

# **MANAGERIAL INTEROPERABILITY - MAJOR INDICATOR FOR THE ACCOMPLISHMENT OF THE INTERNATIONAL MISSIONS**

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To be part of an international alliance, whose main goal is the security and the defense, many times involves a joint force, established through what the member countries of the alliance can put at its disposal. This joint force should improve the information exchange between the partners, and, thus, a better synchronization of all the international tasks that the alliance has to confront with. At the beginning this joint force is heterogeneous, but the member states have to make some steps in the way for make it more efficient and more interoperable.

Interoperability involves that some of the tasks at the national and international level has to be accomplished simultaneous or not, but sometimes using the same troops. These tasks involve appropriate resources, but also an appropriate control and coordination, at both, the national level and international level, and thus, an appropriate managerial interoperability is needed to achieve the established objectives. When it is necessary to clarify how the joint force accomplishes the tasks during the international missions, the managerial interoperability becomes not only a very important indicator but a fundamental one.

In this paper, I present some necessary actions at the national level that can help to improve the managerial interoperability, and thus, the efficiency of the joint force, and how to proceed for measuring the related national efforts, because is very important to increase the confidence and to be sure that you are on the good.

I will start by enumerating the stages that I and some others consider to be necessary in the process of making more interoperable the national forces at the disposal of the alliance.

### **How to build the managerial interoperability in the military field?**

To build an interoperable force, any nation has to follow some major transformations at all the levels of the military system. The European states know this, but there are few examples to be proud in the field of the security and the defense, especially related with the joint international missions.

Romania, in the field of the investments within the Defense Ministry, in the last twenty years some alternatives were proposed and used; all of these alternatives were taken to improve the military acquisition process, mainly based on the specific needs of each of the military branches. In some cases, when the military force involves troops from different branches, as in the case of joint operations, the discrete systems can not interact enough quick and efficient, and some cases involves additional costs.

As result, the transformation, that should create the joint capabilities, has to change the way of thinking and to lead toward new concepts, capabilities, human resources, and organizations. The main objective of this transformation has to be the delivery of a rapid military force, adaptable to new challenges and to sudden circumstances. Therefore, it is necessary to develop new concepts to deploy and to use in the future the joint forces, and these involves new doctrines,

a new organization and a new leading team, new methods and procedures to educate and to train the personnel, new material resources and facilities.

Transformation should lead towards better information management and towards such a reorganization of the structures for a faster and better understanding of the context in which the forces at the disposal have to act. This context includes answers to some questions referring to battles, opponents, the command and the control of the operations, the possible attack and defense procedures to be used, the information management, the training and the equipment of the own forces.

From the battlefield perspective, the joint capabilities have to improve the understanding of the context and to reduce at minimum the risks of the friendly fires. Commandants will have better decisions, and the led by them joint operations can be more efficient, if they should know better the resources at their disposal and where to find these resources. Logistic units have to understand how the combat units should be sustained on the battlefield, and how to dispose the different needed resources, to reduce the time until they arrive where they are necessary.<sup>1</sup>

The building process of the capabilities that are necessary for joint operations has to be originate on collaboration, and should be based on five functional concepts: the knowledge of the battlefield, the command and the control, how to use the force, how to focus the protection and the logistics.<sup>2</sup>

If we have in mind the changes occurred during the last decades, which are related with the battlefield, that often the military operations are asymmetric, for the future it is necessary to rethink these operations as being more jointly. Nowadays the states, especially from Europe, reduce their armed forces. Thus, member states of an alliance participate very often with different troops for the joint force of the alliance, and the alliance needs more interoperability. These

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<sup>1</sup> Alberts David S., Hayes Richard E. - [Power to the Edge](#) (PDF), 2003

<sup>2</sup> Mara, M., A Capability-Based Planning Methodology for Networked Systems-of-Systems. MORS-MAS, 2003

long term ambitious visions push on the traditional managerial practices that have to be changed. The changes have to include all the interested participants, to allow a faster adaptation to the real conditions, to allow a permanent collaboration between all necessary participants on the battlefield at one moment, and to allow a performant management of the information that has to help the all levels decisional process.

To conclude, the forces that are offered by the member states at the disposal of the alliance includes personnel from different national military categories. To operate together, they have to do it, firstly, at the national level and, secondly, at the international level, where they have to operate together with the forces from other states. To achieve this objective, the following steps have to be accomplished:

- The forces have to be trained in similar conditions and accomplishing similar missions;
- The forces have to be equipped and endowed with weapons and military techniques that have to be interoperable at the alliance level;
- The forces have to be endowed with communication systems that have to be interconnectable at the alliance level;
- Concepts, capabilities and standardized organizations have to be used at the alliance level, which means:
  - Doctrinaire principles have to be commune, and the organizational structures and leading structures as similar as possible;
  - The methods and procedures used to educate and to train the personnel have to help them to work, to collaborate and to succeed in the future missions;
  - The materiel and the facilities at the disposal of the joint troops have to be interconnectable;

- The information has to be processed and disseminate faster and more efficient, because the military organizations have to better and faster understand the context in which will act the joint forces;
- The information referring to the battlefield has to be better and faster understood to improve the decisional process and to minimize the friendly fires;
- All the personnel involved has to understand the way of how the logistic units will sustain and supply the troops on the battlefield and how they have to deploy the different resources that are necessary on the battlefield, to be as soon as possible where they are needed;
- The combat units and the logistic units have to have access to the same information related with the available resources, where they are located and how they can be used during the mission time, to minimize the enemy threats.

For measuring the efficiency of all the above activities, whose objective is to build a joint force to be used by an alliance during different international missions, it is necessary to quantify all these activities.

### **How to quantify the activities that are involved within the process for building the managerial interoperability in the military field?**

There is no individual that can predict whether or not all the efforts at the national level will improve the efficiency of the military forces offered to the alliance for international missions. For this reason it is necessary to know from where to start, then to measure all these efforts, and then to compare the results/outcomes with what was established at the beginning. To do these there is necessary to define and to use synthetic indicators.

For the definition of synthetic indicators, indicators from different military programs are classified into three different levels of concretization,

covering information about changes in demand and supply, and the internal organization and business strategy. These synthetic indicators built on the idea of “importance” of an indicator in the description of each level of concretization. With these indicators and using data from those military programs, static analysis is developed for comparing different military national and international realities concerning the development of managerial interoperability.

According to the Endowment Conception with Major Equipment and Systems of the Romanian Military 2006-2025<sup>3</sup>, the Romanian Ministry of Defense intends to update “...the Romanian Military on short, medium and long term in accordance with the principles and provisions established by the *Romanian Military Transformation Strategy* and *Defense Planning Directive* to fulfill the Force Goals (FG), to respect the contributions to NATO Response Force (NRF) in the context provided by the *Prague Conventions concerning Capabilities* (PCC), and the engagements concerning the contribution in forces and capabilities for the European Union”.

To decrease the current discrepancies in the performance of the military capabilities belonging to Romania and other new members, and in order to achieve compatibility and interoperability with allied or partner military NATO has established measures concerning the policy of endowment and modernization of military equipment.

All the military programs propose some targets with the objective “to making operational the force structure engaged through the obligations assumed by Romania with NATO and the need to make it compatible from the structural and action point of view with the other forces within the Alliance”.<sup>4</sup>

This simple statement entails a more complex situation, affecting not just the armed forces of Romania, but also the Romanian society as a whole.

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<sup>3</sup> [www.dpa.ro/engleza/documente/Endowmentconception.pdf](http://www.dpa.ro/engleza/documente/Endowmentconception.pdf), “General considerations”, pp. 2

<sup>4</sup> [www.dpa.ro/engleza/documente/Endowmentconception.pdf](http://www.dpa.ro/engleza/documente/Endowmentconception.pdf), chapter II, pp. 4

While this strategic goal is defined taking into account all possible external challenges, it is important to bear in mind that there are important internal constraints, related to the social aspects and to significant economic diversities.

For this reason the main target, stated before, has to be split into more detailed targets and associated subtargets. Thus, several different targets, with more concrete goals to be achieved (subtargets), have to be considered. Romania took in consideration the NATO and EU recommendations and established specific goals for short term (the end of 2006) and for medium term (2014), for each of its services. These goals will be materialized in new capabilities, which will be used both for national or alliance needs.<sup>5</sup>

In a complex and decentralized policy setting, to move all the actors (involved in achieving these goals) in a common direction requires clear targets, which will allow monitoring and benchmarking best practices. Precisely, for this purpose it comes up the necessity of establishing, where appropriate, quantitative and qualitative indicators. Indicators are important to inform managerial team(s) whether they are on the right track towards the development of a managerial interoperability, and to what extent they are not. Furthermore, developing a complete set of indicators, with more up-to-date data, is important to design appropriate policies at every level and to set adequate adjustments when necessary.

For a complete analysis of the transformation of the Romanian military services, indicators will be classified according to different criteria. These criteria, which will be broadly explained in later sections, are directed to have an idea of how changes are affecting *demand* and *supply*, the internal *organization* and business *strategies*.

For comparing results on the situation of Romanian military services between different realities can be proposed different *synthetic indicators*, which

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<sup>5</sup> [www.dpa.ro/engleza/documente/Endowmentconception.pdf](http://www.dpa.ro/engleza/documente/Endowmentconception.pdf), chapter III, pp.8-9

will capture all aspects related to capabilities measurement, accordingly to different classification criteria. With these indicators, static and dynamic analysis could be easily developed.

For a better understanding, we will give an example for one of the steps, which were presented in the previous chapter: the information has to be processed and disseminate faster and more efficient, because the military organizations have to better and faster understand the context in which will act the joint forces.

This is a synthetic indicator. For an appropriate measurement of this indicator, we have to go deeper and to find what do these mean: firstly, to *process* and to *disseminate* the information, and secondly, how to do them faster and more efficient for improving the understanding of the context of the battlefield, and to make better decisions.

According to Merriam-Webster dictionary, to *process* means “a series of actions or operations conducing to an end”, or “to subject to or handle through an established usually routine set of procedures”.<sup>6</sup> Nowadays, to process information, we use computers, information technology. For this reason, we need to know:

- what kind of processing is necessary at each level (headquarters, units, individuals);
- how many computers we need to process the information;
- what kind of computers we need;
- what kind of software we need;
- how many people has to be trained to use these computers and software;
- what is the level of education / training of this people;
- a.s.o.

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<sup>6</sup> <http://www.merriam-webster.com/dictionary/process>

To *disseminate* the information, according to the same dictionary, means “to disperse throughout” the processed information. How can we do it? Usually we need some chains of communication. How many, what kind, which kind of devices we need there are only some of the questions we have to answer. All these are subtargets, that are measurable, and we can compare what we have, with what the expected results/outcomes are, and to find what we have to do in addition, to determine the needed resources and the needed time framework.

It is not the purpose of this paper to presents the methodology of defining synthetic indicators associated to the different levels of concretization.

## **Conclusions**

Being part of an alliance means to beneficiate of all the rights established through some documents, but also to actively participate in putting in practice of all the objectives that are decided at the alliance level. One of these objectives is or can be related with the participation in some international military missions. Any country which is member of an alliance has to participate with troops and military techniques and devices in these missions. To do that is very important that each country to do some steps, deciding how many troops to offer at the disposal of the alliance, how much and how to be trained, how much and with what to be endowed. All these national efforts have to be managed, and moreover, to lead toward the success. However, for succeeding it is necessary that your troops to act together with the other troops, that are offered by the other member countries. For this reason, your troops has to be trained, and endowed in similar ways, as the other troops, and to create a good interoperability between all the participants in an international mission, not only at the human resources level, weaponry and military technique level, but also at the managerial level.

This is not an easy job, and it involves a lot of activities that have to be done and to be measured to know whether or not we are on the proper way. It is not easy, but it is very important to do it.

## REFERENCES

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