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#### Abstract:

The convergent communication platform is a revolutionary element, starting from the concept of network-based warfare, and constitutes a synergistic integration, in an integrative system, of three domains that underlie military and political action in a security crisis. These domains are the following: the physical one - representing the space in which the maneuvers, attacks, military operations, carried out on sea, air, land and space take place; the information one – representing the online and offline environment, in which the information itself is created, modeled, disseminated, through a process of command and control, analysis and processing of information, which will be the basis of future military and political decisions; and the cognitive one – representing a higher level, existing in the minds of all citizens impacted by the security crisis, and whose perceptions, values, knowledge undergo changes that affect their decisions

*Keywords:* national security, cyber-tool, integrated platform, network-based warfare, integrative system, security crisis.

The technological leap of the twentieth century exerted significant influences on the military and security phenomenon, in all its forms of manifestation. Neither the wars nor the military are the same, regardless of uniform or geographical location, after the planet entered the information age, caused, as a starting point, by the advent of the large-scale internet, in the mid-1990s. Doctrines of the world's great armies bear witness to the new profile of the war, as a military, social, cultural, economic and, above all, information concept.

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The wars of antiquity were aimed at destroying and annihilating the enemy's army, causing physical and human losses, which made the difference between the winners and the losers. The surrender represented the withdrawal from the battlefield, due to a greater number of defeats than the opponent. Victory provided a dominant position to the winner, which overwhelmed his opponent. Renaissance writer Nicolo Machiavelli (1469-1527) understood by military victory "the total defeat of the enemy, in a decisive battle at the end of a military campaign". In another part of the world, in historical Moldova, the ruler Stephen the Great (1457-1504) opted for the involvement of the people in the war. He called for the so-called "great army" to fight the large number of soldiers of the Ottoman military force.

The concept of "total war", by committing all human and material resources for victory, was introduced to the West by Prussian generals Scharnhorst and Gneisenau, at the beginning of the 19th century, following the example of general mobilization within the universal military service, introduced by Napoleon<sup>1</sup>. The planning of the military actions, in which an important role was played by logistics and military intelligence, as well as the need to coordinate huge mass armies, with all the resources involved, led to the emergence of the major states, the operational divisions, separated between "Strategic", "operational" and "tactical". These boundaries became concepts defined by Carl von Clausewitz (1780–1831) and Antoine Henri Jomini (1779–1869).

For Clausewitz, the war was "a continuation of politics by other means" and opened the way to impose the political will of the victor on the defeated, using political-military instruments of persuasion and control.

The two World Wars involved all the human and economic resources of the combatant states. The "total war" devastated entire nations, who surrendered unconditionally. The renunciation of the struggle was not only a military act of abandonment, but also a political one, which led to the annihilation of the adversary, as a state identity and national symbol. The physical and mental dislocation, during the military actions, the dismantling of the army lines and the blocking of the supply routes were following a

<sup>&</sup>lt;sup>1</sup> Sava Ionel Nicu, *Security Studies*, Romanian Center for Regional Studies, Bucharest, Ed. Ziua, 2005.

modern objective, not exclusively destructive. The purpose was the unconditional surrender, which was not limited to the physical destruction of the adversary's resources, but was also meant to compromise his image and public perception.

The new concepts of warfare were generated by the new technologies and mass industrial production, of the 19th and 20th century. The acquisitions of the modern industries offered armies the possibility of traveling over long distances, both of the military and of the fighting equipment.

An important element was the emergence of communication and information channels, very quickly. The nature and consequences of the war did not differ, though. The human and material costs of the "total war", conducted in the 19th and 20th centuries, were very high, being felt by the whole society. In the nineteenth century, human loss as a result of wars were in the order of tens or hundreds of thousands. In the twentieth century, the casualties amounted to millions, and the devastation became complete. The two World Wars proved that humanity was threatened with self-destruction if it continued at the same pace. However, conflicts and wars could not be avoided. Thus, the "limited conflict" was reached, a concept formulated by Henry Kissinger in 1957<sup>2</sup>.

### From the total war, to the information war and the network war

The emancipation of the society and the assertion of new values no longer allowed the huge costs of a total war. Due to these new expectations of Western society, and as a result of the influence of military technology, at the end of the 1960s the professional armies appeared, with a better delimited military specificity. The role of these armies was and is diametrically opposed to those of the past centuries: the main function of the military became the prevention of war. Unlike the period of the two World Wars, political victories, and especially military ones, can no longer be accepted at any cost.

The use of advanced combat technology and the achievement of political and military objectives, with a low level of human loss and destruction, directly influenced the contemporary military phenomenon:

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<sup>&</sup>lt;sup>2</sup> *Op. cit*, p 52

instead of the phrase "war", the formulation of "military operations" appeared.

Thus, the officer went from being knowledgeable and brave to the intellectual military man, possessing innovative thinking and reasoning.

The modern military avoids the use of the term "war" and prefers to evoke the "joint operations" - simultaneously on land, sea and air - and the combined ones - through the participation of several troops from different countries. Thus, from the "total war", the next step was to reach the easy, commercial use, of the "psychological war", "the war / information aggression", "the war of political palaces", "the war of civilizations", expressions that refer to situations of conflict more, more or less open. The military were the first who, especially after the end of the Second World War, avoided, for ideological and political reasons, the use of the word "war". A pressure of recent memory has made the meaning of war, of Westphalia origin, no longer consonant with the limits imposed by the ruling political element.

The name "psychological warfare" first appeared in 1942, in an allied context. The concept was defined as "psychological warfare branch - psychological warfare section". In order to open the second front in western Europe, by landing in Normandy, this specialized structure was then elevated to the rank of service, within the Allied command. The entry into the Cold War period led to the term being replaced by Americans with "psychological operations". The new formulation is included in the NATO manual FM33-1. Since 1962, the term "psychological operations" - PSYOP - has been used, because such activities took place not only during war time but also during peace time. Psychological operations could be directed not only against enemy military structures, but also against civilian population, because it was not politically permissible to admit the conduct of a "war" against civilians, even if the war was only psychological.

The phrase "information war" also passed through a similar transformation. In the first specialized US military doctrine, in 1998, "information warfare" was understood as being carried by the military during wartime, as opposed to "information operations" - which were conducted only in time of peace, possibly of crisis. From 1999 until now, in none of the variants of the NATO doctrine on information operations, the term "information war" has been used. In 2006, the issue was removed, as

being politically incorrect, from their most recent specialized doctrine JP 3-13 / 2006.

Euro-Atlantic official military and political press releases confirm the avoidance of "waging war," with an emphasis on "military operations," in Bosnia, Kosovo, Yugoslavia, Afghanistan, or Iraq.

The only exception is the phrase "counter-terrorism war", launched by George W. Bush, following the terrorist attacks of September 11, 2001.

The second effect of scientific and technological development on humanity has completely changed the military profile of the Western alliance. The twentieth century, of industrialization, required increased skills of the officers, for the use of weapons with maximum destruction capacity. The technical complexity has led to over specialization, in increasingly restricted areas. The use of computer programs, knowledge of at least one foreign language - English - extensive knowledge of strategy and geopolitics, they are standard elements of modern soldier training. The challenges to be faced by the officer in the Allied armies are no longer related either to his/her physical-biological qualities, nor to the technical capabilities available for combat; he/she is no longer exclusively concerned with weapons, but also with ideas and concepts.

NATO armies have ultra-powerful systems of terrestrial, aerial, marine, submarine and cosmic weapons. Under the conditions of contemporary asymmetric confrontations, the military must find the best solutions for their combined use. Three of these solutions come from the most powerful army in the world – the American one. From American specialists, concepts such as "effect-based operations", "network warfare", or "information operations" were imposed.

# The platform of communication convergence - a revolutionary element in the security crisis

The concept of effect-based operations appeared from reasons of efficiency of military actions. Personnel and material resources are concentrated only to achieve those effects that can ensure the accomplishment of the desired goal. The Central American Joint Forces Command considers operations based on effect "a process of obtaining the desired strategic result on the adversary, by synergistically, multiplicatively and cumulatively applying the entire range of military and non-military

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operations, at the tactical, operational and strategic levels<sup>3</sup>." Another formula for "effect based approach operations", EBAO, was applied in the British version and included the documents of the ISAF command in Afghanistan: "EBAOs are designed to influence the will of their opponents, their own forces or that of the neutrals, through the coordinated use of military capabilities in order to achieve the strategic objectives pursued." Effect-based operations represent a new way of thinking and reach the strategic, operational and tactical levels of the enemy. Planning the operations will avoid wasting resources, for maximum effect. The effects can be direct, immediate, or indirect and delayed, physically or psychologically, as a consequence of a combination of diplomatic, military, economic or information actions. The concept materialization is due to both modern military technologies and real-time communications performance, which can cover the entire battle space.

The concept of "network-based warfare" covers the action of control and management of an extremely complex three-dimensional space, to support the military decision. This type of action is possible due to the information technology, electronic communications and online environment, in recent years.

This type of military decision management intends to collect, process and capitalize continuously and simultaneously the data and information existing during the security crisis. The information and data appear and are modeled in a surprising, unpredictable dynamics, which interconnects series of messages and predicates from the actors and decision-makers involved. An early definition of this concept was made public by its authors, Vice-Admiral Arthur Cebrowski and researcher John Garstka, in 1998: "a way to generate combat power, by integrating into the information network of sensors decision-makers and executors, to the purpose of knowing the space of the fight, increasing the speed of the leadership, accelerating the rhythms of the operations, intensifying the lethal effects, emphasizing the selfprotection and achieving a certain degree of self-synchronization".

<sup>&</sup>lt;sup>3</sup> Dumitru Cristea, Roceanu Ion, *Network-based warfare, challenge of the information age in the battlefield*, Bucharest, Publishing House of "Carol I" National Defense University, 2005.

Network warfare foreshadows the dominant characteristics of the war of the future. It uses the present and future technologies with maximum efficiency, to increase the parameters of efficiency and effectiveness. In order for this to happen, the data and information gathered from the battlefield, from the specific reference environment, will be uploaded to a converging exchange platform, to be processed immediately by military commanders and political leaders. They can benefit from a higher degree of knowledge and understanding of the situation, which can lead to optimal decisions. Sensors, military and political decision makers are constantly interconnected. The data, information, analysis, orders flow in a continuous stream, as the changes appear in the reality of the battle space. This fact has immediate advantages: from the speed of reaction of the decision act, to the more efficient management of human and material resources. An integrated system of convergent messages, generated and subsequently exploited by decision makers, provides the actors with a more complete and comprehensive, ubiquitous and multifaceted information flow. The information superiority obtained will make the difference in the security crisis that threatens the social body of the nation.

The mentioned domains are interconnected in a single communication platform, as an electronic network. This facilitates instantaneous and continuous information exchanges, harmonizes and synergizes information processes that involve each of these areas. The final objective of using the platform of communitarian convergence is to obtain information superiority, which is transferred to the fighting power, by the political decision-maker and the military commander.

A possible war, or network-based "military operations" involves a military force that benefits from an integrative information infrastructure. Such a political-military force, based on the network, has the ability to access information on a global level, wherever and whenever it is needed and, at national level, integrates the national defense and security system, into an effective communication convergence platform that is particularly influential.



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