was riding with those maintaining the legitimacy of succession among Muhammad and Ali's line. This leadership would not have been only political and military. Because this line had inherited Muhammad's aura and with it, the capacity of understanding the truth hidden in the Islamic revelation, these would have been religious leaders, as well, their mandate being a richer one.

The conflict between the two parties reached a climax in 680, in the desert outside Karbala, where Yazid, the Umayyad military commander, attacked the caravan of Hussain, Ali's second son and Muhammad's favorite nephew. During the attack, Hussain was killed and his severed head paraded in the streets of Kufa, Ali's former capital, so as to discourage future rebellions.

Four years later, at Karbala, a commemoration was organized, for the first time, for Hussain's death. This was the birth of Shiism.

Starting with the 680 incident at Karbala, the history of the two communities would be one marked by violence, most often than not started by Sunnis who saw in their co-religionists nothing but heretics bound to deviate Ummah from the right path. Along the way, the religious differences between the two would take political forms as well.

Political and economic differences

The rift between the two parties was further exacerbated by the colonial policy of manipulating religious differences, when the power was passed from the colonial power down to the minorities. Thus, in an Iraq with a Shia majority, the power was passed to the Sunni minority. This minority always acted like a majority, by emphasizing its Arab identity, being a known fact that the Arabs are by a great majority Sunni. Along this line of reasoning, the Shia were always excluded from power, any of their revolts being drenched in blood.

The same trend was found in the entire Muslim world, the suppression of the Shia becoming the norm. The adversity between the two communities continues to this day, illustrated for instance by the famous behavior of the Afghan Sunni mujahidin who, in 1979-1989, would take breaks from fighting the Soviet invaders only to massacre Afghan Shias and Iranian officials[6].

The Sunnis' age-old suspicions seemed to have been proven right with the advent of the Persian Safavid Empire. Even though Persia used to be inhabited in its vast majority by Sunnis, the arrival of the Turkic Safavid dynasty to the throne changed this forever. Being Shia and having the wherewithal, the Safavids started a campaign aimed at converting to Shiism the entire population under their reign, benevolently or under threat, campaign that stopped only on the natural borders, where the Persian impetus was counterbalanced by the Ottoman Turks, who were Sunni. The fact that this territory was inhabited by Persians, ethnically different from the Arabs, helped building a different political-religious identity.

The rise of the Persian-speaking Shia power on the border of the regions inhabited by Arabs contributed to exacerbating the conflicts, any Shia claim being deciphered by the Sunni Arabs as an attempt by the Persians at subjugating the peoples of the Peninsula, Saudi Arabia being thus cast as the champion of oppressing the Shias. On the other side, Iran, as the main Shia powerhouse, was always forced to offer protection, at least diplomatically, to its coreligionists.

With the entrance of the US on the Middle East scene, Iran grew more worried. The power from across the Atlantic had signed a security-for-oil accord with the Saudi Kingdom, and Iraq was strongly supported by America during the Iran-Iraq war, with the Americans even wrongly targeting and downing an Iranian civilian airliner[7].

In such a threatening situation, Iran normally would seek to improve its own position while weakening that of its adversaries.

This became possible with the galloping growth of global economy based on hydrocarbons.

Overlaying the map of the regions where the Shias constitute a majority on that of the main oil and natural gas fields in the Middle East has the potential to shock. Even though the common commentator would say that *the Middle Eastern oil belongs to the Arabs*, the analyst who has done the above-described exercise discovers that *the Middle Eastern oil and Gas belongs to the Shia*, in that all major fields are located in areas where Shia constitute the majority (Figure 1).

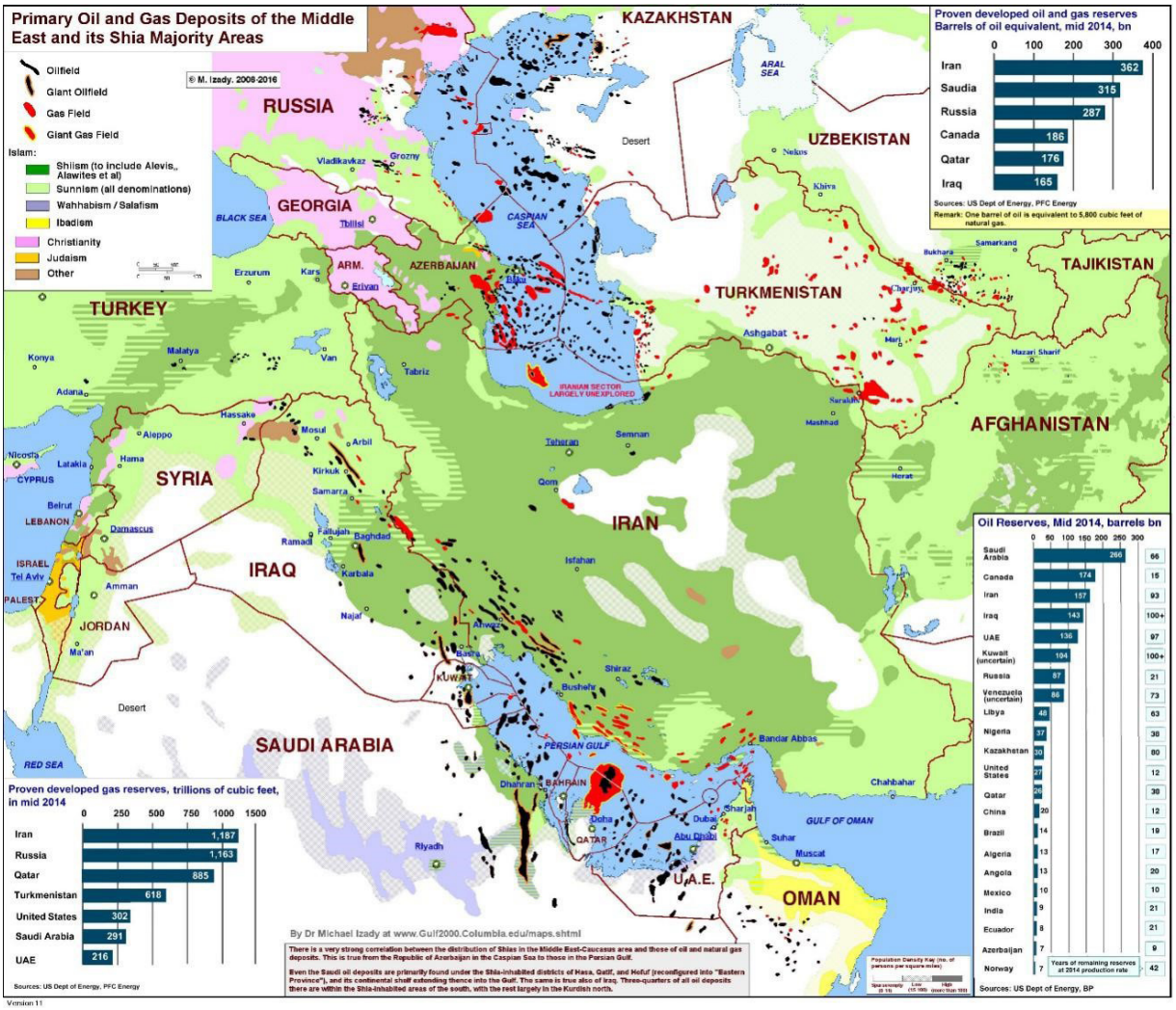

Figure 1 *The layout of the Shia communities and of the oil and natural gas deposits in the Middle East*[8]

In this context, the centuries-old conflict develops a new strategic dimension. With the world economy strictly dependent on the oil production, who controls the oil flows can exert a power beyond belief. Thus, Iran becomes an interesting case study.

Even though, based on the data contained in Figure 1, Iran is only the third oil producer in the world, the Islamic Republic could exert a power beyond its normal boundaries, simply by manipulating the religious feeling[9]. So, based only on geographical and religious proximity, Iran could influence decisions made in neighboring Azerbaijan, another major producer of oil and natural gas.

After the US-led invasion of Iraq, the country did not become a democracy along the lines dreamt of by the Americans, but fell close to becoming a theocracy, with the real *power-brokers* being the grand ayatollahs Ali Sistani and Baqir al-Hakim, and the young firebrand preacher Muqtada al-Sadr[10]. All these have taken, willingly or unwillingly, Iraq in a very pro-Iran direction, at least partially out of a desire to distance their country from the policies of a US which was offering unconditional support to Saudi Arabia. Thus, indirectly, the US ensured

that Iraq would gravitate towards Iran's sphere of influence, Tehran winning, besides political clout, at least an indirect say in the oil and natural gas production in the Shia-dominated south Iraq.

And the situation of Iraq tends to spread on the Western shores of the Persian Gulf. Bahrein is another country where a vast Shia majority is ruled with an iron fist by a Sunni minority. Moreover, from here, the oppression feeling gives free reign to anti-West and pro-Iran passions, well known in this respect being the demonstrations caused by published caricatures of the Iranian leader, demonstrations where the Bahraini youth chanted "We follow you, Khamenei![11]" And the oil-rich Kuwait follows suit[12].

So, along with this *Shia revival*[13], besides a strengthening of the religious feeling in the repressed Shia populations, there is a great chance that this community re-align itself politically with Iran, opening the Islamic Republic possibilities of action that would jeopardize the oil production in countries led by Sunni oligarchies. Affecting the oil production here would be the logical option for Iran. On the one hand, it would decrease the power of the adversarial Sunni regimes and, on the other hand, this would strike a blow at the economies of Western countries allied with Shia Iran's old enemies.

Conclusion

At this point we are able to develop a clearer view of the Muslim world and of the way different interests intersperse and inter-relate. The countries ruled by Sunni regimes will naturally look for an external ally, who can provide protection against the revolutionary impulses coming from the Shia Iran. These alliances, on the flip side, will make Iran feel threatened and, at this point, the instrument simplest to use is striking its adversaries' oil interests, this course being greatly advanced by the disposition of the Shia communities as majorities in regions with the most important deposits of oil and natural gas in the Middle East and the world.

Following from this idea, threats, direct or indirect, against Iran, besides the mass-media noise meant for Western consumption, will achieve nothing but jeopardize the global fluxes of oil and natural gas. And here, the Western countries showing a bellicose attitude towards Tehran are divided in two major groups. On the one hand, we have the US which still has sizable oil deposits on the floor of the Gulf of Mexico, deposits that can be tapped into in case of emergency.

On the other hand, we have the European countries which are overwhelmingly dependent on the mineral resources coming from the Middle East. Thus, in the event of an escalation of the conflict with Iran, escalation which the US seems sometimes highly inclined towards, especially under Saudi influence, the European states will be the ones who will suffer the most in the Western camp, even risking economic collapse.

In conclusion, even though the European countries might share some of the US-desired end-states in the Middle Eastern politics, their approach should be a more moderate one, because they are likely to be the first economic victims when Iran, through its leaders, feels its national survival is endangered. And the Iranian-preferred course of action should surprise no one, especially after the drone attack on the ARAMCO facilities at Abqaiq, in Saudi Arabia[14].

NOTES:

1 Geneive Abdo, *The new sectarianism: the Arab uprisings and the rebirth of the Shi'a-Sunni divide*, Oxford University Press, Oxford, UK, 2017.

2 Vali Nasr, *The Shia Revival. How conflicts within Islam will shape the future*, W.W. Norton & Company, New York, USA, 2007, p. 35.

3 *Ibidem*

4 "Ummah", Arabic word originally meaning "community", has come to designate the worldwide Muslim community.

5 Vali Nasr, *The Shia revival*, p. 36: "Ulama" is an Arabic word designating the community of the Islamic scholars, commonly deemed the guardians, the transmitters and the interpreters of the Islamic teachings. For a description of Ulama's functions in the original Muslim state.

6 Michael Scheuer, *Marching toward Hell. America and Islam after Iraq*, Free Press, New York, USA, 2008, p. 132.

7 Robert Fisk, *The great war for civilisation. The conquest of the Middle East*, Vintage Books, New York, USA, 2005.

8 https://civilianmilitaryintelligencegroup.com/wp-content/uploads/2017/04/Shia-and-Oil-lg.jpg, accessed at 12.02.2020.

9 As a matter of fact, at this moment, the manipulation by Iran of the Arab Shi'a communities' religious feeling is well documented. Geneive Abdo, *The new sectarianism*, p. 148.

10 Vali Nasr, *The Shia Revival*, p. 190.

11 *Ibidem,* p. 235.

12 *Ibidem,* p. 139.

13 Vali Nasr, *op.cit*.

14 Ben Hubbard, Palko Karasz, Stanley Reed, *Two major Saudi oil installations hit by drone strike, and US blames Iran*, https://www.nytimes.com/2019/09/14/world/middleeast/saudi-arabia-refineries-drone-attack.html, accessed at 11.02.2020.

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10.12753/2284-9378-20-06

MANAGEMENT OF HUMAN RESOURCES THROUGH INTERNAL MANAGEMENT CONTROL STANDARDS

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Human resource is the most important value of any organization. Maintaining a high-quality human resource must be the principal objective of any army commander. Some of the internal management standards are especially dedicated to this aim. Managers need to implement in a smart way these standards for the progress of organizations. Without highly qualified people there is no progress in an organization.

Keywords: military organization; internal management control; human resource; standards; integrity, motivation.

The biggest crisis an organization can face is the loss of human resources in general and high quality one, in particular. The bad dream of any manager should be the leaving of the best employees for a variety of reasons. Unfortunately, the effect of leaving the best employees in a large organization and especially of the state, including the military organization here, is not immediately visible and cannot be quantified in financial loss. The effects, however, can be seen over time and in the fact that the organization gradually decays or remains in a fragile equilibrium, without any real progress. Unlike the public sector, in the private sector this has much faster and more visible effects, such as: lower turnover, irreversible losses and even bankruptcy.

Based on these considerations, we hypothesize that without proper human resource management, any organization may suffer a major, irreversible decline sometimes.

Therefore, the implementation of the standards of internal management control, specific to human resources must be done correctly. Of the 16 internal management control standards, the first three: Standard 1−Ethics, integrity; Standard 2 −Duties, functions, tasks and Standard 3 – Competence, performance are standards specific to this field.

At the level of the Ministry of National Defense, according to order no. M.100 / 2019 for the approval of the Methodological Norms regarding the system of internal managerial control in the Ministry of National Defense, the central structure responsible for the implementation of these standards is the General Directorate of Human Resources Management[1]. All human resource management policies are issued at the level of this structure. The importance of correct personnel policies is self-evident.

The partial results of a study conducted by constructing an evaluation instrument (a questionnaire) and its application on a representative sample from the management structures of the Ministry of National Defense are presented below, in order to have a reference system documented in future research and in identifying opportunities to improve this system[2].

For Standard 1 −Ethics, integrity, according to the national legislation in force, a series of requirements must be implemented. These would be: establishing internal rules of conduct and sanctions for non-compliance[3]; declaring assets for persons with management positions[4]; the declaration regarding the gifts received in protocol activities that exceed a certain amount, stipulated in

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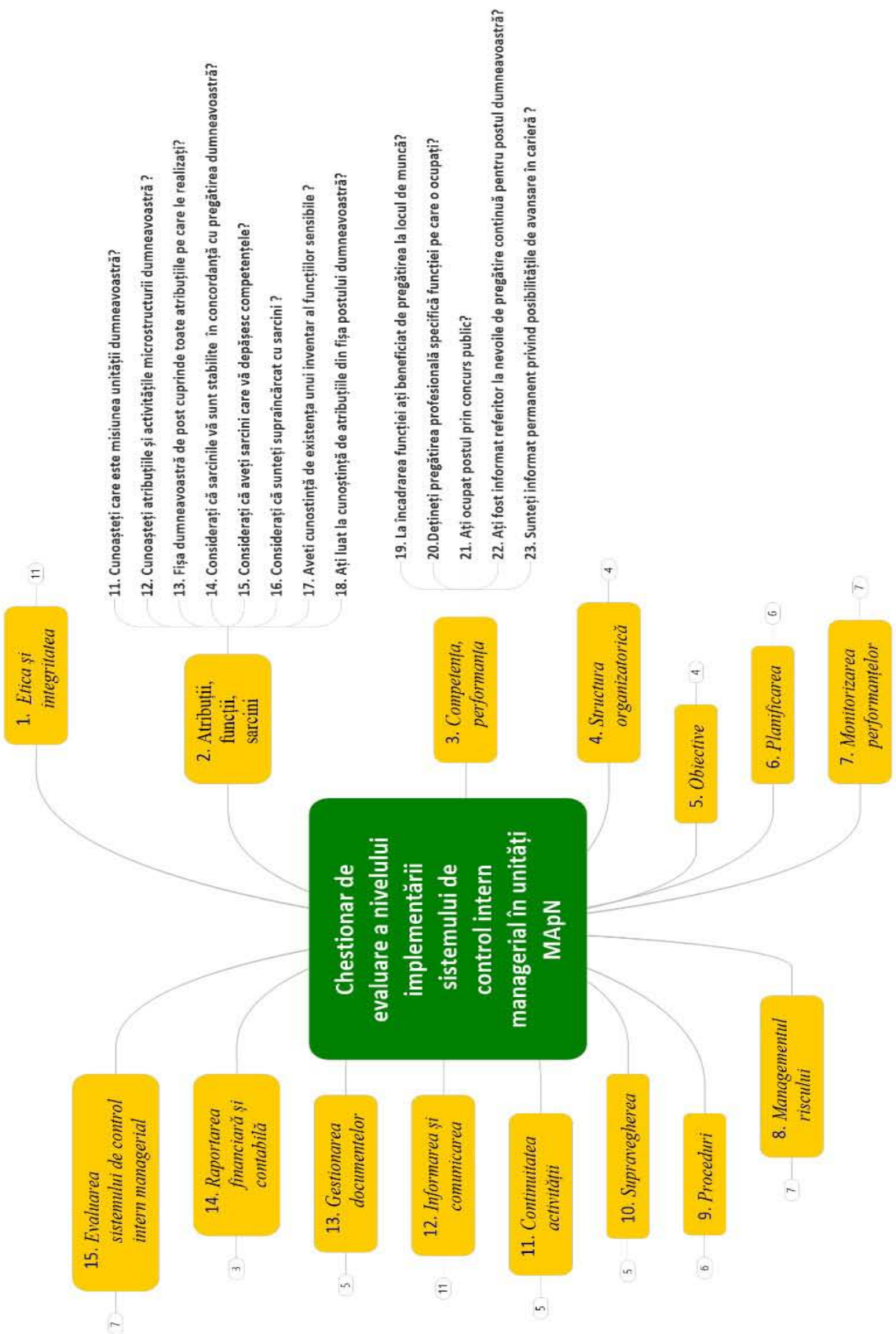

Figure 1 *Scheme of the questionnaire*
(only part of the 93 questions are expanded, the part regarding the human resources area)

the legislation[5]; ensuring, through the application of clearly established procedures, compliance with the codes of professional deontology; applying questionnaires to employees to ensure that they are aware of the legislation in force related to this standard; making presentations containing topics specific to the standard; performing unannounced controls to verify compliance with requirements; creating opportunities to meet the requirements of the standard.

But how do we actually do these things? Which are the actions and activities that need to be performed to say that the standards have been implemented? Some of the activities are visible and can be easily verified by simply accessing the website of the National Integrity Agency, namely the declaration of assets. Which we cannot know for sure if they have been declared correctly and completely. This must be the personal responsibility of each person that completes it, as it falls under legal provisions regarding the felony of false statements.

Another easily identifiable activity would be that of the unannounced checks that are usually recorded in a register. It is difficult to verify whether the questionnaires have been applied seriously or only formally and it is also difficult to identify whether presentations have been made on these topics. A solution would also be to send electronic materials to all employees of the structure. The declaration regarding gifts represents, again, an activity that must be based on the fairness and responsibility of the employees who receive such gifts. The development of an organizational culture based on responsibility, fairness, mutual respect and integrity should be the goal of this standard.

For Standard 2 − The duties, functions, tasks, the most important and at the same time the most difficult thing, from our point of view, after studying the literature in the field, is to establish a balance between skills and challenges for each job. Once this balance is created, it would bring a state of gratitude to the respective person and work to the maximum capacity, adding value to the organization which he is a part of. This balance that produces a state of happiness for most people, was defined, by the American psychologist Mihály Csikszentmihályi, under the name of "flow". This state would be obtained, according to him, after conducting some research, by: intensity of focus on the activity carried out; clear objectives; own choice of activity; the activities must involve neither with too many challenges (the burnout phenomenon occurs[6]) nor be without challenges (the boredom appears); receiving feedback from activities[7].

These findings led to the development of a two-axis model: the level of challenges and the level of skills. Graphically, it is presented as in Figure 2.

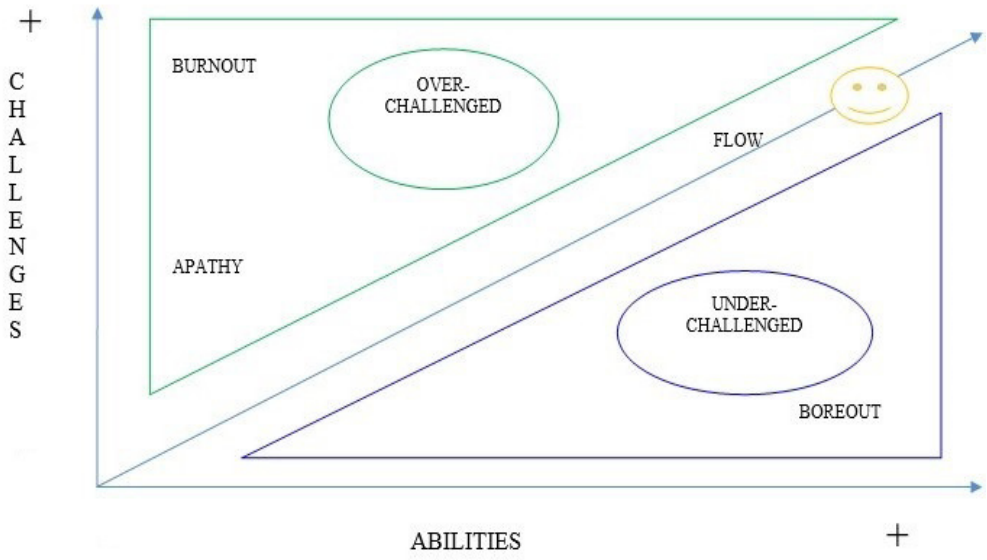

Figure 2 *"FLOW" model*

Source: *Adaptation by Mikael Krogerus and Roman Tschäppeler, The Decision Book, Fifty models for strategic thinking, PROFILE BOOKS LTD, England, 2017, pp. 52-53.*

It is a real challenge to establish this balance, but without coherent and properly implemented policies the human resource will not be harnessed to its true potential and no progress will be made in the organization.

Another aspect to consider is to correlate the tasks with the function and the tasks to be performed.

The main requirements of this standard are: ensuring that all documents regarding the mission of the structure, internal regulations, making sure that microstructure activities are up to date and are known by the employees; drawing up a document that includes the sensitive functions according to a predetermined model and methodology; permanent updating of job descriptions; establishing appropriate measures for managing sensitive functions and reducing their exposure to risks[8].

These requirements can be verified by the specific documents existing at the level of each structure. At the same time, they involve managers in identifying and establishing the necessary measures for sensitive functions. The elaboration in collaboration of the documents of the structure, lead to a consolidation of the professional relations and to the achieving of a real team of management of the structure. This will strengthen the management of human resources and generate added value. At the same time, the creation of documents with the support of computer applications of a collaborative type, dedicated to this type of work will shorten the duration of many sessions and will make the work process more efficient.

For the third standard, Standard 3−Competence, performance is necessary to implement the following requirements: all positions must be filled, according to the legislation in force; each position must have clearly defined the duties and skills necessary for it to be occupied, with clearly set objectives and performance indicators; to have a permanent situation with the next stages of preparation for each person within an organization, based on their skills and their desire for career development; vocational training programs should be adapted to the real training needs at the level of structures, these should be applied as much as possible and with up-to-date information[9].

This is where a qualitative development of vocational training programs is needed first. However, this fact cannot be achieved without a professional human resource that is involved in the body of instructors and teaching staff. Human resources policies in this area need to be much more complex and carefully established in order to have continuity in the lifelong learning process. Human resource of this type cannot be formed today. A good teacher is trained in years of study and practice. At the same time, there must be an extrinsic motivation, of a financial type, in order to attract good quality human resources in this professional area. If there is not sufficient motivation, it is very possible that this type of human resource can migrate to other functions that are more attractive from a financial point of view, as well as professional development opportunities.

The "management of human resources represents the backbone"[10] of a modern organization.

Conclusions

Currently, within the Ministry of National Defense, rules are established to be implemened for all the requirements mentioned above and specific activities are being carried out to maintain and develop these standards but, as in any field, there is room for improvement.

It is important to maintain and develop a coherent system of human resource management, taking into account the minimum requirements of the internal management control standards. The efficiency and progress of any organization depends on a good human resource management. Medium- and long-term planning in this area is paramount. It is important to find resources and to make the right decisions, based on specialized studies, in order to generate a kind of human resource management that interweaves the personal life of the individual with the success of the organization.

The main aspects to consider regarding the management of human resources, according to the specialists, are the following: employee integration, training, performance evaluation, adjustment to organizational dynamics, organizational communication and employee motivation.

Once all the aforementioned requirements have been implemented, we can consider that there is a good management of the human resource established through the prism of the standards of managerial internal control and of the specialized studies management within the military organization and the possibility of further research in the field.

NOTES:

1 *Law no. 346/2006 regarding the organization and functioning of the Ministry of National Defence*, published in the Official Jurnal of Romania, Part I, no. 654, Bucharest, July 28, 2006, republished.

2 The objective of the research was to create an overview of the level of implementation of the internal management control system at the level of the military organization, as well as how this management system is perceived by the people with management positions in the Ministry of National Defence, of different ages. For this research, a questionnaire was designed and applied in order to determine the research objectives set.

3 *Law no. 53/2003 − Labor Code*, republished, with subsequent amendments and completions.

4 *Law no. 115/1996 for the declaration and control of the wealth of the dignitaries, magistrates, of persons with management and control functions and of the civil servants, with the subsequent modifications and completions.*

5 *Law no. 251/2004 regarding some measures regarding the goods received free of charge on the occasion of protocol actions in the exercise of the mandate or function.*

6 https://en.wikipedia.org/wiki/Sindromul_burnout, accessed at 06.07.2019.

7 Mikael Krogerus, Roman Tschäppeler, *The Decision Book, Fifty Models for Strategic Thinking,* PROFILE BOOKS LTD, England, 2017, pp. 52-53.

8 *Order no. M. 100 / 2019 for the approval of the Methodological Norms regarding the system of internal managerial control in the Ministry of National Defence.*

9 *Ibidem*.

10 Georgeta Pânișoară, Ion-Ovidiu Pânișoară, *Human Resources Management – Practical Guide*, Second Edition, Polirom Publishing House, 2005, Bucharest, p. 3; *Law 455 of 18.07.2001 on electronic signature*, republished in the Official Journal of Romania no. 316 of April 30, 2014.

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FROM MERCENARIES TO *PRIVATE DEFENCE.* THE CASE OF RUSSIAN PRIVATE MILITARY COMPANIES

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The modern hybrid warfare came with an important added value involving old instruments in new clothes. It is the case of the Private Military Companies, used in a way that allows credible denial and the hiring of mercenaries with impunity. It is the case of the Russian PMCs, a form of the private defence that goes the closest to mercenaries. Lawfare, another very present form of the hybrid approaches nowadays, has provided the means to hire and change a highly condemn practice as well as the breach of the rules of war and the human rights into a very effective tool with a very high impact when facing regular armies as well as guerillas, irregulars or legitimate protesters.

The study makes an overlook into the international legal framework for the use of mercenaries and moves to the uses and abuses of the new PMCs – Private Military Companies. From the legal framework observed in the case of American legislation and private defence approaches in the US, the translation of the PMCs as an instrument in Russia has put the framework under the umbrella of a real lawfare, with ambiguity in the status and illegality according to the internal Russian legislation. Not talking about difficulties of those PMCs and their way of operating to fit into the international legislation regarding mercenaries and the illegal interventions of hybrid nature.

Russian mercenaries case study is in the heart of the present paper. It covers the legal (in)existent internal base, the hybrid use of legally inexistent private defence companies in Russia's offensive special operations, as well as the use of the lack of legal base for constraining mercenaries by condemning some for a credible denial. And last but not least, the habitudes in using Russia's PMCs as a power projection instrument, methods to covertly finance those interventions and the political use of such an instrument in showing characteristics of a Great Power.

Keywords: mercenaries; private defence; hybrid warfare; lawfare; guerrillas; revolution; insurrection; protest.

The Mercenary. An imperfect legal basis

The mercenary has a long historical evolution and has been used since ancient times. The idea of recruiting people specialized in the art of weapons to defend a prince or a nobleman and to participate in wars is a constant throughout history. The emergence of nation states, equal sovereignty and mutual responsibilities of states that come with the recognition of sovereign equality also implies establishing responsibilities for mercenary nationals, an approach that, we believe, could extend today to the paradigm of foreign fighters – in theaters of terrorist operations around the world, with all the consequences resulting for the states on this dimension[1].

However, it must be accepted that the legislation in this area is imperfect. First of all because we are talking, for the most part, about *Conventions open to state ratification* or *UN General Assembly Resolutions* which are not binding. Secondly, because all 5 permanent members of the Security Council are not signatories to these conventions – even though some are voters of UN General Assembly Resolutions. Last but not least, because the definition found in these documents for mercenaries is a cumulative one which includes a set of conditions that make it inapplicable or difficult to apply in practical terms.

The origins of anti-mercenary laws are found in the 19th-century neutrality laws codified in *The Hague Convention on the observance of the Rights and Duties of Neutral Powers during War*[2]. Article 4 mentions that neutral states cannot allow combatant corps or recruitment agencies to work on the territory of neutral states and act as belligerents. However, Article 6 absolves the neutral state of responsibilities for persons crossing the border and offering their services to the belligerents[3]. And Article 17 mentions as a clause of the loss of neutrality in war that the provisions apply to mercenaries[4]. The illegal act under the Convention is not mercenary work *per se* but rather the violation

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of the sovereignty or territorial integrity of a third state. The connection is made between mercenaries and aggression against a state, respectively the principles of non-interference in the internal affairs of the concerned state[5].

Therefore the provisions of international law as it is quantified today, with or without the states as parties to the conventions, suppose that, when an internal conflict or a war takes place between two states, a third party should observe the sovereignty of the states and, therefore, remain neutral in relation to the war in question, this also assuming the non-involvement of the third party in any way as a source of mercenaries / fighters / troops in any way, shape or form.

On this basis, Russia's actions in Ukraine, even without admitting to the presence of Russian troops, and only of Russian military personnel who "lost their way and ended up" in Ukraine or were on leave – as Serghey Lavrov explained at the OSCE meeting in which Ukraine had presented the evidence – as well as other Russian nationals, generate responsibilities for the state under the Conventions regarding mercenaries.

Additional Protocol I (1977) to the Geneva Conventions of 1949[6] is the only document in force today *erga omnes*, applicable to all, concerning mercenaries. It states that a mercenary cannot be considered a combatant or a prisoner of war – thus the Geneva Conventions does not apply to him in this case; and then a formula for defining the mercenary is presented that cumulatively demands several conditions, such as – the person who is recruited locally or abroad to fight in an armed conflict; actually participates in the fighting; he is motivated by money, receiving much more than the regular military forces of the concerned state; he is not a citizen of a party to the conflict; he is not part of the armed forces of any party in the conflict; he was not sent by the state to which he belongs as a military officer in official capacity to a third party in a conflict[7].

The convention has some practical value, among which the most important is deterring mercenary services, by depriving of rights, even those equal to the military of the regular forces and entailing the responsibility of states of origin. However, the definition of a mercenary is so restrictive in this convention that it is impractical and unusable in particular cases, no matter how obvious it is, for instance, that Russian soldiers of the regular army captured in Ukraine meet these conditions, for example, for whom the Russian state denies any responsibility.

On the other hand, there are numerous efforts undertaken to remedy these vulnerabilities of the legislation such as *The Convention against the Recruitment, Use, Financing and Training of Mercenaries* of December 4, 1989, with 36 State Parties and 9 signatories, adopted by the UN GA Resolution 44/34[8]. We can also add here *The Convention for the Elimination of Mercenarism in Africa*, adopted by the Organization of African Unity in Libreville, July 3, 1977[9], which is specific and reasserts the provisions of Additional Protocol I to the Geneva Convention.

There, in the new convention, the definition of mercenary is derived from Article 47 of Protocol I but goes much further, it applies to any armed conflict (Article 1, paragraph 1) and to any situation (Article 1, paragraph 2). All instances are considered violations of international law with equal responsibility for the mercenary himself and for the state of origin, generating responsibilities for states which must take actions in relation to mercenaries – punishment according to the criminal code, prosecution, pro-active prevention. Article 4 also condemns the complicity to the mercenary activity. Articles 9 and 12 stipulate the extradition of those involved in accordance with the Convention in order to face the criminal charges in the concerned state, not only the internal provisions on mercenaries.

The topic is extremely complex, and there are also more direct approaches and proposals for mandatory Conventions, even studies that separate the legitimate activity of Private Military Companies from that of mercenaries. Michael Scheimer has such a study that is meant to protect PMCs from a legal standpoint, and also to clarify the legal status and entail the responsibility of states where the companies are registered and whose citizens are involved in these illegal actions[10].

Scheimer points out that all PMCs fall under Article 47, which defines mercenary work, but can also easily avoid it because of the cumulative conditions of the definition. The support and the advisory role are not mentioned in the Convention, as the definition implies the direct role in effective battles – a fact that automatically includes the PMCs,

but requires conditions difficult to prove for direct involvement; financial involvement is not easy to prove for the employees of PMCs, they might be profit oriented but they do not encompass the type of financial conditions required by definition, which refers to the employees, who are not directly linked to the conditions that lead to the sanctions stipulated by the Convention[11]. Furthermore, Scheimer proves that there is language and wording of the contracts that can easily avoid the condition of non-belonging to the armed forces of the parties involved in a conflict[12].

However, the conclusion of all the studies, under the terms of the new conventions, is that a PMC is legitimate if the option of private defense is accepted in the state in which he is registered and if there are the appropriate control formulas of the state institutions that control the Regular Army and the intelligence services (it can be done by means of contracts signed with the state which will be the direct beneficiary) and if they are open and represent the concerned state in a transparent manner. It is the only legal option for the use of PMCs on the territory of a third state.

Lawfare. Its use in the case of mercenaries and *private defence*

We introduced in the concept of *lawfare* meaning the speculation and the abuse of the existing loopholes in the International Law and the lack of legislation, in order to use military instruments to achieve the military and strategic objectives using these means[13]. This include premeditation and strategic planning to achieve these goals, it is not a random action or one that just speculates on the opportunities determined by the vulnerabilities of the targeted country, vulnerabilities present at one point[14].

Of course, examples are all around us: the creation of the new form of war, with the use of soldiers without distinctive signs and unclaimed, the intervention of the so-called "green men" as a military force and as a tool for avoiding responsibility, both for aggression and regarding the rights of these soldiers and their families[15]; speculation and use of loopholes in international law in order to take advantage of their capabilities and dominant position to obtain national advantages in cyber warfare and aggressive actions in the energy sector, as they are not yet defined by international law as aggression; the creation of artificial islands at sea in order to claim offshore rights, such as the creation of new strategic fortifications, including by using natural grounds and based on the natural development aspect of these artificial islands; last but not least, the case of a group of adventurers / terrorists who wish to set up, by purchase or by force, and to own their own state, established on the territory of weak states, in territories where that state has little authority and its army is weak and poorly prepared.

The legal war – *lawfare* – used in the case of mercenaries and PMCs implies speculating on the vacuum of legislation or bypassing the responsibilities generated by the existing legislation in this matter. We have seen above what the shortcomings of the legislation are and, when there exists and is clarified the lack of the appetite of states to adhere to the principles and provisions of the conventions in this field.

Private military companies are a relatively recent instrument of state power projection. The existence of foreign legions, mercenaries and their use by states, mainly in the colonies, is a fact recorded during the Cold War. However, states still have legislation that mentions the monopoly over use of legitimate military force and condemns the use of mercenaries. Still, the tools of private military companies, in the direct sense, belongs to the 21st century, when the expansion of the hybrid war and the need for credible denial of actions, as well as the introduction of some forms of business and self-financing of these instruments resulted in military forces being used in parallel with such companies. The most widely known and most extensive use is that of the Russian Federation, although mercenaries and PMCs are still banned in Russia.

The most common used definition of PMCs is taken from "Montreux Document on Pertinent International Legal Obligations and Good Practices for States related to Operations of Private Military and Security Companies during Armed Conflict"[16] and stipulates that MPSC (military and private security companies) are "private business entities providing military or security services". In recent years, Russia has become increasingly interested in PMCs after they started being used by some states such as the US, UK, South Africa or Israel.

The fundamental difference between Western and Russian PMCs is relevant. The former have contracts with the states they come from and have strict norms in recruiting the professional soldiers, training them and carrying out dangerous missions, accompanying regular national military troops, to whom the general tasks in conflict go to and have heavy and specific capabilities. Private companies are used in special missions, their degree of use being relatively restricted otherwise – rescue after kidnappings, assistance and security of private individuals in hostile territories – hence, above all, responsibilities regarding security and protection.

In the case of the Russian Federation, the private military companies belong to some oligarchs with close ties to Putin, the recruitment and training of the employees is conducted in GRU camps – the Russian military services – and their use in special operations exceeds the guard duty and the protection of individuals or objectives. They are, in fact, regular military troops with special status, undercover, with whom Moscow denies any link, allowing credible denial and offensive operations, taking over, defending vital resources from unstable areas that they exploit for the personal or business interests of their owner and the Russian state. The links with the Russian state and the secret services, especially the military ones, is obvious and necessary for their functioning especially outside the Russian territory.

Sending contractors to the battlefield entails lower political and financial costs and helps reduce diplomatic and social costs for the continuation of the war. In addition, states do not have to publicly explain their casualties. The risks assumed by private soldiers are higher and the state does not have the same responsibilities towards them and their families once they die or are injured[17].

Additionally, the operations that these private companies can carry out could go beyond the classic laws of war, as a result of them not being regular troops, and those hired or captured by these companies cannot invoke the laws of war because those involved do not have the status of regular troops, nor a responsible state. In fact, PMCs are a perfect tool for *lawfare* – legal warfare, operating on the edge of the law or in territories where the law has no applicability[18].

Private Military Companies.
The case of Russia. Practices and abuses in the use of *private defence*

Between 1998 and 2013 Russia attempted several times to set up private military companies based on the Western model. However, the final product was a hybrid, combining the characteristics of private security and military companies. The most significant PMCs of that period were Antiterror-Orel, Antiterror, the RSB Group and the Moran Security Group (which is linked to the Wagner Group)[19]. In the Putin era, the Kremlin emphasized the use of foreign policy, challenging the West, in order to strengthen the regime and to restore the old Russian "spheres of influence" that existed during the Soviet period.

The most important Russian PMCs set up in the last decade are Moran Security (2011), RSB Group (2011), E.N.O.T. (2011) and Wagner (2013)[20].

In the last decade, Russian private military companies have expanded both their range of services they provide and the areas where they operate. Initially, most of the Russian PMCs focused on protection services for individuals, companies and critical infrastructures or on military consultancy and training for foreign military forces[21]. After the Arab Spring and the beginning of the civil wars that followed after 2011 in Libya and Syria, the Kremlin reassessed the role of irregular forces and non-state actors in hybrid conflicts, which led to the formation of the Russian Special Operations Forces (SOF) – subordinate to the Russian General Staff – and the private military company Slavonic Corps Limited.

The first use of irregular forces in the context of a hybrid conflict by Russia was during the annexation of Crimea and the start of the war in Donbas. The Russian PMCs played an increasingly important role in the conflict zones and occupy an equal position with the regular military troops on the battlefield, being some kind of government structures. Russian CMPs take over in "gray areas" in order to create "artificial stability zones," mainly with the purpose of exploiting the natural resources of an area, and partially take over political control.

Russian private military companies have also expanded their activities in the area of cyber security and military-patriotic education / propaganda, and recently in the information war[22]. Russian businessman Yevgeni Prigisin, Wagner's

owner and close ally of Putin, also funds the "trolls factory" in St. Petersburg. Most members of the PMCs are veterans of Russia's enforcement and security structures, but not limited to them, as the groups attracted pro-Russian fighters from other ex-Soviet states and from Serbia.

The status of private military companies has a role in increasing the ambiguities and the control over them by the Russian state bodies. While in the West private security and military companies have a clear legal status and are very profitable, in the United States, private security companies were legalized in 1992, are officially registered and have already participated in the protection of Iraq's oil and gas installations since the 2000s.

In contrast, Russian PMCs do not exist *de jure*. Moreover, belonging to a private military organization or the creation of a private military company is a mercenary activity that is illegal, according to the Criminal Code of the Russian Federation. This is reinforced by Article 13 of the Constitution which underlines the monopoly of the Russian Armed Forces at the level of official state institutions. This is why Russian private military companies are registered abroad: RSB-Group was registered in Russia in order to operate inside Russia on security and legal protection activities, and was registered in the British Virgin Islands for international operations, while the Moran group was registered in Hong Kong[23].

To avoid the legal dilemma, although it had been proposed to legalize these companies several times in the State Duma, in September 2018, President Putin signed a decree that classified as secret all information about those who "cooperate with the external intelligence services of the Russian Federation and they are not employed (by them)." Thus, journalists writing about issues related to Russian PMCs can be prosecuted for investigations and public disclosures regarding this area[24].

However, according to experts in the field, Vladimir Putin and Russia want to keep PMCs illegal, ambiguity being a mechanism by which they can be controlled, either by Putin or the FSB as an institution, beyond the coordination they have with the GRU. As long as they operate illegally, they can be threatened, managers and employees face severe prison sentences in Russia[25], and this mechanism helps maintain their loyalty to the Kremlin. Thus, executing the orders received from the Kremlin is a kind of state "protection tax" to allow them to carry out such activities that generate individual and private income, beyond the services provided to the Russian state[26]. Moreover, the Kremlin can continue the credible denial of the Russian state's involvement in activities abroad, given that the respective actors do not formally exist in Russia.

Condemning mercenaries: an instrument for the credible constraining and denial of recruiting fighters in private defence

There are four types of Russian private military companies: consulting companies, support companies (auxiliary functions), private security companies and those providing tactical support during military operations (including direct participation). The functions performed depend on the theater in which they operate, but they are, broadly speaking, military and paramilitary, geopolitical, geostrategic and hybrid. Russian private military companies operate in the form in which they have been directly identified and their existence was acknowledged, partially or indirectly, in Ukraine, Syria, Libya, Central African Republic and Venezuela.

In the early phase of the use of PMCs, immediately after the annexation of Crimea and the military aggression in Eastern Ukraine, the first thing that was exposed internationally was the set-up by the Russian Federation of some military corps financed by various private companies, mercenary corps to fight in various abroad territories. The first one to draw attention was Moran Security Group, led by Viaceslav Kalashnikov, a former FSB officer, and probably still on the payroll of the Russian service, recruited mercenaries, especially former army or special services officers or former police, for the "Slavic corps," Slavianski Korpus, whose initial and official objective was to protect Syria's oil installations[27].

Upon arrival in Syria, the Slavianski Korpus unit, with 250 mercenary employees, quickly transformed into an entity that directly supported Bashar al-Assad's troops. Yet, the formula proved to be a total failure and the unit was quickly withdrawn from Syria; it was shameful how it worked even in comparison to Syrian troops of the Al-Assad government or Shiite pro-Iranian militias, Libyan Hezbollah, not to mention the Pasadarans and the Iranian official militias acting

on the ground. Russian mercenary troops were old, lacking flexibility and mobility, poorly armed for Syria's theater of operations and completely unfit for the local conditions of the fight with the well-armed and equipped Syrian insurgency, with the Al Nustra Front, belonging to Al Qaeda and with the fighters of the Islamic State. Russian troops returned to the country, according to the above-mentioned source, where some of its members were sentenced to prison for receiving resources from a foreign state as mercenaries[28].

Moscow denied any involvement in the activities of the Slavic corps. However, Le Figaro points out that it is almost impossible for a group of several hundred armed men to carry out missions for the benefit of the Russian state without the approval of the Russian security forces. Its failure to adapt to the desert conditions and the context of guerrilla warfare with the Syrian insurgency does not mean that the Russian troops are equally ineffective in more familiar areas, as is the case of Eastern Ukraine.

It is true, however, that here the type of "volunteers" is different from the mercenaries in Syria and only a few are former military personnel. In this case they are prisoners, released and trained near Rostov on Don, in training camps, and subsequently inserted via the unenforced border in Eastern Ukraine and, first of all, professional and active military personnel who are registered as on vacation or on leave and sent to coordinate and fight against the Ukrainian army and special forces in Donbas.

The bad aspect, as far as they are concerned, is the fact that in the event of death or injury, they do not benefit from any of the rights or advantages of someone who defends their country, are buried in mass graves or brought home as part of the long chain of coffins hidden in purported humanitarian convoys that bring ammunition and supplies and leave with the dead and injured towards anonymous cemeteries or small hospitals in marginal settlements of Great Russia, in order to hide their existence.

Officially, Russia cannot have mercenaries. Still, the old "Afghans" – its fighters in the war in Afghanistan, together with the traditional Kazakh corps – another feature of Russia's paramilitary troops – were the major source of recruiting "volunteers" fighting in Donetsk and Lugansk, alongside the Russian Army regulars who are registered as on leave or offer their resignation before being sent to the region to face the Ukrainian troops. Recently, mercenaries became a current troop resource in Russia[29].

Since they are outlawed in Russia, the fighters of Wagner private military company, registered in Argentina, were training in the theaters of operations where they were fighting. This approach allowed Russia to deny the existence of its foreign military operations. However, Russian President Vladimir Putin sent mercenaries to fight in Syria and decorated them for bravado in formal ceremonies and, on top of that, paid certain sums of money to the children and family of those who died in the conflict. The data appeared in investigations published by Russian publications, cited by the Western press[30].

Wagner has officially about 1000 mercenaries who train in the Russian village of Molkino, where the training camp of the 10th brigade of the special military intelligence forces GRU is also located. The Russian Defence Minister announced the death of six soldiers in Syria. But besides the 6 Spetznaz fighters, the Wagner sources cited by the Russian publication *Fontanka* claim that there were several dozen dead in their unit this year alone. As the unit does not formally exist, the victims were not publicly announced. Nevertheless, decorations and other posthumous symbols and honors for those killed were sent to their families, with the signature of President Putin, distributed by a general of the military *intelligence* troops.

The Russian publication released photographs of these medals and orders with Putin's signature. It did the same with the documents provided to the families of the deceased. Others were victims in 2014-2015, in Eastern Ukraine, for the same reason of being able to formally deny the involvement of Russian troops in Donbas. An example is Maksim Kolganov, who appeared in photos in Lugansk, Ukraine, and Latakia, Syria, and was killed on February 3, 2016 in Syria and received the posthumous medal "for bravery" from the Kremlin[31].

In fact, previously, several Wagner soldiers fought and died in Debaltseve, a strategic Ukrainian settlement in Donbas, following the first Minsk agreement. That battle also involved several hundred Russian military regulars and the strongest bombardment of modern times, in January and February 2015.

In order to benefit from money, salaries (not the daily allowances given while on the theater of operations) and payments given to family members, paid by the Russian state, both the Russian "foreign fighters" and their families must sign confidentiality agreements. The law of silence is applied strictly in exchange for a volunteer service in Donbas and the maintenance of the family post-mortem[32].

As for recruitment, many false organizations post advertisements in Russian media, obviously with the support of the Russian state. With the planning and contribution of the Russian state and the authorities which, in a country where mercenary work is punished by law, have many public recruitment offices and announcements in the official press.

In this regard, the numbers of Russian volunteers in Donbas range from a conservative 12.000-15.000 to a maximum of 30.000-50.000 (compared to up to 1.000 foreign fighters from outside Russia in total in the Donbas battles), registering 2.500 dead among volunteers only. The number of wounded is not known, but at an average rate of 4-4,5-5,5 times the number of dead, it means an estimated between 10,000 to 113,750 wounded in the first two years of conflict only, when difficult battles were fought, before the war entered the *low intensity conflict* phase.

Private military companies: an instrument of power projection and assertion as great power

Russia is reasserting itself and rebuilding itself as a global power. On a different basis and by other means than during the Cold War. And the first instrument it uses in the endeavor are private soldiers, the illegal military companies of the GRU, Russian intelligence services, registered in other states, who recruit – on a large scale – soldiers trained for special operations as mercenaries, mainly from Russia. Putin's Russia, with Defense Minister Sergei Shoigu and Chief of General Staff, Valeri Gherasimov at the forefront of influence and decision making, has set up the most lucrative export and projection of strategic relevance industry in recent years[33].

Firstly, the patriotic concerns and military schools were developed, where young people are ideologically trained on velicorussian and nationalistic bases. They constitute the special military training resource which is subsequently recruited in private military companies for 3.600 USD per month (Wagner) and also have better options, such as the Patriot Group, for example, that offer more money. And, while initially the Slavon Corps, Wagner's precursor, was used in 2013 in Syria resulting in major loses, later Wagner became relevant in Ukraine, and then returned to Syria where it was paid to capture refining and oil resources in return for 25% of the income they produced[34], aside from training Syrian troops and direct fighting in the reconquering of the territories lost by al-Assad.

Lately, it spread to Sudan, Libya, Yemen and the Central African Republic. The same old habits have been employed: protection of leaders, training of armies, guarding diamond and rare metals mines or oil resources. The practice of Soviet instructors has been reactivated on a large scale, generating direct profits for the Russian state and relevant strategic influence.

Not to mention that those who have ventured to write about these developments have been eliminated. Three Russian journalists paid by Hodorkovsky were eliminated in the Central African Republic, because they filmed not only the support offered to official forces, but also actions in the rebel territory. The journalist Maxim Borodin from Yekaterinburg unexpectedly "jumped" from a window[35], dying, and another journalist, Denis Korotkov, born in St. Petersburg, had to go into hiding after receiving threats following exposing the Wagner attack on US and Kurdish-Arab troops, which led to the death of several hundred Russians in Syria, near Dar Ezzor[36].

Russia took advantage of the withdrawal of Americans troops from Africa and of its low desire to maintain a permanent presence there, and the poor image of the former colonists, especially the French, and took over. In Libya, it offered its support to General Khalifa Haftar who opposes the UN and US-recognized government[37].

In Egypt, an old Soviet military base was restored, in the desert, near Libya[38]. In fact, it was all about the rivalry with the US, a war with the West all over the world. And the results can be seen even today.

Its presence in the Eastern Mediterranean Sea is not only a step taken towards Syria and the Middle East. In Yemen, at the request of the pro-Iranian Al Houthi movement, and as part of a complex

action in partnership with Iran, Russia took over the capabilities of the former Soviet naval base on Socotra island, which it had from 1962 until the collapse of the USSR[39].

The strategic result is the projection of force towards the Gulf of Aden and the Indian Ocean and, on the other hand, the parity of power in the Red Sea, an extension of the presence in the Eastern Mediterranean, and the control over the naval base already announced by the President of Sudan Al Bashir[40].

On October 15th, 2018 there were 2500 Wagner soldiers in Syria, 170 in Sudan, 500 at the Central African Republic – Sudan border, according to data publicly acknowledged by Russia or by host countries. Yet these mercenaries can also be used in Russia, while offering the same credible denial to the authorities.

Moreover, the relationship between these troops and the Russian authorities, especially the GRU, is complicated. Although they use classical military cover, they receive Russian orders and decorations, and they are treated in Russian hospitals, they can be abandoned at any time and can be described as mere adventurers. It happened with two such soldiers captured and killed by Daesh - the Islamic State, and in the case of the attack where several hundred were killed near Dar Ezzor (the target was in fact the nearby refinery).

Yet, the complex relationship also raises questions about the dependence of the oligarch who pays them, Evgheni Prigojin, about Putin, respectively the level of loyalty and the possibility that, at some point, they will turn against the interests of the Russian state abroad, or even at home. Furthermore, the assassination of some pro-Russian separatist leaders in Donetsk and Luhansk raises questions about the autonomy of these groups and the execution of local leaders who do not obey the orders coming from Moscow, or involvement in control rivalries, or the sharing of the benefits resulting from lucrative economic resources and capabilities[41].

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FACTORS WHICH AFFECT THE OPERATIONAL PHYSICAL PERFORMANCE OF SERVICEMEN

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Minimizing the importance of the human body and its possibilities for adapting to the conditions of an armed struggle, with the emphasis being increasingly placed on the technological revolution and in the military field, may be a disadvantage for carrying out the assigned missions. This adaptation of the human body is conditioned by the positive influence of individual factors or of factors independent of the purely physical component.

This article addresses a number of factors that may influence the operational physical performance of servicemen, factors that, neglected, may lead to the failure to perform the received military tasks. The role of the information presented in this material is to raise awareness that the accomplishment of the objectives in the missions carried out by the military, is not conditioned only by the specific training, technology and the act of execution, but also by the cumulative approach of these factors.

Keywords: factor; operational; serviceman; internal; external; physical.

Accepting the fact that war is an integral part of society and human evolution, being an abnormal way of regulating social demands and resettlement, a reality from which one of the parties involved will be directed towards reaching a compromise between its existence and territorial, economic, social cessations, it leads to its approach and treatment almost like any phenomenon specific to humanity. As far as can be seen, today's war knows no borders, and it takes place in all possible environments. If until recently it was fought only in the ordinary natural environments (earth, air, soil), now it knows, due to the technological revolution and its expansion, an important expansion in both the virtual and the cosmic environment.

The technological expansion and evolution, the development of highly sophisticated systems, even in the military field, is conditioned by the presence of the key factor, the one without which all these could not be possible, at least until now: *man*. At the same time, *man* is the factor whose contribution materializes, unfortunately, in the existence of wars. *Man* in the military environment, being an organism with multiple physical and mental peculiarities, with multiple qualifications and specialized in "weapons", is under a bombardment of individual or environmental stimuli with different intensities. The exposure to these stimuli for a long time can lead to impairment and disruption of the military and combat capabilities of the *man* working in the military, the serviceman. This disturbance can be found, as a purpose, in the failure to meet the received objectives and missions.

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Influences of individual and environmental factors on the operational physical performance of servicemen

Involving fighters in the conduct and carrying out of military actions, as well as in the combat environment (for example: excessive heat, extreme cold, humidity and heavy or long-lasting rain, altitude, deep water, night, etc.) are causes or elements that lead to the occurrence and onset of effects on the servicemen. These effects can be both beneficial, as they can contribute to the development and acquisition of a better adaptation of the fighters to the requested conditions, and detrimental, by affecting the physical, intellectual and emotional capacities of the servicemen, thus reducing their fighting possibilities, leading to the chances of non-fulfillment of missions.

In order to create an overview of the number of factors that appear and influence the operational performance of the military, it is necessary to present in a synthetic way those relevant to the military field (Table no. 1).

All these factors can influence the behavior of the fighters, behavior being defining for the

accomplishment of the mission. The factors that I focus on in this paper can be divided into two categories: individual and environmental. In general, the effects of these factors can be countered by a physical and mental effort of the fighter combined with the external intervention of some help or support elements. The factors I will consider in this analysis are *age, gender, nutrition and hydration, heat, cold.*

Table no. 1

PHYSICAL AND MENTAL STRESS FACTORS[1]

Physical stress factors	**Environmental** Heat, cold, humidity, dust, vibration, noise, explosions, smoke, poisons, chemicals, energy-directed weapons, radiation, pathogens, physical work, reduced visibility (bright lights, darkness, fog), difficult or difficult terrain, high altitude.
	Psychological Sleep deprivation, dehydration, malnutrition, poor hygiene, muscle fatigue, deficient immune system, lack of physical training, illness or injury, sexual frustration, substance use (smoking, caffeine, alcohol, drugs etc.), obesity, poor physical condition, age.
Mental stress factors	**Cognitive** Information (too much or too little), sensory overload, ambiguity, uncertainty, unpredictability, time pressure or long wait, difficult decisions, organizational dynamics and unexpected changes, difficult choices, incorrect functionality recognition, work above one's level of qualification, previous failures.
	Emotional New to the unit, isolated, lonely, fear and anxiety caused by different types of threats (death or injury, failure or loss), resentment, anger, anger produced by frustration and guilt, inactivity, boredom, lack of loyalty, spiritual confrontation or temptation which leads to loss of faith, interpersonal conflict, longing for home, loss of confidentiality, victimization and harassment, exposure to combat, thought and the need to kill.

One of the first factors I address is *age*. We all admit that getting older leads to negative, sometimes irreversible, changes in physical effort and functional physiological possibilities, and daily tasks become increasingly difficult. We will all experience the negative impact of age on the locomotor activity (for example, on movement constancy, the speed of movement, the speed with which we perform different movements, the biomechanics of movement) or on our ability to lift weights and work with them. Moreover, muscular strength and endurance are two extremely important motor qualities for military actions, which may limit the operational physical performance of the servicemen.

In terms of stamina, Jansen et al., in the "Skeletal muscle mass and distribution in 468 men and women aged 18 - 88 yr" study, indicated that the muscular strength is maximum in the age range 20-30 years, and this decreases with values between 10-15% of the muscular mass of the whole body, between 20-80 years, at the same time with an increase of the body fat. Moreover, after the age of 55-65 years, there is an acceleration of muscle degeneration. The influences that the age has on the muscularity of the human body can be found in the diminution of the "muscle mass, the area of the muscular cross-section, the composition of the type of muscle fiber (nn – the human musculature is composed of two types of fibers, either white or red), to the reduced number of capillaries, changes in innervation and neural conduction, protein content in myofibrils"[2].

In terms of resistance, a capacity of the body with an essential role in supporting the carrying out of combat actions for long periods of time, it supports decay rates with values between 5% and 20% per decade, starting from the age of 25 years. These differences in values are due primarily to the level of physical activity performed (either centralized or in free time), lifestyle, genetic inheritance but also possible medical causes that have occurred throughout life.

The second factor to which my attention is directed is the *gender* of those who take part in missions, given the lack of discrimination between men and women. In the case of this factor also, the physical performance for the military environment must be approached differently and analyzed from the point of view of muscular strength and endurance, both for men and women.

The impact of gender on the muscular strength is evident mainly due to the structure and composition of the body. It is acknowledged that there is a difference in muscle mass between women and men, with women having about 60% of men's muscle mass, but also a higher amount of adipose tissue than men. It should also be borne in mind that "women are 40 to 60% weaker in the upper body and about 25-30% lower in the body than men"[3]. These differences can be found, from the point of view of the various motor skills that a military man performs or usual military tasks, in a deficit or even the impossibility of transporting military materials and equipment, in the absence of the physical possibilities of rescuing injured comrades. Leyk et al. showed in the study „Recovery of hand grip strength and hand steadiness after exhausting manual stretcher carriage" that out of a total of 2.000 men and women, approximately the same age, at the handgrip test, 90% of women developed a maximum hand strength, in a proportion of 95% lower than of men, even if the force can be developed equally on the muscular unit in men and women.

Considering the resistance and due to the same structures and composition of the human body, the major differences tend to be to the disadvantage of women, being found in the "highest percentage of body fat among women" (nn – it means adding an additional task for the effort); in lower blood volumes and hemoglobin levels leading to increased heart rate compared to submaximal workloads; in the size of the hearts that are smaller in women (again, the heart rate increases – additional matter)"[4]. The combination of the smaller heart size, blood volume and hemoglobin level leads to a reduction in maximal oxygen uptake, which supports physical exertion. With all these elements leading to a definite conclusion, women's endurance capacity cannot be neglected, knowing that thorough training and lifestyle can offset these disadvantages, military women can make efforts comparable to those of men.

The conduct of military actions is based on the accomplishment of a common and individual effort of the servicemen, both psychically and physically. The physical and mental support for the servicemen during effort, is provided by *nutrition and hydration*, the third factor addressed by me. Physical effort, assuming energy expenditure, is possible through the supply of nutritional and energy substances. This fact is possible as a result of the nutritional process.

Nutrition[5] can be introduced in the category of factors with positive or negative influence on the performance of the missions: positive because it stimulates and supports the physical and mental effort, implicitly the military performance; negative, due to the impossibility of energy support in achieving an effective physical effort. The quality and quantity of the food at hand, the feeding of the servicemen in a rational manner, according to the mission to be fulfilled, contributes to the fulfillment of the tasks set out. Also, due to lack of food or, on the contrary, overeating, the military will reach a state of energy and nutritional insufficiency or obesity, elements that will ultimately materialize in the occurrence of harmful effects on the body. The lack of energy support can be caused by reduced time for food consumption, insufficient amount of food and water, reduced appetite due to stress factors.

The energy costs of the military participating in the training are higher than of the civilians, a fact demonstrated by the study "Energy requirements of military personnel"[6], according to which the need and energy consumption of the military was between 2.300-7.100 kcal, the average being 4.620 kcal. According to this study, the energy consumption of the military in the operational units is about 20% higher than that of the support units.

At the same time, it is shown that these energy expenditures are higher in some areas of the field, in the days with activities planned throughout the 24 hours, depending on the duration of the missions and their intensity.

Food deficiency for a short period of time can lead to muscle pain, reduced muscle strength, lack of proper recovery, and weakness[7]. The insufficient quantity of food has as an immediate consequence the drastic decrease of the possibilities of achieving an aerobic effort, due to the lack of nutritional and energetic resources, but also the reduction of the mental and cognitive performances and capacities. In the long run, the lack of food, obviously, is found in the reduction of the total muscular strength, of the aerobic and anaerobic resistance, fact demonstrated by the study "Nutritional and immunological assessment of Ranger students with increased caloric intake"[8].

These elements lead to the awareness of the importance of the food of the military and their performance, the energy balance being a requirement between the demands to which they can be exposed and what they are offered. "A strategy for the health and performance of the military starts from the availability of food, their consumption and a correct diet, related to the effort they make"[9].

Next to food is an essential element of our survival, an element without which life on earth would not be possible: water. This is vital in everything we do, including in the conduct of military action. It is known that without nutritional and energetic contribution, people can survive even 30 days, while without fluid consumption, the survival time is very short, only a few days. In the absence of water, performance is greatly diminished, being the element for which there are no alternatives. The 3% reduction in the amount of water in the body substantially reduces physical and cognitive performance, leading to the emergence of thermal stress[10], an element that materializes in the overheating of the human body, this being the cause of diseases and in some situations, even death.

During the preparation and carrying out of the missions, water is the main source of hydration and has as an important purpose the replacement of the electrolytes lost due to the physical effort made: magnesium, potassium, sodium, calcium. Dehydration requires water consumption to restore the body's acid-base balance, but the effects of water and the rehydration process can be enhanced, accentuated and not replaced, by artificially enriched liquids or naturally with electrolytes. These liquids can be a fast source of energy, when the quantity of food is reduced and it is desired to obtain a rapid energy boost, in a special way, during the missions of long duration, idea demonstrated by Montain and Young (2003), in the study "Diet and physical performance. Appetite"[11].

The water consumption during the military actions is different, this characteristic being given by the environmental conditions. If a natural environment with high temperatures does not require and does not substantially influence the consumption of food, then that of water yes. High temperatures cause abundant sweating, which is a major waste of water in the body.

Also, the cold and the low temperatures, are causes for the increase of the nutritional and energetic expenses by approximately 30%, value indicated by Hoyt and his collaborators, in the study "Energy balance and thermal status during a 10-day cold weather US Marine Corps Infantry Officer Course field exercise"[12]. Dehydration can also occur when temperatures are low, due to the lack of water sources, frozen foods that contain less water than those in the basal state, inadequate clothing or even breathing.

The supply of water, regardless of whether the missions take place in cold or hot areas, can be achieved either by the water transport or by the improvisation of some means of procuring and capturing the water. If the missions are carried out in snowy areas, the supply of water will not be a problem but it is required, as for the source of water captured with improvised means, means of filtration and treatment against pathogenic factors.

If we look at the missions carried out by the Romanian Army in recent years, in the theaters of operations, we can see that the servicemen must carry out actions, inevitably, in environment conditions that are often completely unfriendly. Actually, these traits of the environmental conditions are enhanced by the heat and the cold, the following factors that I am going to talk about and that can influence the physical performance of the military.

Carrying out missions for a longer period of time, in the absence of temperature control of the temperature of the military body "can cause symptoms of exhaustion, fatigue, weakness, dizziness, confusion and fainting"[13], which, together with their other physiological deficiencies, can lead to serious or serious illnesses or death.

The air temperature that creates thermal comfort for people is between 22° and 25°. In this interval, the activities carried out by people are carried out in the best conditions, without the heat factor influencing their cognitive and/or physical performances. Moreover, the thermal stress is conditioned by "outdoor temperature, air movement, relative humidity of air, average radiant temperature, metabolic temperature and clothing (through its insulation and impermeability effect)"[14].

Warming the body negatively influences the cognitive performance directly proportionally

to the increase of the temperature. The logical reasoning can be kept for a period of "2 hours at 29.5° Celsius; whereas at 42° Celsius, cognitive performance remains acceptable for up to an hour"[15]. The monotony and repetitive nature of the activities are elements that contribute to the faster installation of the negative effects of heat on the human psyche.

Another negative effect of heat on the servicemen is found in the diminution of psychomotor performance (coordination, balance, dexterity, etc.). Psychomotor skills are diminished to "temperatures above 30° Celsius, the maximum exposure limit without affecting performance is 32° Celsius, regardless of the duration of the task"[16]. Moreover, "exposure to an ambient temperature of 32°-35° Celsius, for 6 hours, determines a symptomatology characterized by weakness, dizziness, restlessness, irritability, loss of appetite, nausea and vomiting (...) with negative physiological effects and psychological important"[17].

Opposite to heat is cold, the other temperature factor that affects the physical performance of the military. Cold, often disregarded, by its two elements, hypothermia and frostbite, is one of the important risk factors for the military participating in training and missions, in areas with low temperatures permanently or in winter conditions. Moreover, „the risk of frostbite is low at temperatures of -10° Celsius, the risk at -20° Celsius is considerable and pronounced at -25° Celsius"[18].

„Frostbite is manifested by the inflammation of the affected areas, the creation of an extremely painful point, and in the situation of the external intervention to prevent the action of the cold, the place can become bruised and can lead to the loss of function and even of the respective segment. The spread of the infection and the lack of proper treatment can also cause death"[19].

Particular attention should also be paid to exposure time and wind. This is an aggravating factor of thermal perception, in other words, at an air temperature of 0° Celsius and a wind speed of 15 km/hour, the temperature felt is -4° Celsius. Disregarding them creates premises for frostbite.

Hypothermia (abnormal drop in body temperature) occurs if the body is submerged in very cold water, in the absence of equipment that provides the combined thermal comfort with exposure to low or negative temperatures for a longer period of time. The installation of hypothermia has uncontrollable tremor effects, central nervous system dysfunction, lethargy, confusion, hallucinations, irritability and even coma (Table no. 2). It can lead to death as a result of reduced respiratory rate and heartbeat until

Table no. 2

STAGES AND SYMPTOMS OF HYPOTHERMIA[20]

Stage	Body temperature	Clinical simptoms	Intervention
Compensated	36^{0}C	Intensification of metabolism, to balance heat loss (slight tremor).	Common measures for thermal protection.
Easy	34^{0}C -36^{0}C	Accentuated tremor, varied individual symptoms.	Local warming of the extremities, hot drinks, light exercise.
Moderate	32^{0}C -34^{0}C	Paroxysmal tremor, various individual reactions.	Warming of the body, hot liquids (if the individual is aware and can swallow); alcohol is excluded.
Severe	28^{0}C -32^{0}C	State of confusion, progressive obnoxiousness of consciousness, disappearance of tremor, increased muscular rigidity, decreased heart and respiratory rate, cardiac arrhythmia, ventricular fibrillation.	Imminent lethal danger, specialized medical help is required, careful manipulation of the victim, no sources of aggressive heating are used, a possible refusal of help from the victim is ignored.
Critical	sub 28^{0}C	Apparent death, accentuated heart rhythm disorders, spontaneous ventricular fibrillation, pulmonary edema.	Emergency specialized medical help (the survival temperature can, in rare cases, go as low as 18 degrees Celsius).

stopping. During the mission, under such conditions, the military equipment must provide them with thermal comfort and, at the same time, provide the possibility of movement, to ensure the thermal transfer from the body to the outside in order to avoid overheating of the body.

Conclusions

The human body is not an inexhaustible resource of energy, it is an actual consumer of physical and mental matter. Its performance is determined by this ratio, between demand and supply, between the requests to which it is exposed and what comes to support the compensation and support of the physical, intellectual and mental effort. However, it is not enough just to create a positive balance, but also to focus on all the parameters and factors that condition the success of a mission.

The carrying out of military operations, for long periods of time, with different intensities of physical and mental effort, has a direct impact in many situations, negatively, on the operational physical performances of the military. Creating appropriate strategies is an essential factual situation in order to reduce the negative effect of these factors on the military body, in which the forecasting of the conditions for carrying out the missions is a central element in the planning and training of the servicemen. Moreover, including in military training programs, training sequences in the field of military physical education that can combat some of the negative effects of the tackled factors, is a viable solution for supporting the actions of the servicemen during missions.

NOTES:

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WALKING – ANATOMICAL AND FUNCTIONAL ASPECTS AND ITS ROLE WITHIN MILITARY PHYSICAL EDUCATION AND THE MILITARY ENVIRONMENT

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Whether we regard walking as an ordinary automatism of the people to whom we do not pay any particular attention, or we look at it from the perspective of specific basic motor skills and the actions and activities of the servicemen, it must be admitted that it is the main form of human locomotion, the main mode of human movement. Beyond the applicative utility of walking, in a deep approach, it must be understood as the central component of movement, a quintessence of the existence of human life on Earth, along with the other elements that support our survival: oxygen, water and food. This material comprises a synthesis of the main information that will help get a deeper understanding of walking and an awareness of its role both for daily life and as a fundamental motor skill needed for the servicemen.

Keywords: walking; movement; physical activity; marching; running.

According to Charles Darwin's evolutionary theory, animal and plant species undergo transformations as a result of their ability to adapt to environmental conditions, of the overpopulation in different geographical areas, of the need for survival and the struggle for existence, of their genetic traits but also following the imprint that nature leaves on them. Man, according to the same theory, is no exception, being subjected to essential changes that clearly delimit it from animals.

Throughout history, our ancestors made the transition from four-legged walking to bipedal walking, evolving from the instinctual-animal actions to rational actions using articulated language. Bipedalism is a fundamental characteristic of man, a key element for human movement, a factor whose lack would question our existence in the current form. The transition to bipedalism determined changes in the entire osteo-articular and muscular apparatus, changes that produced adaptations, firstly in the lower limb muscle groups in order to increase the strength developed by them due to the need to support body weight. Also, the degree of freedom for performing movements in the joints of the lower limbs also supports adaptations and modifications required by human evolution.

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Walking – anatomical and functional issues

In order to create a correct overview of walking, conceptually speaking, it is necessary to treat it considering two directions of analysis that are conditioned and interlock each other: the first consists in its approach taking into account the anatomical – biomechanical component, and then the awareness of the importance of the body's correct movement is the essential objective of this definition; the second perspective aims at treating walking from the point of view of physical education and of the applicability for the preparation of servicemen, the final conclusion being drawn towards understanding its usefulness in the military field.

But what is walking? In the anatomical-biomechanical sense, walking represents a cyclical locomotor movement of the lower limbs, by bringing one foot in front of the other and which, initially, is a voluntary motor action and becomes, as a result of exercise and repetition, an automatism, an involuntary act.

Walking can also be seen as a succession of "permanent imbalances and rebalances, whereby the body adapts to the supporting surface and the environment, permanently maintaining contact with the surface on which the movement is performed (n.n. – this is one of the fundamental characteristics that distinguishes walking from running. There is a moment in running – the flight phase, in which any contact with the support surface disappears)"[1].

During walking, the lower limbs successively act as support and propulsion, determining the appearance of the functional elements of walking: support on a single lower limb, support on both lower limbs and the balance or advancement of a lower limb. When the weight of the entire body is supported by a single leg (supporting lower limb), during walking, we speak of unilateral support, when the other leg performs the balance-pendulum movement (its forward design as a result of muscle contraction) and bears the name of a pivoting or swinging leg. When the body's weight is supported by both feet, we speak of bilateral support. The moment when, during movement, the swinging leg reaches the support leg is called the moment of verticality.

In addition, walking consists of two different periods, during which the lower limbs perform the functions stated above. The two periods are: support and balance (pendulum, oscillation). During the support period, there are several moments: "initial contact (with the heel), loading, medial support (with the middle of the sole), termination of the support (loading towards the forefoot), detachment (from the ground)"[2].

These moments can be divided into two phases: the posterior phase of the unilateral support and the second, previous of the same support. Between these two phases the moment of verticality is also interposed. The second period, balance, consists of the "initial (posterior), medial or middle and final (terminal, anterior) oscillatory movements"[3]. These phases create the cycle of walking (Figure 1).

The fundamental elements specific to walking are: "the anti-gravitational support of the body - provided by the body's anti-gravitational reflexes; balance – consists in maintaining the balance and the direction of movement (n.n. – the position of the body's center of gravity, during the movements, it undergoes changes as a result of the weight transfer from one segment to the other); propulsion – occurs due to anterior and lateral tilt of the body, before support on a lower limb; stepping"[5].

Stepping, being an essential component of walking, has as a trigger element the need to contact the support surface and the inclination of the body when the body's mass passes from one foot to the other. It has the double step as basic functional unit which, according to Mary, represents the totality of movements that we perform between two identical positions of the body. The double step can also be defined as the movements made between two successive support positions of the same leg. A simplistic definition of the double step can be understood as a sum of two simple steps. The simple step is defined, according to Littre, as "the distance between the two heels, when the legs are supported on the ground"[6]. Tudor Sponge considers the step as "the distance between the contact point of one foot (left) and the contact point of the other foot (right)"[7].

Normal walking is characterized by a series of parameters, and their values particularize it for each individual. These parameters (Figure 2) are: the length of the step (the distance between the heel of the same lower limb, relative to two identical

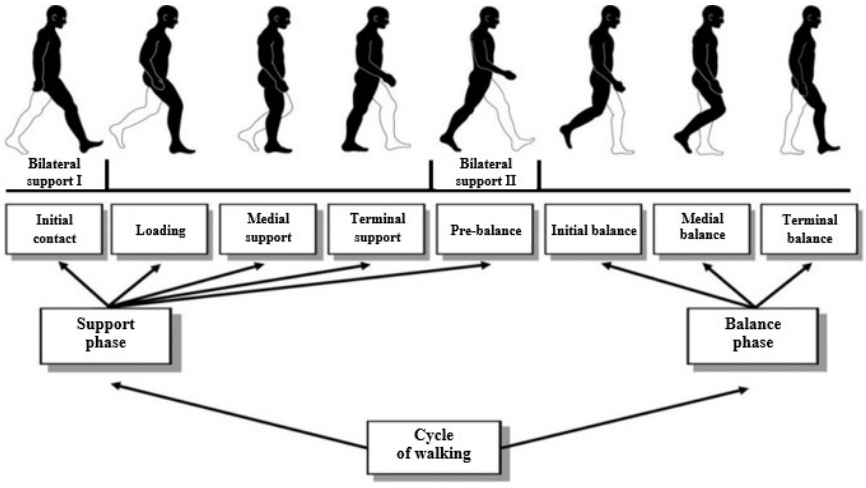

Figure 1 *Cycle of walking*[4]

positions of the body) – 70-80 cm, its width (the distance between the heel of the lower limb and the line of walking direction) – 5-6 cm, the angle of the step (is given by the longitudinal axis of the foot

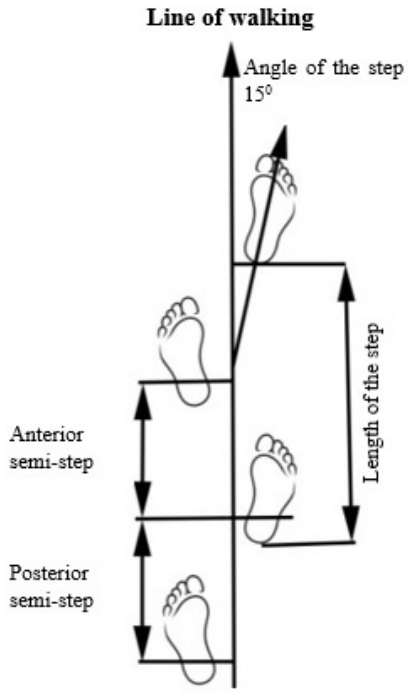

Figure 2 *Coordinates of walking*[8]

and the line of walking direction) –approx. 15°, the cadence or pace of walking (for a slow walk, the number of steps is about 60-80 steps/minute, for an average one – 80-100 steps/minute and for an alert walk we have values between 90-120 steps/minute), speed walking – 4-6 km/hour, the length of a walking cycle is between 150-160 cm.

Another extremely important indicator that I mention, given that people are looking for a way to move and reduce fat tissue, is the body's energy consumption during walking. During walking, a person with a weight of 75 kg, at a moderate speed of about 5 km/hour, consumes about 4.8 calories/minute, in total 288 calories/hour.

During walking, the human body is subjected to several types of oscillatory movements, which are of three types: vertical, transverse and longitudinal. The vertical oscillations are represented by the ups and downs of the body's center of gravity (it is arranged near the vertebrae of the second sacral and five cm before it, on the vertical axis of the body), with an average amplitude of this movement of about 4,5 cm. The maximum lifting moment is reached when the moment of verticality is achieved. The minimum threshold is reached at the time of bilateral support.

The second type of oscillations, the transverse ones, with an average amplitude of the movement of approximately 4.4 cm, having the maximum also at the moment of verticality, are found during the successive inclination of the trunk on the support leg, when the support phase is performed during movement.

The longitudinal oscillations are identified with the movements of the trunk in the sagittal (anteroposterior) plane, in the forward-backward direction. These movements can be observed in the moments of tilting the torso forward and backward, in the moments of unilateral anterior and posterior support of the lower limbs. All these three types of oscillations determine the movement of the center of gravity on a sinusoidal trajectory both vertically and horizontally.

The analysis of walking highlighted the existence of a number of 6 fundamental movements: "rotation, tilting and lateral displacement of the pelvis (n.n. hip), flexion of the knee, movement of the foot and knee"[9].Thus, the pelvis performs two rotations: one around the vertical axis of the body towards the lower limb that advances by about 4°, summing up a total of 8° and the second rotation, around an anteroposterior axis of about 4°-5°. Also, the pelvis moves in a horizontal plane, left-right, depending on the lower member performing the support phase.

But how is normal walking done correctly? From the upright position, with bilateral support (first), one of the lower limbs initiates the movement by advancing with the heel of the foot. In this position, the foot of the lower front limb is flexed on the calf at an angle of approximately 90° and 30° to the ground, the knee is almost fully extended, the lower limb is in anterior support and initiates the movement. In this phase, the arm opposite the advancing foot is slightly projected in front, the head and the trunk remain upright.

The following moment, the one-sided support (first), is achieved by the support of the front leg and the swing of the back leg. The lower limb in front takes on the entire body weight and rests its entire sole on the ground. The rear one makes a quick movement (a swing), from back to front.

The knee of the support leg is almost extended, the arms are close to the body, the trunk and head are upright. When the lower back member reaches the lower support member, that moment of verticality is created, as I mentioned earlier.

After this, the lower support limb continues the body's propulsion. The lower limb pendulum continues its forward movement and sits on the ground with the heel, at which point we have the second position of bilateral support. During the movement, the knee and ankle of the lower limb are slightly flexed, the pelvis also performs a forward rotation, the opposite arm is also slightly forward, the trunk and head are upright.

The following phase is balance, in which the swinging lower limb becomes supportive and the other will play the role of the swinging foot. The latter will perform the detachment from the ground, swinging it forward, reaching the moment of the vertical and preparing for its placement with the heel on the support surface, preparing the next cycle of walking. Throughout this stage the head and the trunk maintain their verticality, the opposite upper limb will move forward simultaneously with the design of the swinging leg in front.

Moreover, the amplitude of movement of the upper limbs for the two phases of walking is variable, being conditioned by the speed of walking and, in some cases, by the length of the step. The trunk and upper limbs play a role in maintaining the body's balance throughout walking.

A distinct element of walking is the way of placing the foot on the ground, and this mode is called the pronation of the foot. As it is known, each of us places the foot differently on the support surface and we have different shapes of the sole. "This shape of the sole can be normal, with a high or flat arch – platfus. From the point of view of the pronation, we can place the foot more on its external side (insufficient or lateral pronation), normally or more on the internal part of the foot (exaggerated or over pronated pronation). For each of these, it is recommended that the shape of the sports shoe be as follows: semi-curved for a normal pronation, curved for a lateral pronation or straight for the exaggerated pronation"[10].

Going further with our analysis, we can talk about walking from the standpoint of physical education and its applicability to the military environment. Walking is a motor action[11] and it is a component of human motor skills[12], performed consciously in most situations and which, apparently, is quite easy to achieve, automatically, based on segmental coordination, when attention is obviously directed towards the direction of walking.

The place of walking within military physical education and the military environment

The normal walking technique can be modified or even disturbed by the voluntary or involuntary occurrence of internal or external triggering factors. These internal (for example, the degeneration of the joints of the lower limbs or mental processes such as will) or external (the appearance of obstacles in the direction of walking) factors can lead to the appearance of specific variants of walking.

If in military physical education, walking with its variants (walking on tip-toes, walking on heels, walking on the outside parts of the soles or on the inside, crouched walking, with added steps, with crossed steps, with a knee lift, in lunges, etc.) is most often found in the form of preparatory exercises, in the military environment, walking has strong applicative connotations. In the military environment we find it in two situations: the first, in the training and education activity, and the second is the movement of troops on foot (march), of tactical and combat situations.

From the point of view of the teaching and training activities, walking with its variants is found at the beginning of the lessons in the form of exercises for warming up the lower limbs and their joints. Regarding the second situation, walking is the essential motor activity for the movement of troops on foot, of march. Moreover, the march represents "the movement of a subunit/military unit (of the troops and of the equipment provided), mainly on foot, with limited access to the support of vehicles ... A march is considered to be a successful if the troops reach their destination at the set time and are physically capable to carry out their mission"[13].

As far as walking and the combat situations are concerned, the table below shows some moments in which we find it, of course, next to other motor skills useful in applications.

Table no. 1

WALKING IN DIFFERENT COMBAT SITUATIONS[14]

SHOOTING	PHYSICAL REQUIREMENTS
Throwing hand grenades	Walking, running and carrying cargo, jumping, crawling, climbing, pushing, pulling, squatting, lunges, starting, stopping, changing direction, throwing.
Movement	**Physical requirements**
Individual movement techniques	Walking, crouching, running and transport of cargo, jumping, crawling, climbing, pushing, pulling, squatting, lunges, starting, stopping, changing direction, climbing and descending.
Movement from one point to another	Walking, crouching, running and transport of cargo, jumping, crawling, climbing, pushing, pulling, squatting, lunges, starting, stopping, changing direction, climbing and descending.
Movement under enemy fire	The motor skills mentioned above (walking, crouching, running and transport of cargo, jumping, crawling, climbing, pushing, pulling, squatting, lunges, starting, stopping, changing direction, climbing and descending) executed at high speed and with precision.
Survival	**Physical requirements**
Close combat	Reactions in close combat: pushing, pulling, pacing, walking, running, racing, throwing, lifting body weight, squatting, lunges, rotating, bending, locking, kicking, arm-banging, stopping, changing direction.
Adaptation to situations	**Physical requirements**
Threat assessment and response (force escalation)	Reactions to direct physical contact: pushing, pulling, running, racing, throwing, lifting body weight, squatting, melting, rotating, bending, locking, kicking, arm-banging, changing direction, weight-bearing, jumping, crawling, climbing, start, stop.
Fight abilities	**Physical requirements**
Reaction to direct contact with the enemy	Walking, crouching, running, pushing, pulling, racing, throwing, lifting body weight, squatting, lunges, rotating, bending, locking, kicking, arm-banging, changing direction, weight-bearing, jumping, crawling, climbing, start, stop.
Evacuate the wounded	Lunges, crouching, lifting weights, walking, running, transport.

Conclusions

Knowing the correct walking technique and applying it to real situations can turn this motor activity into a moment of relaxation, a recreational process. Following some basic rules during walking (keeping the head and torso in an upright, high position; directing the gaze forward at 10-15 m, not on tip-toes; allowing free movement of the upper limbs forward and backward from the shoulder joint; keeping the shoulders in a low and slightly backward position; keeping the pelvis in a neutral position; having a slight tension of the abdomen; light walking) will increase its efficiency, obtaining essential benefits for our state of health.

Adding the applicability of walking in the military field, where it is evident when troops must move and transport materials, to its sanogenetic effects (lowering blood pressure, reducing heart disease, risk of type 2 diabetes, depression, fat tissue, as well as memory enhancement), we can certainly admit that this is a good physical exercise for maintaining and developing the military capabilities of the servicemen, but also a pleasant and useful way to spend their leisure time.

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1 M. Cordun, *Kinetologie medicală*, AXA Publishing House, Bucharest, 1999, p. 78.

2 T. Sbenghe, *Bazele teoretice şi practice ale kinetoterapiei*, Medical Publishing House, Bucharest, 1999, p. 304.

3 *Ibidem*, p. 304.

4 Translation Tino Stöckel, Robert Jacksteit, Martin Behrens, Ralf Skripitz, Rainer Bader and Anett Mau-Moeller, *The mental representation of the human gait in young and older adults,* Frontiers in Psychology, 2015.

5 M. Cordun, *op.cit*., p. 79.

6 *Ibidem*, p. 79.

7 T. Sbenghe, *op.cit.*, p. 303.

8 M. Cordun, *op.cit.*, p. 79.

9 T. Sbenghe, *op.cit.*, p. 304.

10 G.C. Ciapa, *Orientări și oportunități pentru pregătirea fizică a militarilor*, "Carol I" National Defence University Publishing House, Bucharest, 2019

11 The motor actions represent a "sum" of motor acts (these are the simplest gestures of human movement, realized with the help of the skeletal musculature and the bone system through which rapid adaptations to the situations encountered are realized or the motor actions are created) with the purpose of reaching to an immediate goal.

12 A. Dragnea et al., *Educaţie fizică şi sport – teorie şi didactică*, FEST Publishing House, Bucharest, 2006, p. 3: "The processes and mechanisms by which the human body or its segments move, detaching itself from a landmark, through muscular contractions".

13 G. F. Băițan, *Pregătirea fizică a militarilor din Armata României în contextul întegrării în NATO*, "Carol I" National Defence University Publishing House, Bucharest, 2019, p. 144.

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CULTURAL DIVERSITY IN THE PRACTICE OF INTERNATIONAL PUBLIC RELATIONS

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Cultural diversity refers to the cultural differences that exist between people and collectivities, as multiple entities: traditions, customs, manner to approach education, manner to approach society from an intercultural perspective. According to some authors, cultural diversity is the essence of practicing international public relations.

Those who practice such public relations must have an open and tolerant attitude for managing communication involving people from different cultural backgrounds; otherwise, conflict situations and tensions may arise which would compromise the achievement of the objectives.

Through the present scientific approach, we will highlight some aspects regarding cultural diversity in international and regional initiatives and the fact that this is the essence of practicing international public relations; also, we will highlight the need to respect cultural diversity in the theaters of military operations.

Keywords: cultural diversity; cultural differences; initiatives; security; international public relations; communication; interaction.

"Let's enrich each other from our diversity".
Paul Valery (French writer, 1871-1945)

Cultural diversity in international and regional initiatives

Important topics of international and regional debates include cultural diversity and its importance in shaping the world we live in.

A broad definition of cultural diversity was formulated at the first Cultural Summit of the United Cities and Local Governments (UCLG) international organization, held from March 18 to 20, 2015: "Cultural diversity is the main legacy of humanity. It is the product of thousands of years of history and the fruit of the collective contributions of all peoples through languages, ideas, techniques, practices and creations. Diversity should not only refer to the "other"; it has multiple dimensions and is part of each person's unique identity. Cultural diversity allows the continuous redefinition of identities and differences. It represents an essential component of social harmony, citizenship and the creation of a peaceful society"[1].

A key role in the formulation, promotion and implementation of international instruments on the various facets of the complex reality encapsulated within the term cultural diversity is held by the United Nations Educational, Scientific and Cultural Organization (UNESCO). Thus, the recognition of cultural diversity as a value of the international community was enshrined in the *Universal Declaration on cultural diversity*, adopted by UNESCO in November 2001[2], in articles 1-4: "cultural diversity: a shared heritage of humanity; from cultural diversity to cultural pluralism; cultural diversity is a factor of development; diversity means respecting human rights"[3].

The approaches on cultural diversity, within UNESCO, have decreased from four (artistic production, identity, in relation to development and in relation to democracy) to two appreciated as convergent: a first approach concerns cultural diversity within a certain society, focusing on aspects such as: fundamental human rights, promotion of cultural democracy, equality on participation of all minorities (ethnic, gender, linguistic, racial, religious, sexual, etc.) and it is placed under the umbrella of the concept of "multiculturalism"; the second approach concerns the cultural diversity between different states, societies and / or cultures, being regarded as a principle that should be

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respected in the exchange of cultural goods and services between these states and / or cultures[4].

Resolution 57/249 Culture and Development, adopted by the UN General Assembly on December 20, 2002, stipulates that on May 21, the *World Day for Cultural Diversity, for Dialogue and Development* be proclaimed, respectively a day when the benefits of cultural diversity are promoted and the commitment to build a peaceful world, based on the values of mutual understanding and intercultural dialogue, is reaffirmed.

According to article 2 paragraph 1 of the Convention on the Protection and Promotion of the Diversity of Cultural Expressions (adopted at the General Conference of UNESCO, Paris, 2005), "cultural diversity can be protected and promoted only if human rights and fundamental freedoms are guaranteed, such as be the freedom of expression, information and communication, as well as the ability of people to choose cultural expressions"[5].

The UNESCO report "Investing in Cultural Diversity and Intercultural Dialogue" from 2009[6], appreciates cultural diversity as a key concern of this century. According to this report, there are voices who argue that the globalization and liberalization of the market of goods and services will lead to cultural standardization and will strengthen the existing imbalances between cultures; other voices claim that the end of the bipolar world of the Cold War and the eclipse of political ideologies will lead to new lines of religious, cultural and ethnic guilt and will become the beginning of a possible "clash of civilizations". Joining these voices are scientists warning of threats to the terrestrial environment generated by human activity, drawing parallels between the erosion of biodiversity and the disappearance of traditional lifestyles as a result of a lack of resources and the spread of modern lifestyles.

During the third forum of the Alliance of Civilizations, held in Rio de Janeiro, on May 27-29, 2010[7], the invited personalities highlighted in the speeches the importance of cultural diversity: all cultures, civilizations and religions contribute to the enrichment of humanity; cultural differences have been used to create fear and to justify invasions and wars; the cultural diversity of the world represents a wealth and a path to the peace of the Planet; civilizations, cultures and societies must recognize and value cultural differences and overcome the fear of diversity; promoting cultural diversity helps to emphasize the value of the individuals and cultures they belong to; the promotion of cultural diversity must be incorporated as a right and principle in the development strategies of the states; cultural diversity is a transversal element of the three pillars – economic, social, media – necessary for sustainable development.

International initiatives on cultural diversity are complemented by numerous regional initiatives.

We exemplify, in this regard: *The Charter for the African Cultural Revival*, adopted in Khartoum (Sudan), in January 2006, by the African Union member states[8]; *European Parliament resolution of 10 April 2008 on a European agenda for culture in a globalizing world*[9]; *The White Paper on Intercultural Dialogue*, entitled "Living Together in Dignity", adopted by the Council of Europe in May 2008[10]; *North America Regional Declaration on Bio-cultural Diversity*, adopted in May 2019[11].

Cultural diversity – the essence of international public relations

Among the problems that specialists in international public relations face when working in a country other than the one of origin are cultural diversity and cultural differences. Such relationships are planned and executed at the multinational or international level.

In international public relations, culture plays an important role; cultural concepts, according to Patricia A. Curtin and T. Kenn Gaither, make a difference in the practice of international public relations and are the essence of practicing international public relations[12]. According to the two specialists in the field of international public relations, "culture represents the thresholds that public relations must face, in order to reach common situations in the middle of international public relations, whether it is about building the national image, attracting tourists, stimulating economic growth or tempering disagreements with rival groups or nations"[13].

Culture is perceived as an element of identity, which offers a sense of belonging and a way of expressing values; however, it can also be perceived as an economic activity through the cultural and creative sectors. Each culture has its own specificity and functions according to its own internal dynamics, its own principles and laws,

written or unwritten; the values appreciated in a space can differ greatly from society to society, from state to state[14].

In the practice of international public relations, knowing the cultural concepts of a country, understanding cultural differences and accepting cultural diversity are essential and can represent the difference between a contact (personal, group, organizational etc.), a successful discussion and business or a failure.

It is clear that one of the great challenges of the present is to accept cultural differences between us and to understand cultural diversity as a necessity in our changing world.

Cultural reconciliation can be more difficult when one considers that one's own culture is superior to another culture. According to surveys conducted by the Pew Research Center[15], people around the world and of all ages are proud of their culture, but the perception of one culture's superiority over others is maintained (for example, in Asia, feelings of cultural superiority are much more intense).

Understanding cultural diversity as well as accepting and respecting cultural differences is helpful in understanding how people look at the world and their relationships with others, but also how people talk about them, about others, or about their ideas.

A relevant example is detailed by Gao Hongzhi, a researcher on the role of cultural concepts in business relations, who states that in business relations with China it is important to know the content of the following three concepts *guanxi, miànzi* and *renqíng*: *guanxi* is a deeply rooted cultural concept in rural society and refers to the care for the other; in the business field this cultural concept consists first of building a trusting relationship at personal level, followed by the negotiation and conclusion of contracts; *miànzi* is the cultural concept that refers to the position of a person in the community (organization), in other words, according to the hierarchical Chinese culture, business is done at the same level; *renqíng* is a kind of social currency and refers to the exchange of favors with the other part or parts involved in the business.

For New Zealanders, who are quite individualistic, it is a challenge to develop relationships with a collectivist society such as China, where the relationship is more valuable than the business[16].

Another example is presented by Daniel David, according to whom "Romanians have a collectivist culture, without being an extreme / strong collectivism. Values such as tradition and conformism that characterize a collectivist culture come to Romanians from the historical need for security"[17].

Kevin L. Keenan brings to public attention another example in which he argues that Egypt has a rich and profound national culture, of which most ethnic and historical subgroups are proud and that the two characteristics that best distinguish Egyptian culture are the importance of family and the central role of religion[18].

The communication process meets difficulties not only in the context of its development within the same culture, but also, even more so, when it takes place between people of different origin and culture.

The field of interaction of international public relations is vast, comprising the field of international organizations, the field of inter-governmental relations, the field of transnational economic transactions and the field of interactions between the citizens of different countries.

There are beliefs and customs so ingrained that the approach to cultural diversity can be extremely different from one country to another or even from one organization (group, company) to another.

The existence of cultural diversity also implies the presence of barriers or obstacles in the way of achieving effective communication in the practice of these relationships. Thus, such barriers and obstacles can be the following: the wrong translation or interpretation of verbal symbols; the presence of norms and behavioral roles; the existence of different beliefs and values; the lack of openness or sincerity; differences in perception; the existence of stereotypes, prejudices and ethnocentrism (belief in the superiority of one's culture over others).

We cannot omit the fact that "the diversity of human cultures lies behind us, around us and in front of us"[19].

In today's complex, dynamic and dynamic security environment, cultural diversity should not be viewed as a security challenge, but actually as an advantage that people can enjoy for expressing their freedom and expressing their ethnic, cultural, linguistic and religious identity.

In the practice of international relations, it is important to apply the following norms: encouraging and maintaining a working atmosphere appropriate to people's creativity and free expression; promoting open communication within the team by establishing interpersonal relationships based on empathy; promoting a positive and tolerant attitude towards cultural differences; solving possible conflicts generated by the cultural diversity of the group members.

Respect for cultural diversity in theaters of military operations

The cultural dimension is often at the center of peace building processes, being part of the problem or solution. According to Michelle LeBaron, "culture is an essential part of conflicts and conflict resolution (...). Cultures are embedded in every conflict, because conflicts arise in human relationships"[20].

The interest in cultural diversity in conflict is directly linked to the promotion of cultural diversity worldwide, starting with the UNESCO report "Our Creative Diversity" (1995) and culminating with the adoption of the UNESCO Convention on the Promotion and Protection of the Diversity of Cultural Expressions (2005)[21].

The theaters of military operations offer possibilities of multiple intercultural contacts, on the international cultural background of the area of action, with the members of different cultures, but also with the members of the culture of the host country where the mission is carried out.

Cultural integration plays an important role in achieving mutual cohesion and trust and contributes to the success of the military mission.

Each community (group, state) has its own moral values, traditions, customs and rules of conduct different from the others; each person has values, habits and behaviors that are different from the other people they come in contact with and communicate with. For the military members participating in missions outside the national territory, it is important to develop skills that promote interculturality in any cultural space and communication skills that allow adaptation to the operational environment and integration among the locals.

Also, in order to understand the cultural specificity of a country / area / region in which the mission is to be carried out, it is important that the military know the historical, religious, social, cultural etc. aspects that can be obtained from books, magazines or serious specialized websites. The military training before moving to the theater of operations offers many relevant information about the locals, about the cultural differences and similarities.

To illustrate, we can give as examples of practices considered offensive in the communication with the Afghan population: to ask questions and to make observations regarding the female members of the family; to address the elderly, the mullahs and other important people; pejorative comments, such as "as stubborn as a donkey" or "to work like a horse"; accusations of dishonesty, cowardice, corruption, greed etc. (true or false), made especially in public; the use of obscene language in addressing the Afghan population or in the presence of Afghans[22].

In theaters of military operations, the process of communication takes place not only between the military members who come from the same culture or from different cultures, but also with the local forces, whose involvement contributes to improving the results of the mission. Therefore, it is important to know the cultural differences, to develop good relations with the locals from the first meeting, based on honesty and respect towards their strengths and weaknesses[23].

An important aspect in the theaters of operations is the negotiation in an intercultural context, as there may be different situations in which the negotiation of the agreements or the resolution of conflicts arising between the soldiers from the same unit or through the interaction with other military and civilians belonging to different cultures may arise. The members of different cultures understand the negotiation differently: some cultures focus on building positive relationships between negotiators, other cultures give importance to the outcome of the negotiation.

An important aspect to mention refers to the culture of the military, which is distinct from civilian life and the non-military organizational culture and which allows the military to be united and act in challenging environments.

In the planning and conduct of military operations, the following aspects must be taken into consideration: the interaction of people with their

environment, economic relations, social relations, political structures and their belief systems[24].

If cultural diversity generates intolerant, hostile and aggressive activities aimed at a heterogeneous cultural reality, it can lead to extreme forms, such as armed conflict. The Bosnian War of 1992-1995 provided one of the most dramatic and horrific examples of this kind[25].

Respect for cultural diversity is an important condition for the success of missions performed in military operations theaters.

Conclusions

Each national culture comprises a series of its own specific elements (artifacts, norms, values, rituals, ceremonies, heroes, stories, etc.) used to interact inside and outside the respective culture.

The recognition and application of respect for cultural diversity gives expression to the principle of human equality and dignity and is a way of promoting coexistence and interaction within a society.

Cultural diversity has an important role not only for economic growth, for an intellectual, emotional, moral and spiritual life, but also for the smooth running of international public relations.

In the context of international public relations, mutual understanding of culture is a necessity for planning and performing different activities. For the development of these relationships, cultural diversity forms and strengthens dynamic and interactive relationships between people and their environments, with positive and negative effects on the performance of the team (company, etc.) and the success of the activities.

The military field is one of the areas of international public relations. The high number of missions carried out outside the native country required that the military training be given importance to the training of cultural skills, beneficial for the military in gaining the confidence of the local population, showing respect for the local customs and improving the interpretation of the interactions with the locals and allied troops.

On the agenda of many international, regional or national organizations and for practicing international public relations, cultural diversity is therefore a topic of great interest.

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THE POLITICAL CONCEPT OF *MITTELEUROPE* BETWEEN MYTH AND REALITY

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The desintegration of the socialist states offered political leaders the chance to redefine the identity of their own nations. Even if the European Union, a creation of the occidental cultural space, represented the first option, a part of the leaders of central European states took very seriously the idea of rebuilding the economic and cultural space of the former Austro-Hungarian Empire. Even after the disintegration of this political and economic system, the central European world continued to refer to the rules that defined it. Despite the attempts of the communist regime to rewrite the history of these nations, Mitteleurope remained a mark for the people of these lands and even became a viable option in a society that rediscovered their multicultural past.

Keywords: Mitteleurope; Central Europe; multiculturalism; collective identity; economic space.

The idea of a super-state structure in the middle of Europe appeared for the first time in front of the politicians and culture people during „The Great War"[1]. The German politician and publicist Friedrich Nauman wrote in his book, "Mitteleurope", published in 1915[2], about the need to create a political and economic structure with the help of the alliance between Germany and the Austro-Hungarian Empire[3]. This alliance was seen as one that had the purpose to defend the cultural identity of the German people which was "threatened" by both the Russian and the Anglo-French on the East and West borders, as the author says[4]. At the same time, he mentioned that he was marked by the racial concepts from that time which said that the future of this federal state must be ruled by a people capable of producing benefits for the entire community[5].

Regarding the administration of this new state, he considered that the two German empires must forget the conflicts from the past and work on forming this new structure. The author considered that the Austro-Hungarian Empire was the weak link of this alliance which was forced by the circumstances in 1867 to accept to share their space with the Hungarians. Analyzing the course of the war, Nauman felt that in the end Austria would most likely have to accept a new split by co-operating with the Slavs from the Eastern provinces[6].

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The German Empire was much better structured and adapted to the new conditions of development. He considered that the rhythm of development of the two nations was completely different. The German nation was focused on modern business in which they used the fundamental principles of the nation: punctuality, conscientiousness and modesty. The Austrians were anchored in the past, remaining faithful to the principles of feudal work organization[7].

Prussia, the destabilizing factor of the balance of power in Central Europe during the 18th and 19th centuries

The first change of the relations of forces in Central Europe took place in 1742 when the small kingdom of Prussia occupied the region of Silesia[8] (but not its Southern part later called Sudanese Silesia), a province mainly populated by Slavs and administered at that time by the Habsburg House. The annexation of this province brought, through its resources, an added value to the kingdom of Prussia which in this way could lay the foundations for a healthy economic development. The important coal and iron resources located here allowed Prussia to become a great industrial power in the first part of the 19th century, which helped them in military actions. The territorial growth of the Prussian state did not stop here. It participated alongside Austria and Russia in 1772 in what remained in history known as the division of Poland (the Polish state was divided among its neighbors in three successive stages 1772,

1793 and 1795)[9]. Its disputes with the other big German power, Austria, took place throughout the eighteenth and nineteenth centuries. Most of these confrontations ended with the military victories of Prussia, which almost every time thus added to its territories controlled by the Habsburg House[10].

The revolution of 1848 rattled the old Habsburg Empire. Many of the politicians of the time came to the conclusion that the survival of this conglomerate of nations depended on the way it would be reorganized. Prince Felix Schwarzenberg, Prime-Minister and Minister of Foreign Affairs of the empire between 1848-1852, contributed to the writing of the first Constitution of the country. This important document provided the reorganization in the independent provinces of the Habsburg monarchy. The main purpose of the new Constitution was to cancel the effects of the new "Constitution of Hungary", known as the "Laws of March", adopted by the Hungarians from Budapest during 1848. The Austrian document stipulated the separation from Hungary of the provinces of Slovakia, Transylvania and Croatia which were integrated by force to the Hungarians during the 1948 revolution[11].

With support from the Russian army and indirectly from the Romanians from the Apuseni mountains who opposed the integration of Transylvania into Hungary, Emperor Franz Joseph succeeded in defeating the powerful Hungarian insurrection. The ideal – promoted by the Hungarian intellectuals – of separation from Austria was not shared by the representatives of the other ethnic groups. An important thing to remark is that the Hungarian troops fought isolated from the other minorities. Yet, these did not help the Hungarian revolutionaries; on the contrary, some of them even fought alongside the imperial army.

The most important moment was the insurrection of the Romanians from the Apuseni mountains led by Avram Iancu who put up fierce resistance in front of the Hungarian troops (this space was the only area that could not be occupied by the Hungarian army during the period June 1848 - September 1849)[12]. This happened due to the lack of flexibility of the Hungarians to accept the recognition of national and social rights for the other peoples of the empire.

After the defeat and disarmament of the revolutionaries, the imperial authorities posed the problem of carrying out reforms meant to discourage the initiation of similar social movements. Being aware that they could not afford to economically and militarily support a dynastic medieval empire with dispersed territories, the regrouping in the Danube region of the forces available to the Habsburg dynasty[13] was considered for the first time. The plan was to abandon some provinces (the main states of Northern Italy) and to initiate a reform of the rest of the territory on the basis of modern democratic principles.

Making this wish happen became harder especially as a result of the national re-awakening of some of the more culturally evolved peoples who wanted to obtain rights sooner than the Austrians were prepared to offer them. Thus, the imperial troops had to violently suppress many emancipation movements, the most popular being the insurrection in Prague in 1861.

With the consolidation of Prussian power in Central Europe after the second half of the 19th century France, Austria's traditional adversary for several centuries, radically altered its position towards the Habsburg Monarchy[14]. The defeats suffered by the two great powers at Sadowa[15] and Sedan[16] prompted many of the French scientists to actively participate in the creation of a distinct Austrian political and cultural identity which would compete with the German one. Since this moment the Austrian cultural identity became permanently associated with the space in southeastern Europe where, due to existing ethnic diversity, instability was a constant issue. In this underdeveloped economic space, the German culture of the Austrian state continued to be a guarantee of progress which would be later regarded as a stability factor. The permanent fear of Germany's military recovery prompted the great powers of that time, especially France, to continue to promote this clear separation policy between the two states.

By the Versailles peace treaty signed at the end of World War I, the unification of these two German states was forbidden[17], the interdiction remaining in force at the end of World War II when Austria was again separated from the rest of Germany.

However, the dissolution of the old Habsburg Empire was rushed from the inside by numerous requests for local autonomy. After the proclamation of the Austro-Hungarian dualist state in 1867, the strong and influential Czech minority in

Moravia began to negotiate by peaceful means the achievement of equal rights to the two recognized peoples of the Empire[18]. This effort was successful in the year 1897 when the government led by Kasimir Felix Badeni proposed the introduction of the Czech language as a second official language in Bohemia. The initiative was not supported by the German population of the province, who triggered important street movements to undo this endeavor. Despite these pressures, the Czechs succeeded in obtaining a privileged status within the Austrian part of the Empire, but not equal to the Hungarians. This dispute showed that the Empire was not yet ready to evolve to a federal state, the list of national minorities was very long, and their unequal level of economic and cultural development did not create the conditions for their uniform functioning.

Inspired by the changes produced in the West, the representatives of the reformatory wing continued to identify a new formula for the preservation of the dualistic monarchy. Even though the movement of the Czech was not met with the initially estimated success, it was not waived and they continued to seek solutions for the co-establishment of Bohemia alongside Austria and Hungary in a new territorial administrative formula. The project became only partially reflected by the recognition of the autonomy of Moravia in the year 1906 (Introduction of Czech language education and the delimitation of school constituencies in the territory)[19], but without a big impact on the functioning of the state. This desideratum did not solve the problems within the dualist state, the Southern Slavs (Serbs, Croatians, Bosnians and Slovenians) represented a compact bloc, yet administratively divided between the two powers of the Empire (Austria owned territories inhabited by Slovenians, Croats and Bosnians, while Hungary held the largest part of Croatia and the predominantly Serb inhabited Voievodina). The establishment of a state of Southern Slavs seemed unfeasible, especially because of the strong opposition of the Hungarian government, which claimed the absurd idea of a Hungarian ethnic state. A special case was the setting of an autonomous Galicia (a province inhabited mostly by Ukrainians, but whose leadership was to return to the Polish minority) after the model of Moravia; however, the project was cancelled in 1914 by the outbreak of the war[20].

The project of establishing territorial autonomy of the Austro-Hungarian Empire based on the principle of self-determination of peoples

Pressured by the way in which military actions were evolving during World War I and aware of the time of the national revival of the peoples of the Austro-Hungarian Empire, the Austrian authorities sought to quickly identify solutions for the reorganization of the state. In support of this endeavor, many people of culture grouped up, embracing and advancing various theories.

Austrian writer Hugo von Hofmannsthal[21] joined those in favor of the idea of federalization of the Empire by proposing the establishment of a multiethnic state operating on the basis of the principles of the Holy Roman Empire, to which it was the rightful successor. In his opinion, Austria had to leave the side of Germany, considered an impostor, and return to its original position as a bridge between the Mediterranean world and the Northern Europe. The alliance of the two German empires seemed somewhat unnatural as while Germany was the supporter of a project for setting an ethnic German state, Austria had remained the prisoner of the nationalities of its empire and promoted the concept of a multiethnic state built around the ruling dynasty.

The necessity of reforming the old Austrian Empire on the basis of the principle of national self-determination was frequently underlined by representatives of the Romanian nation from Transylvania, Banat, Bucovina and the Romanian territories of Hungary (Maramureş and Crişana), among which a prominent role was played by Aurel Onciu in Bucovina, Iuliu Maniu, Alexandru Vaida Voievod, Vasile Goldiş, Ştefan Cicio Pop and other prominent intellectuals. During the truce signed by the Romanian state in the year 1918 with representatives of the Romanian intellectuals, Central Powers advanced the fantasy idea of unifying the entire Romanian nation, including the Romanians from the Old Kingdom within the Habsburg state, thus creating a Romanian "Kronland".

The most profound analysis of this phenomenon was made, however, by the Romanian Aurel C. Popovici, a close friend to the heir to the throne of the dualistic monarchy Franz Ferdinand, who published in 1906 the Book of the United States

of Great Austria (Vereinigte Staaten von Groß-Österreich)[22]. He stressed the need to reorganize the Empire on the basis of federal principles (the model envisaged being Switzerland)[23], taking into account the ethnic share of each of the 11 ethnic groups.

According to his point of view, each nation would have had to govern itself by preserving its national identity in this way, but he also stated that it was absolutely necessary to maintain economic and political ties between the regions of Central Europe under the management of the Habsburg monarchy as a condition necessary to protect this area against external influences.

Revolution of 1848, at which time the authority of the Habsburg state could be reinstated only with the help of army troops from the Tsardom of Russia. The absence of a national conscience first led the Hungarians and then the Polish, Czech, southern Slavs and Romanians to seek to reconstruct their national identity.

Although many of the representatives of Romanians within the dualistic monarchy were convinced by the economic viability of the Central European area (Mitteleuropa), as a result of the persecution they were subjected to by the Hungarian authorities, they started to consider that the only chance to benefit of national rights was to

Figure 1 *Model of the European Central state in Aurel C. Popovici's view*[24]

Despite the fact that such a project could have meant a significant contribution to rescuing the dualistic monarchy and even promoted Germany as a first-tier power, specialists failed to identify a quick solution to reduce multiple existing ethnic and religious differences in this space. The unity around the ruling dynasty, principle that had functioned for centuries, began to show its limits even after the

support the project of creating a Romanian national state. The Romanian population of Transylvania, Crişana, Banat and Maramureş declared on countless occasions its intention to participate alongside the three recognized nationalities (Hungarians, Transylvanian Saxons and Szeklers) in the management of the territories they inhabited. Every time their requests met the unequivocal

refusal of the Hungarian authorities who continued to practice a policy of erasing national identity.

Romania's entry into the war on the side of the Triple Entente clarified this dilemma and prompted most of the nationalist leaders to embrace the Great Romania project. The sacrifice of Romanian soldiers on the battlefield of World War I, together with the political support offered by Romanian allies, created the necessary conditions for the emancipation of the Romanian population of Austro-Hungary.

The culmination of the struggle of ages of the Romanians was the proclamation of the "Declaration of Independence" of the Romanian nation of Transylvania and the Hungarian country, read on 5/18 October 1928 by Alexandru Vaida Voievod in the Budapest Parliament: "Under the natural law that each nation can order, decide for itself and freely about its fate (…) the Romanian nation of Hungary and Ardeal wishes to make use of this right and demands accordingly for it too the right to – free from any foreign pressure – decide its own settlement among the free nations"[25].

The only national minority within the empire who did not wish to dissolve this amalgam of peoples and who was fully aware of the importance of preserving this great economic market was the Jewish community. Without an ethnic identity and not having a recent national history, the Jews in the dualist monarchy were the only ones who could understand the concept of supra-nationality. They could not join the principle of national self-determination promoted by US President Woodrow Wilson at the Versailles peace conference, as they lived scattered throughout the territory of the Austro-Hungarian state, without having the opportunity to set up a national state. Moreover, they did not benefit from the support of their own language, the members of this community being very easily confused with the ethnic group they lived in.

The largest concentration of Jews in Austro-Hungary, about three-quarters of the total, lived in the regions of Galicia (it represented 10% of the entire population) and Bucovina where their share reached 25%, and in Cernăuți where they represented the majority population (approximately 40% of the population of the city)[26]. This community was fully integrated due to the fact that on their own initiative they had adopted the German language and were part of the imperial administrative apparatus present in those provinces.

Friedrich Naumann (1860-1919), the author of the book Mitteleuropa, considered it was absolutely necessary to preserve this space in order to support German imperialism. Although initially he was one of the supporters of the colonial policy promoted by Admiral Alfred von Tirpitz, who aimed to replace England as great naval power, he later returned to this idea and supported the consolidation of the power of the German Empire on the continent.

In this sense, Central Europe dominated by the Austro-Hungarian Empire was the key that allowed German expansionism to the space in the east of the continent. From his point of view, the Hapsburg monarchy and his empire constituted a shame for the German world, being unable to control its own space of influence. He considered it absolutely necessary to involve Germany in supporting this project in order to form a super-state bordered in the Western part by France (the border between the two being fixed on the Rhine line), and in the Eastern part by Russia with which it would be adjacent along a demarcation line that would have left Karelia in the North and continued south to the "right or left" of Romania (Romania's situation being unclear, it could be negotiated depending on the military capacity of the Russian Empire).

In the initial version of the plan for the constitution of Central Europe, Bulgaria was located outside the boundaries of this area, but after entering the war together with Central Powers the author reconsidered the geopolitical limits of the region and included the Balkan state.

The national rebirth of the Slavs determined Naumann to look for a solution to the Polish problem. He considered that the future of this state was still closely linked to the Habsburg monarchy and proposed the unification of all territories inhabited by Poles (referring only to the area within the Tsarist empire) within the Danube monarchy. In his vision, Poland should also incorporate the territories inhabited by the Ukrainians and Belarusians and become the third subject of this federation.

The end of the First World War brought with it the dissolution of the dualist monarchy and consequently of the central European economic market too[27]. The states in this area immediately felt the effects of this dismantling. None of them

benefited of a sufficient number of consumers to enable them to develop competitive industrial branches capable of competing with those in western Europe. The governments of the Central European states became very quickly aware of the fact that they could not support the development of strong national industries even if they were to increase the taxes for the imported products.

This shortcoming prompted them to look for new solutions to revitalize the common economic space. The major disadvantage was the desire of each state to play a major role in this project. Inter-war Austria had entered economically into the area of influence of Germany, thus creating a power vacuum which was quickly attempted to be occupied by a number of the former states of the empire. In the absence of the traditional hegemon, Hungary, as the governing partner, was the first to propose a project for the economic revival of Mitteleuropa.

After the rebirth of the Polish state, the political and economic decision-makers in this country also proposed a project similar to the Hungarian one, in which Poland was to play a very important role. They suggested the settlement of a "state" that would encompass all the territories included in the post-Baltic isthmus between Germany and Russia, including the Baltic states and even Ukraine. Just as the Hungarians, the Polish people were afraid to include in this space the strong German economy, which would have canceled from the beginning any effort to build competitive industrial sectors.

Marshal Josef Pilsudski, artisan of the policy of forming military alliances among the central European states, had conceived this project on the basis of the Polish-Lithuanian union that dominated this area during the Middle Ages[28]. In contrast to the project conceived by Hungarians, based on rational economic principles, the Poles introduced in the elaborated plan the idea of forming a predominantly Catholic space (even if they wanted to include states with the majority of population being of Orthodox religion such as Romania and Ukraine) that would have formed a "sanitary cord" between liberal Europe and "Byzantine Europe" (Orthodox).

The breaking of the Central Powers bloc and the emergence of a mosaic of national states with large national minorities in the Central European area was strongly contested by many Western people of cultural.

Jean Berenger, history professor at the University of Strasbourg, mentioned in his book The History of the Habsburg Empire[29] that the decision to dissolve Austria-Hungary was a huge mistake.

At the end of the First World War, frightened by the possibility of rapidly recovering German influence in this area, France and the United Kingdom through the Versailles Peace Treaty decided to support the formation of a number of national states on the ruins of the former empire. The lack of political experience combined with the economic fragility and the inability of these new entities to support effective military groups capable of resisting the new type of threat (communist ideology promoted by the Soviet Union) have accentuated the crisis of collective security.

Conclusions

At present, there are many voices, especially coming from Hungarian and Austrian politicians who invoke the need for the economic restoration of the former Austro-Hungarian Empire economic space. To prove the chances of success of such a project the most appropriate solution would be to review the main problems faced by this political entity.

The historic facts clearly demonstrate the failure of this project. Despite some beautiful memories kept by the intellectual elites of the states from the former empire, the inter-community relations were very tense and the dualist state was unable to identify a solution that was suitable for all ethnic communities.

The artisans of this project should take into account the mistakes of the past and eliminate as much as possible the discrimination between the citizens of this continental bloc and give up the idea of dividing them once again into first and second rank citizens.

NOTES:

1 https://www.historia.ro/sectiune/general/articol/de-ce-este-numit-marele-razboi

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3 Friedrich Nauman, *Central Europe (Mittel-Europa)*, Knopf Alfred Publishing House, New York, 1917, p. 1, https://

ia902205.us.archive.org/1/items/centraleurope00naumgoog/centraleurope00naumgoog.pdf, accessed at 13.09.2017.

4 *Ibidem*, p. 34.

5 *Ibidem*, p. 25.

6 *Ibidem*, p. 103.

7 *Ibidem*, p. 14.

8 Richard Lodge, *Russia, Prussia, and Great Britain, 1742-1744*, *The English Historical Review*, vol. 45, no. 180, 1930, pp. 579-611, *JSTOR*, www.jstor.org/stable/553394, accessed at 18.02.2020.

9 Piotr Wandycz, *The lands of partitioned 1795-1918*, University of Washington Press, Washington, 1975, p. 8.

10 Stacie Goddard, *When Right Makes Might: How Prussia Overturned the European Balance of Power*, International Security, Vol. 33, No. 3 (Winter, 2008/2009), p. 129, https://www.jstor.org/stable/40207143?read-now=1&refreqid=excelsior%3Af497995a71081124b062d4deb440aba0&seq=20#page_scan_tab_contents, accessed at 14.02.2020.

11 Alice Freifeld, *Nationalism and the Crowd in Liberal Hungary, 1848-1914*, The Johns Hopkins University Press, Baltimore, 2000, p. 64, https://books.google.ro/books

12 Silviu Dragomir, *Avram Iancu*, Second Edition, Science Publishing House, Bucharest, 1968, p. 295.

13 John Komlos, *The Habsburg Monarchy as a Customs Union: Economic Development in Austria-Hungary in the Nineteenth Century*, Princeton University Press, 1983, p. 28, https://www.jstor.org/stable, accessed at 26.02.2020.

14 Paul Kennedy, *Ascensiunea și decăderea marilor puteri. Transformări economice și conflicte militare din 1500 până în 2000*, Polirom Publishing House, Iași, 2011, p. 180.

15 On 3 July 1866 Prussia defeated Austria, thus ending the existence of the Holy Roman Empire of German ancestry, whose crown traditionally returned to the Habsburgs emperors. This event created the premises of the emergence of a new empire inside the Germanic space from which Austria was definitively eliminated.

16 On 1-2 September 1870, the French Empire ruled by Napoleon III was abolished and the Republican France that followed him lost the right to intervene in Europe's problems.

17 Alfred D. Low, The Anschluss Movement, 1918-1919, and the Paris Peace Conference, American Philosophical Society, Philadelphia, 1974, p. 416, https://books.google.ro/books?, accessed at 18.02.2020.

18 Victor Jaeschke, *A National "Struggle for Survival"? – The Badeni Crisis of 1897 in Cisleithania's German-language Press*, Sprawy Narodowościowe, No. 49/2017, p. 3 https://ispan.waw.pl/journals/index.php/sn/article/view/sn.1436, accessed 26.02.2020.

19 Jan Petatras Rene Kuklik, *Minorities and Law In Czechoslovakia 1918-1992*, Estates Press Prague, 2017, p. 129.

20 John Schindler, *Fall of the double eagle. The battle for Galicia and the demise of Austro-Hungary*, Potomac Books, 2015, p. 251.

21 David S. Luft, *Hugo Von Hofmannsthal and the Austrian Idea: Selected Essays and Addresses, 1906-1927*, Purdue University Press, 2011, pp. 103-106. www.jstor.org/stable/j.ctt6wq1n5.15, accessed at 26.02.2020.

22 Aurel Popovici, *Stat și națiune. Statele Unite ale Austriei Mari,* Albatros Publishing House, Bucharest, 1997. Following the fact that the European Union encourages the development of regional identities (underlining the advantages of smaller-scale economic development planning), as an alternative to the centralized development of national economies, the model suggested by Aurel C. Popovici may be considered topical once again. The need to promote this idea of coexistence and inter-ethnic cooperation within a wider (central European) economic market determined the decision-makers in Austria to support the publication of this book in 2014. This cultural movement joins the economic measures (the acquisition by Austrian companies and banks of many of the assets of the former state-owned companies in central European countries) thus contributing to a geopolitical repositioning of the "former central European empire" in its former area of influence. This type of measures is clear in the new German geopolitics of Central Europe, which through the recreating of regional identities gains a consistent advance in front of national thinking (directing all internal resources towards a judicious planning of the national economy).

23 *Ibidem*, p. 266.

24 https://austria-forum.org/attach/AEIOU/Popovici%2C_Aurel/OE_U%20.png, accessed at 07.03.2018.

25 The definitive breakage of Hungary. Speech in the Hungarian parliament on 18 October 1918 by dr. Al. Vaida-Voievod, *Chemarea Tinerimii Române*, Nr. 9/ 1932, Cluj-Napoca, http://documente.bcucluj.ro/web/bibdigit/periodice/chemareatinerimeiromane/1932/BCUCLUJ_FP_3234_1932_007_009.pdf, accessed on 31.01.2019.

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27 Vladimir Gonec, *"New Central Europe" in Co-operating and United Europe.: Czechoslovak Ideas in 1920s and 1930s and Attempts at Co-ordination with Austrian and Hungarian Ideas*, in Disintegration and Integration in East-Central Europe: 1919 – post-1989, Nomos Verlagsgesellschaft Publishing, 2014, p. 80, https://www.jstor.org/, accessed at 26.02.2020.

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EVOLUTIONS OF INTERNAL MANAGEMENT CONTROL SYSTEM IN THE MILITARY ORGANIZATION

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The evolutions of internal management control system in military organization have an interesting and progressive history. When we decide to follow democracy, we need to change the system and the mentality. Internal management control system is an important need for the state entities in order to develop a progressive and democratic organization.

Keywords: military organization; internal management control system; standards.

The implementation of the internal management control system in the military organization starts with the accession of Romania to the European Union. Although, at national level, the first law in which we find the phrase "internal managerial control" is the *Government Ordinance no. 119/1999* regarding internal control and preventive financial control, republished (Official Journal of Romania, Part I, no. 799 / 12.XI.2003), just starting in 2005, one year after the issuing of the *Order of the Minister of Public Finance no. 946/2005* for the approval of the Internal Control Code, comprising the internal management / control standards for public entities and for the development of managerial control systems (Official Journal of Romania, Part I, no. 675 / 28.VII.2005), its timid implementation beginning through the Financial Accounting Department.

In the year 2006, the duties regarding the implementation of the internal management control system are responsibility of the General Secretariat of the Ministry, according to article 16 (3) of Law no. 346/2006 regarding the organization and functioning of the Ministry of National Defence, republished. Thus, "The General Secretariat ensures the implementation, monitoring and evaluation, at the level of the Ministry of National Defence, of the provisions contained in the strategies and programs of reform of the public administration, elaborated on the basis of the Governance Program, as well as the monitoring, coordination and methodological guidance of the implementation and / or development of the internal management control system".

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The year 2009 brought to the Ministry of National Defence level the first methodological Norms regarding the elaboration and development of the management control system in the Ministry of National Defence, approved by order of the minister of national defense no. M.S. 113 of 26.10.2009.

It is a classified document because it also includes a list of the main coding areas for operational / system procedures. Otherwise, these norms describe the main directions of action necessary to be applied to implement the system of internal managerial control in the military organization.

Subsequently, at national level, a series of legislative changes appeared, which were transposed, adapted, each time, in the military organization.

These were the following:

- Law no. 234/2010 amending and supplementing Government Ordinance no. 119/1999 (Official Journal of Romania, Part I, no. 831 / 13.12.2010);
- Minister of Finance no. 1.649 / 2011 for the modification and completion of the Order of the Minister of Public Finance no. 946/2005 for the approval of the Code of internal control, comprising the management/internal control standards at public entities and for the development of managerial control systems (Official Journal of Romania, Part I, no. 140 / 24.02.2011);
- Minister of Finance no. 1.423 / 2012 for amending the Order of the Minister of Public Finance no. 946/2005 for the approval of the Code of internal/managerial control, including the internal control standards at public entities and for the development of managerial control systems;

• Order of the Secretary General of the Government, no. 400/12/06/2015 for the approval of the Code of internal / managerial control of public entities, published in the Official Journal of Romania, Part I, Nr. 444, 22.06.2015, as subsequently amended and supplemented;

• Order no. 200/2016 regarding the modification and completion of the Order of the Secretary General of the Government no. 400/2015 for the approval of the Code of internal / managerial control of public entities;

• Order no. 201/2016 for the approval of the Methodological Norms regarding the coordination, the methodological guidance and the supervision of the stage of the implementation and development of the internal management control system in the public entities;

• Order of the Secretary General of the Government, no. 600/20/04/2018 for the approval of the Code of internal managerial control of public entities, published in the Official Journal of Romania, Part I, Nr. 387, 07.05.2018.

In the Ministry of National Defence this legislation has been implemented, evolutionarily, in accordance with the national legislation, in the following orders:

• Methodological norms regarding the elaboration and development of the management control system in the Ministry of National Defence, approved with the order of the minister of national defence no. M. 75 of 12.07.2012;

• Methodological norms regarding the system of internal managerial control in the Ministry of National Defence, approved with the order of the minister of national defence no. M. 84 of 30.06.2016;

• Methodological norms regarding the system of internal managerial control in the Ministry of National Defence, approved with the order of the minister of national defence no. M. 100 of 13.05.2019.

From the analyses carried out, for example, the main changes of the norms are presented comparatively, in the following table:

The legislation stipulates minimal measures that need to be implemented for each standard, between 2005 and 2016 for 25 standards, subsequently for 16 standards, the latter also containing the difference of nine standards from the previous norms.

The Ministry of National Defence, being an organization based on order and seriousness, has rigorously implemented the internal management control system. The main problem faced by those who started the implementation of SCIM was that of integrating a new management tool over the already existing one or ones (with communist and NATO influences).

Gradually, the system of internal managerial control has undergone modifications at the level of requirements, according to those presented previously in the table but also many others that were not nominated here.

Currently, from our research on the public reports of the Court of Accounts, the system of internal managerial control has not been fully integrated into the organizational culture and all the structures.

The main causes identified would be:

• personnel fluctuation;

• lack of specialists;

• insufficient training.

Unfortunately, as an example that is not very encouraging, in the Court of Auditors' Public Report from 2018, on page 89, the following situation is described: "regarding the organization, implementation and maintenance of internal management and control systems (including internal audit), as well as when evaluating the internal / managerial control system, it was found that the system procedure for the elaboration and updating of the Risk Register was not updated and no longer was the periodic review and reporting of the risk situation, according to the requirements of section 8.2.3 letter e) of OSGG no. 400/2015 for the approval of the Code of internal / managerial control of public entities"[1].

Although not a serious deviation, it betrays the partial integration of the system of internal managerial control in the organizational culture of some structures of the Ministry of Defence. This aspect, however, is not at all abnormal from a historical perspective. Throughout history, always, new systems, especially within state structures, have been more difficult to implement due to bureaucracy and greater resistance to change than in private systems, more easily oriented to reform and progress.

Table no. 1

COMPARISON TABLE
FOR THE MAIN CHANGES TO THE RULES

THE MAIN ASPECTS ANALYZED	*Methodological norms regarding the elaboration and development of the management control system in the Ministry of National Defense, approved with the order of the minister of national defense no. M. 75 of 12.07.2012*	*Methodological norms regarding the system of internal managerial control in the Ministry of National Defense, approved with the order of the minister of national defense no. M. 84 of 30.06.2016*	*Methodological norms regarding the system of internal managerial control in the Ministry of National Defense, approved with the order of the minister of national defense no. M. 100 of 13.05.2019*
Number of standards and their names grouped into the five sections (*Control environment, Performance and risk management, Information and communication, Control* and *Evaluation and audit activities*)	**25 internal management control standards:** ***The control environment*** S1. Ethics, integrity S2. Tasks, functions S3. Competence, Performance S4. Sensitive functions S5. The delegation S6. The organizational structure ***Performance and risk management*** S7. Objectives S8. Meal S9. Coordination S10.Performance monitoring S11. Risk management S12. Hypotheses, reassessments ***Information and communication*** S13.Informarea S14. Communication S15. Correspondence and archiving S16. Reporting irregularities ***Control activities*** S17.Proceduri S18. Segregation of duties S19. Oversight S20. Deviation management S21.Continuity of activity S22. Control strategies S23. Access to resources ***Audit and evaluation*** S24.Control verification and evaluation S25. Internal audit	**16 standards of internal managerial control:** ***The control environment*** S1. Ethics, integrity S2. Tasks, functions S3. Competence, performance S4. The organizational structure ***Performance and risk management*** S5. Objectives S6. Meal S7. Performance monitoring S8. Risk management ***Control activities*** S9. Procedures S10. Oversight S11. Continuity of activity ***Information and communication*** S12. Information and communication S13. Document management S14. Accounting and financial reporting ***Audit and evaluation*** S15. System evaluation of internal managerial control S16. Internal audit	**16 standards of internal managerial control:** ***The control environment*** S1. Ethics, integrity S2. Tasks, functions S3. Competence, performance S4. The organizational structure ***Performance and risk management*** S5. Objectives S6. Meal S7. Performance monitoring S8. Risk management ***Control activities*** S9. Procedures S10. Oversight S11. Continuity of activity ***Information and communication*** S12. Information and communication S13. Document management S14. Accounting and financial reporting ***Audit and evaluation*** S15. System evaluation of internal managerial control S16. Internal audit
Documents that are prepared for sensitive functions	• Inventory of sensitive functions; • List of employees holding sensitive functions; • Plan for ensuring the rotation of employees from sensitive functions.	Inventory of functions considered to be especially exposed to corruption / sensitive	Inventory of sensitive functions and measures for their management
Planning documents	Plans with the main activities of the structures	Plans with the main activities of the structures	The structures of the ministry elaborate a strategy / strategic plan within which they establish the general objectives of the entity, the priorities and the activities that have to be accomplished over a horizon of 3 years
Insert hypotheses / premises into the planning documents	Plans with the main activities of the structures, as well as any other planning documents prepared according to the regulations in the field include assumptions / premises, objectives and have associated performance indicators	Plans with the main activities of the structures, as well as any other planning documents drawn up according to the regulations in the field must include assumptions / premises and objectives to which performance indicators are associated	The elaboration, as an annex to the plan with the main activities, respectively the instruction plan (as the case may be), of the table of hypotheses / premises, accepted by consensus, which are the basis for establishing the objectives
Documents for risk management	Structure risk register The plan regarding the implementation of risk management measures	Structure risk register	Structure risk register Plan for implementing control measures for significant risks
Centralizing situations throughout the year	Quarterly situation regarding the stage of the implementation of its own internal / managerial control system on ....., hereinafter referred to as the quarterly situation	The semiannual centralizing situation regarding the stage of implementation and development of the internal management control system	The centralizing situation regarding the stage of implementation and development of the internal management control system (annual)
Annual self-assessment of the internal management control system	• Self-assessment questionnaire for the implementation stage of internal / managerial control standards • Synthetic situation • Anual report	• Self-assessment questionnaire for the implementation stage of internal / managerial control standards • Synthetic situation • Anual report	• Self-assessment questionnaire for the implementation stage of internal / managerial control standards • Synthetic situation • Anual report

Surce: *Author.*

A relevant example would be the one regarding the computerization of the public administration. The Government's strategy on Computerization of the Public Administration, issued in 2001 stipulated on page 18: "The electronic ID card (ID Card) will be used not only as a personal identity document, but also as the only multifunctional access card at all the online administrative services that require a certain degree of user identification. The digital signature, contained in the electronic ID card, will be the main means of guaranteed access to information and online services provided by public and private agencies and can ensure the legal validity of the documents electronically transmitted"[2] and by the fourth quarter of 2003, 1,000,000 such cards had been issued.

We all know that, to date, no such card has been issued. And we are in 2020, 19 years after that moment. However, at the country level, including the Ministry of National Defence, through the audit carried out by the Court of Accounts, it was found that: "at the level of the central public entities, major credit authorizing officers, it can be appreciated that the process of implementing the internal control standards is in a development phase, aiming to comply with the legislative requirements, the average degree of implementation of the standards of internal managerial control being of 75.8% (according to the Report on the internal managerial control for the year 2018 elaborated by the Directorate of internal managerial control and interinstitutional relations from the General Secretariat of the Government). However, the audits carried out by the auditors of the Court of Auditors reveal sufficient aspects that need improvement in order to have from the internal management control system a useful tool in achieving the objectives"[3].

Returning to the implementation and development of the system of internal managerial control in the structures of the Ministry of National Defence organization, we find, however, from the same public reports of the Court of Accounts that the Ministry of National Defense is among the ministries that have implemented the most correctly the internal management control system. Implementation directions have been established for each standard so that they can be properly implemented. The directions of action are to be found, publicly, in the orders of the Minister of National Defence, published in Romanian Official Journal. Also, for each standard a number of requirements have been established.

The main requirements established for each standard are:

Standard 1 – Ethics and integrity

• Appointment of an ethics counselor for both civil servants, as well as for military personnel and conducting ethics counseling sessions, upon request, starting with 2016[4];

• Identification and management of sensitive functions;

• Establishing commissions on goods received free of charge – 2019;

• Identifying and managing corruption risks in some working groups – 2019.

Standard 2 – Duties, functions, tasks

• Identification of sensitive functions and key functions related to risks and mission;

• Preparation at all structures of the Regulation of organization and functioning and the Regulation of internal order.[5]

Standard 3 – Competence, performance

• Establishing performance indicators both individually and at the structure level and monitoring them.

Standard 4 – Organizational structure

• The structures have become more flexible with the new missions.

Standard 5 – Objectives

• Establishing increasingly applied objectives in the planning documents;

• Setting SMART goals for each employee.

Standard 6 – Planning

• Inserting the assumptions that are the basis for setting the objectives in the plans with the main activities and other planning documents;

• Elaboration of perspective plans for 2-3 years and multi-annual plans;

• Development of master plans.

Standard 7 – Performance monitoring

• Monitoring is done through established performance indicators.

Standard 8 – Risk management

• Risks are identified and managed through concrete measures and strategies used;

• Risks are monitored through appropriate plans.

Standard 9 – Procedures

• The procedures are concrete and have established a unitary format within the Ministry of Defense.

Standard 10 – Surveillance

• Permanent supervision of the activities is carried out through controls, based on performance indicators.

Standard 11 – Business continuity

• There are plans for situations that could create discontinuities in the current activity.

Standard 12 – Information and communication

• Progress has been made in implementing information flows with the support of information networks;

• Internal communication is done through newsletters, coordination meetings, etc.;

• External communication has expanded on social networks[6] and is carried out professionally and transparently, in compliance with the legislation in force.

Standard 13 – Document management

• Document management has been continuously developed through the implementation of specific procedures.

Standard 14 – Accounting and financial reporting

• The organization based on the authorizing officers allows the decentralized management of resources, focused on the objectives of the entities, making the commanders responsible, who are obliged to assume managerial responsibility.

Standard 15 – Evaluation of the internal management control system

• The internal management control system is evaluated annually, including within the structure's annual self-assessment.

Standard 16 – Internal audit

• The internal audit structure has permanently developed the internal management control system through periodic evaluations.[7]

Conclusions

Currently, within the Ministry of National Defence, implementing norms are set for all the standards mentioned above and specific activities are being carried out to maintain and develop these standards but, as in any field, there is room for improvement.

It is important to maintain and develop a coherent system of internal management control, taking into account the minimum requirements of the standards of internal management control. The efficiency and progress of any organization depends on a good resource management. Medium- and long-term planning in this area is paramount. It is important to find resources and make the right decisions, based on specialized studies, in order to generate a kind of internal managerial control that will lead to the success of the organization.

The main aspects to be considered regarding the internal management control, according to the legislation, would be: achieving an organizational framework conducive to the implementation of the internal management control system, establishing an efficient and effective information flow, a good risk management and clear and useful procedures, adapted to the structure.

Particular importance must be given to Standard 8 – Risk management, which is a key element of the internal management control system. Risk management involves a number of complex activities because the risks are found in various fields and categories: security, war scenarios, financial, environment, IT, reputational, occupational health, etc. At the same time, the risk management process is carried out in a complicated, dynamic context, subject to permanent transformation, with many external factors that can influence the decision-making activity.

For a good management of all these issues, regardless of the domain, it would be useful to digitize the risk management process by developing a computer application at the ministry level.

NOTES:

1 http://www.curteadeconturi.ro/Publicatii/Raportul%20public%20pe%20anul%202018.pdf, accessed at 01.02.2020.

2 https://www.gov.ro/fisiere/programe_fisiere/e-administration.pdf, accessed at 31.01.2020.

3 http://www.curteadeconturi.ro/Publicatii/Raportul%20public%20pe%20anul%202018.pdf, accessed at 31.01.2020.

4 *Metodological norms regarding the internal managerial control system in The National Defence Ministery approved by the national defence minister* no. M. 84 from 30.06.2016.

5 *Law no. 53/2003 – Labor Code, republished, with subsequent amendments and completions.*

6 https://www.facebook.com/mapn.ro/

7 *Order no. M.100/2019 for the approvel of methodological norms regarding the internal managerial control system in the Ministry of National Defence.*

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*** *Law no. 234/2010 for amending and supplementing Government Ordinance no. 119/1999*. (Official Journal of Romania, Part I, no. 831 / 13.XII.2010).

*** *Law no. 53/2003 - Labor Code, republished, with subsequent amendments and completions.*

*** *Order of the Minister of Public Finance no. 1.649 / 2011 for amending and completing the Order of the Minister of Public Finance no. 946/2005 for the approval of the Code of internal control, comprising the management / internal control standards at public entities and for the development of managerial control systems* (Official Journal of Romania, Part I, no. 140 / 24.02.2011).

*** *Order of the Minister of Public Finance no. 1.423 / 2012 for amending the Order of the Minister of Public Finance no. 946/2005 for the approval of the Code of internal / managerial control, including the internal control standards at public entities and for the development of managerial control systems.*

*** *Of the Order of the Secretary General of the Government*, no. 400/12/06/2015 for the approval of the Code of internal / managerial control of public entities, published in the Official Journal of Romania, Part I, Nr. 444, 22.06.2015, as subsequently amended and supplemented.

*** *Order no. 200/2016 regarding the modification and completion of the Order of the Secretary General of the Government no. 400/2015 for the approval of the Code of internal / managerial control of public entities.*

*** *Order no. 201/2016 for the approval of the Methodological Norms regarding the coordination, the methodological guidance and the supervision of the stage of the implementation and development of the internal management control system in the public entities.*

*** *Of the Order of the Secretary General of the Government*, no. 600/20/04/2018 for the approval of the Code of internal managerial control of public entities, published in the Official Journal of Romania, Part I, No. 387, 07.05.2018.

*** *Methodological norms regarding the elaboration and development of the managerial control system in the Ministry of National Defence, approved with the order of the minister of national defence no. M. 75 of 12.07.2012*.

*** *Methodological norms regarding the system of internal managerial control in the Ministry of National Defence, approved with the order of the minister of national defence no. M. 84 of 30.06.2016.*

*** *Methodological norms regarding the system of internal managerial control in the Ministry of National Defence, approved with the order of the minister of national defence no. M. 100 of 13.05.2019.*

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