

DEVELOPMENT OF THE INFORMATION MANAGEMENT WITHIN THE ROMANIAN MILITARY ENTITIES PARTICIPATING IN JOINT OPERATIONS

Andrei ZOTA

PhD, Ministry of National Defense, Romania, andrei.zota@mndse.nato.int

DOI: 10.19062/2247-3173.2017.19.2.36

***Abstract:** Operational elements designed to carry out their activity in various missions abroad, have to possess specific management, information and execution systems that are capable to operate downrange. Information sharing is also vital to the success of multinational military, counterterrorism and humanitarian operations. In order to achieve this, in the stage of rendering operational this new structure, a series of principles, design and shaping methods of these systems, will be applied, but also systemic analysis will be employed.*

***Keywords** Information, resources, sharing, cooperation, management, security*

1. INTRODUCTION

Information has become one of the main categories of resources of modern warfare, information technology and modern communications systems, the means of providing real-time information, influencing public opinion, shaping the action of politics and military art. Our personal experience in collecting, checking, evaluating, integrating, interpreting and providing information to political and military decision-makers to make decisions about defending national interests and countering the threats of current opponents made me understand the importance and complexity of this area of information resources. Also, the studies and courses in the field of information resources followed within the accredited institutions strengthened our conviction that in order to ensure interoperability with the troops from the other NATO member states, with which the Romanian troops participate in the multinational operations, it is necessary to align the concepts and syntheses including the field of information resources. Within the defence resources, the information resource is one of the most important and in many moments of the preparation of the war and the post-conflict period becomes the most important. Defense Resources Management, which includes the information resource, can only be an integrated management that places the information resource within each of the other resources and analyzes the implications of other resources on information resources.

2. INFORMATION RESOURCES MANAGEMENT

Since the Integrated Defense Resources Management is a major part of Defense Resources Management and the informational resource cannot be treated only as a defense resource, it is found in all the compartments of society, it can be appreciated that on a certain channel we can consider it as a Part of Integrated Management of Defense.

Taking into account the theoretical depth studies in the field of management, we propose a definition for its particularization - Information Resources Management, established at the level of the operational unit, consists of the entire process and management relations that aim at the creation, application and improvement of some systems, methods, techniques and modalities Leadership to provide information and intelligence to decision-makers with low resource consumption (human, material, financial, time, etc.). Information Resources Management within the operational units has a strong practical and applicative character due to the fact that, maintained at the state of the art, cannot achieve its central objective: obtaining competitive intelligence products using as small as possible and even limited resources. The practical-applicative character is manifested in the design of new systems, methods, techniques, procedures. This creates a set of tools that can be used by information structures to streamline their work. Information Management Relations in the Operational Units can be defined as the relations established between the components of the structures involved in the management of the information resource and the relations between them and the components of other systems that constitute a Romanian Task Force in the processes of forecasting, training, control and evaluation of the information system activities of the operational units. The characteristics of information resource management relations are influenced by two factors: - human factor: the quality of the military in the information structures influences all the processes, the relationships and the products with which they interact. That is why it is necessary to apply selection to the constitution of the human component of this system so as to identify personnel with a solid foundation of theoretical knowledge and practical skills. Ideally it would be that at least some of the staff had previous experience in a theater of operations, similar to that in which the Romanian operational force would act. A rigorous selection means an informational system that will have decision-makers with managerial skills, professional executives and high-level management relationships. It is the human factor that ultimately can differentiate between the information systems of the national contingents involved in a multinational operation; - the technical-material factor: it is given by the level of technical and material endowment. The information system organized within the operational units can be simpler or more complex, it can use only one type of information sources or more, and the particularities of the exploitation of the sources in which will be involved in a specific technique, will be reflected in management relationships. Exploiting sources and using different types of techniques will have certain features that will influence and be reflected in management relationships. Overall, management relationships within the information system of a Romanian Task Force are influenced by:

- national military specificity;
- size of the information system;
- complexity and diversity of information products obtained;
- types of information sources that the information system uses;
- locations of the information system components;
- continuous nature of the activity carried out;
- software features used to manage the database and process information;
- quality of the staff;
- managerial training of the decision-makers within the information system;
- legislative framework in which it acts (SOFA, the provisions of international humanitarian law, etc.).
- objectives, restructurings, resizing, etc.

Development directions: Ensuring essential operational capabilities for structures made available to NATO Information in a multinational operation is channelled into providing strategic assessments and warning about possible security risks. With decentralized, dynamic and efficient information, but with centralized synthesis and dissemination, the results may be superior. The information activity in the future area of action must produce assessments prior to the issuance of the Initiation Directive to enable commanders to carry out the planning of the operation on a concrete and as far as possible basis. The factors that decisively influence the mission are: geographical, cultural and ethnic environment, political and civilian history and objectives. The basic requirement of the structures made available to NATO is to ensure the achievement of essential operational capabilities to meet the full range of military missions within the Alliance.

Military capabilities required for NATO forces and commanders, enabling them to be made available, at the right time and place, to carry out effective and sustained operations in the most arduous environments and involving the existence of force protection components. The following operational capabilities are considered essential to ensure the level of operability established for each structure made available to NATO in order to accomplish the missions:

a) Timely availability of Forces: Ensure the establishment and sustaining of a sufficient and effective military presence at the right time, including the ability to build forces by increasing their level of operability accordingly and gradually so as to meet the requirements arising from a change in the strategic environment, and Ability to rotate forces engaged in operations;

b) Effective Information: To provide effective information support, military intelligence structures within the NATO forces as well as surveillance and recognition means must be designed to provide flexible "mission-friendly". Within NATO, intelligence is based on the contribution of nations and must focus on both military issues and political and socio-economic factors. The information should provide ongoing support to the political and military authorities for the entire spectrum of operations in times of peace, crisis or war to identify instability, crisis and conflict trends, as well as support for the identification of prevention and response measures of a political nature and military. To be effective, information support should include, but is not limited to, the following elements:

- Information on geopolitical, political, military, economic, sociological and cultural factors;
- Information on areas of interest outside the NATO Member States;
- Information on areas with potential impact on national and NATO security and interests;
- Information on the proliferation of weapons of mass destruction and technologies with military applications that can be used against NATO member states, their interests or forces.

In order to increase the effectiveness of structures made available to NATO, under the conditions of crisis and conflict, the architecture of the information system, technologies, structures and doctrines must be harmonized with their capability requirements. The quality and timeliness of providing data and information are key tools for making an efficient information system in peace, crisis or conflict. Counterintelligence is an important requirement in ensuring effective operations in the theatre of operations. The flow of strategic, operational and tactical information from NATO and national control and intelligence elements to NATO decision-makers, commanders and forces, must be timely and secure.

c) Dislocation capability and mobility: ensures the concentration and engagement of forces in place and at the desired time (dislocation capability) in order to be able to move quickly once they have been deployed (mobility);

d) Effective engagement in combat: ensures efficient use of forces, especially weapon systems, in all types of operations;

e) Effective command, control and communication (C3): provides the force management system to fulfil missions received;

F) Logistic support capability: Provides efficient and timely logistic support for any type of action to fulfil the mission;

G) Survival capability and force protection: it ensures the limitation of the effects of the opponent's actions, including the effects of weapons of mass destruction, while ensuring the freedom of action and the efficiency of combat use of their own forces.

The essential operational capabilities mentioned above are not mutually exclusive, being interrelated and interdependent.

3. INTEROPERABILITY AND FLEXIBILITY

Achieving interoperability and flexibility, a prerequisite for ensuring the achievement of key operational capabilities with a view to involving NATO structures at multinational and joint operations within the Alliance.

A) Interoperability and standardization - is the ability of allied forces to train, carry out exercises and operate effectively together to accomplish their tasks and missions, and ensure through the development and implementation of NATO concepts, doctrines of tactics and procedures;

B) Flexibility - is the ability to execute a broad spectrum of operations and is ensured by structuring military capabilities and by selectively, timely and efficient use of them. The structures made available to NATO with a high level of operability (Very High Readiness Task Force – VJTF) should be able to quickly start, if necessary, collective defense or crisis response operations.

Participation of multiple nations under a single command to achieve the objective of a multinational operation involves interoperability issues on several levels: action, procedural, doctrinal, technical and so on. In the information plan, the above is materialized in the need to provide information to the forces of the various nations involved but also to receive information from them. Information will not only circulate between military structures, but also between them and non-governmental organizations. The conclusion is that a set of information procedures and criteria for the dissemination of information for each multinational operation must be established. One way to solve the issue of standardization in the information plan is to use existing agreements (for example NATO STANAGs). These will form the basis for defining a common point in information interoperability. Because each multinational operation is unique, these standards will be modified to adapt to the concrete action situation.

Information interoperability will be created based on the issuance of procedures and agreements containing clear dissemination criteria, limiting the dissemination of information, defining specific terms, classifications and other guides in the field.

C) Implementation of specific management, information and execution systems, capable of operating under the operating theatre conditions.

Operational units designed for different external missions must have specific management, information and execution systems capable of operating under the operating theatre conditions.

For this, at the stage of operationalization of the new structure will be used a series of principles, methods of system design and sizing, as well as system analysis. Management of Information Resources in the management of multinational operations is a process of knowledge, direction, command and control, influence and action, able to establish the directions of effort and to support the planning of actions in the fields of: information, command, communications, psychological environment operations, information actions and public relations. From these areas, the first two involve collecting, processing and capitalizing on information, adopting strategies for influencing, cryptology, and exploiting information, providing predictive elements, simulation, and forecasting.

In order to provide effective information support, the military intelligence elements within the structures made available to NATO as well as the means of surveillance and recognition must be designed in such a way as to provide flexible "mission-friendly" support. Within NATO, intelligence is based on the contribution of nations and must focus on both military issues and political and socio-economic factors. The information should provide ongoing support to the political and military authorities for the entire spectrum of operations in times of peace, crisis or war to identify instability, crisis and conflict trends, as well as support for the identification of prevention and response measures of a political nature and military. In order to increase the effectiveness of structures made available to NATO, under the conditions of crisis and conflict, the architecture of the information system, technologies, structures and doctrines must be harmonized with their capability requirements. The quality and timeliness of providing data and information are key tools for achieving an effective information system in peace, crisis or conflict situations. Counterintelligence is an important requirement in ensuring efficient operations in the theatre of operations. The flow of strategic, operational and tactical information from NATO and national control and intelligence elements to NATO decision-makers, commanders and forces, must be timely and secure. Information superintendence is provided to the commandments of the operationalized structures that perform external missions of the data and information capacities (forces and means) combined with the annihilation of the opponent's (counter) information to collect information about his own forces. The information is intended to support the work of commanders and commanders on:

- Knowing the enemy's military and other capabilities and their evolution in time and space;
 - knowing the opponent's device and its activities at a certain time;
 - identifying the centre of gravity of opponent's actions, vulnerable and critical points and likely intentions;
 - knowing the characteristics of the action space and its influence on the actions;
 - misleading your opponent;
 - Influencing non-combatants and neutral people to support their actions or resist resistance.

The data and information gathered and processed must lead to the knowledge of the current state and the prognosis of the next one, constantly taking into consideration the necessity of overcoming the opponent in terms of informational activity. During operations, the commanders of the operational units will have access to a great deal of information covering every aspect of the theatre of operations, the battlefield. The available information will cover a wide range of domains, both about your own strengths and your opponent: number, identity, equipment, location, refuelling status, losses, recovery status, fuel reserve, available ammunition, and much more.

There will also be an equal amount of information on the area where the actions take place, the climate, the state of the weather, the state of the land, the socio-political influences and other aspects of the battlefield. Particular attention must be paid to selecting the information that must reach the commanders; if they are suffocated with non-essential information they will not be able to appreciate the real value of the threats on the battlefield and will not be able to make the right decision. One of the basic requirements in the planning of the action is that any commander will identify, from the outset, why information on the forces of the opponent and the allied forces is needed to make the decision and, finally, to draw up the Operation order (OPORD). The questions that he needs answers make up the Commander's Critical Information Requirements (CCIR). The commander can formulate the respective questions from the time of the assignment of the new assignment, during the mission analysis, and later on during the planning of the action. Starting from the CCIR, information planners form the Commanders Priority Intelligence Requirements (PIR). These are key information questions to which the commander must have answers in order to be able to prepare and conduct a military action.

4. CONCLUSIONS

One of the conclusions we reached in our research is that the power of information changes the way war moves, forcing the armed forces to consider the relationship between the power of information and the action taken. Depending on how they can get and use and share the information, command structures can plan, organize, coordinate, and control subordinate forces so that missions are executed successfully, consuming as little resources as possible and eliminating, as much as possible, human losses. Within some operations, commanders will have access to a great deal of information. Fields of interest are varied and involve diverse information, focusing on the knowledge of the opponent and the confrontation environment, but also on creating a real picture of the situation and capabilities of their own forces. Information products can be of great magnitude and may suffocate the command and control system of force. Careful attention will be given to selecting the information that must reach the commanders. If they are saturated with non-essential information, they will not be able to appreciate the real threats in the area of responsibility and will not be able to make the right decisions. That is why each leader have to, within the authority of his command, dispose of a science-based information system capable of providing him with the necessary information in a timely manner. We have presented in this paper some of the development directions that should be taken into account by the command structures for the most effective information management within operational units participating in multinational operations.

REFERENCES

- [1] AAP-06 - NATO Glossary of Terms and Definitions, NSA, Bruxelles, 2014.
- [2] AJP -3.4.9. - Allied Joint Doctrine for Civil-Military Cooperation, Edition A Version 1, February 2013.
- [3] AJP- 3.4.3 - Allied Joint Doctrine for Support to Civil Authorities.
- [4] AJP-9 - NATO Civil-Military Co-operation (CIMIC) Doctrine.
- [5] Allied Command Operations Comprehensive Operations Planning Directive COPD INTERIM V1.0, 2010.
- [6] AC / 35-D / 2001-REV1, Directive on physical security, NATO HQ, Brussels, 2006
- [7] ACO Forces Standards vol. I - General AAP-6 (2007), NATO Glossary of Terms and Definitions (English and French), NATO HQ, Brussels, 2007.
- [8] C 400/2 "Military Committee Guidelines on Implementation of the Alliance Strategy
- [9] Doctrine for Information Support of Joint Operations, General Staff, Bucharest, 2008.
- [10] NATO Guide, Public Diplomacy Division, 1110 Brussels, Belgium, 2011.
- [11] SHAPE Comprehensive Crisis and Operations Management (CCOM) process Handbook, December 2014.
- [12] PĂUN Ilie, Information Management within combat environment, București, 2011
- [13] TOHĂNEAN Dorin, External Policy as the security foundation, Braşov, Air Force Academy, 2014.
- [14] REHRL John - Handbook on CSDP The Common Security and Defence Policy of the European Union, Armed Forces Printing Centre, 2014
- [15] MUREŞAN Mircea, ENACHE Doru, Multinational Operations - crisis management and multinational operations, National Defense University Publishing House, Bucharest, 2005.