THE RELEVANCE OF THE OPERATING CONCEPTS IN THE DEFENSE PLANNING PROCESS

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Abstract: The operating concepts are multipurpose and comprehensive elements. They are not used only as one of the starting points to required future capabilities of the armed forces but they also form the foundation of military doctrines. They also represent a basic for the lower degree operating concepts, or the institutional or functional concepts. They unify the joint efforts and principal directions towards the achievement of future goals and missions of the armed forces. Upon aligning the existing and required capabilities in the Defense Planning Process (DPP) it is not possible to eliminate all risks. Under restricted availability of resources it is necessary to focus the efforts on the priorities of the development of the capabilities addressing the most probable risks and risks with the highest impact. The paper focuses on the position and role of the operating concepts in the defense planning process and their importance for mid-and long-term planning.

Key words: defense planning process, capability-based planning, defence resources management, operating concepts, scenarios, capabilities, capabilities package.

1. Introduction

The primary objective of the defense planners is to design and develop military tools that can be applied quickly and efficiently across the spectrum of possible scenarios (missions) and situations for the protection and achievement of vital interests while respecting real political, economic, social capacities of a state or an alliance. The scenarios assign different tasks for military means and thus require different methods of use and capabilities[1] of the armed forces.

At the same time, planning the design and of the military tools for future use may not disrupt the present preparation and readiness of the tools. The planning situation descriptions and future methods of military application (aspects link with operating concepts), usually for a perspective of 10 to 20 years, are a necessity, resulting from the high requirements imposed on resources necessary to develop the military tools to prepare a country for these types of situation.

Therefore, it is necessary to be concerned with operating concepts. Using them we can predict, with an acceptable level of probability, for which tasks and how we will use the military capabilities. In addition, it will allow a better allocation of the available resources for developing the future military capabilities in framework of the Defence Planning Processes.

2. Conceptual and methodological aspects

The objective of Defence Planning Process at an alliance or an international organization level, North Atlantic Treaty Organisation (NATO) for example, is to establish
THE RELEVANCE OF THE OPERATING CONCEPTS IN THE DEFENSE PLANNING PROCESS

a supporting setting, within which defense planning of the individual countries may be synchronized as efficiently as possible in order to ensure the goal satisfies NATO military needs.

In the NATO vision, the purpose of the NDPP (NATO Defence Planning Process) is “to provide a framework within which national and Alliance defence planning activities can be harmonized to meet agreed targets in the most effective way. It should facilitate the timely identification, development and delivery of the necessary range of forces that are interoperable and adequately prepared, equipped, trained and supported as well as the associated military and non-military capabilities to undertake the Alliance’s full spectrum of mission”[2].

On the other hand, the objective of defence planning at the national level is to build and maintain the armed forces corresponding to the need and ambitions of the country to ensure its security, defense and possibly even contribute to keeping peace and stability in a determined region (for some states even in the world - for U.S. for example). The defence planning is a set of activities, procedures and relations executed by the governmental authorities (especially at the level of security departments) in order to achieve goals and tasks of the country’s defense. They result in specific decisions, measures, procedures and deadlines. Simultaneously, planning the defense it is necessary to respect present political, military, economic and financial resources.

Over time, the approaches to defense planning have undergone and dynamic development. In this respect, after the end of the Cold War and the wars between the military power of the Warsaw Pact and NATO, fundamental changes in the planning of the armed forces took place. The principle of planning based on the main threat (military threat), represented by potential global conflict, was abandoned and ways to respond to new crises under a very wide spectrum of future threats have gradually started being explored. Thus, nowadays when security environment is characterised by uncertainty and by asymmetric/hybrid threats, this task becoming increasingly challenging. As a consequence, the new transformations led to the introduction of a new approach of defense planning - capability based.

Capability-Based Planning (CBP) was developed as an alternative to threat-based planning and this method involves a functional analysis of operational requirements. Also, capabilities are identified based on the tasks required[3].

Capability based planning (CBP) is a process initiated by identifying the entire spectrum of capabilities the military forces need in order to operate across the full range of military operations - universal employment. The planning is aimed at reasonable, optimal and flexible forces able to face a wide spectrum of threats. CBP is a complex, alghoritmic an comprehensive approach to armed forces development that scope is to offer on the most appropriate military capabilities options in order to meet defense priorities. The military force options developed should tally crucial objectives, reduce the cost and risk and conform into other constraints.

Under this process the operating concepts play an important role as they are crucially involved in defining the capabilities that will be asked the armed forces in the future.

Operating concepts usually describe the methods, techniques and plans to use the military capabilities in order to achieve the set or goals. The scope of this may vary, from comprehensive to concise, from describing the actions of the forces in the most general terms and at the highest strategic level to the specification of the action.

The preparation and application of operating concepts in the process of defense planning is critical since it generates conditions for the efficient use of military tools. The operating concepts directly define how to use the military tools to achieve the political
THE RELEVANCE OF THE OPERATING CONCEPTS IN THE DEFENSE PLANNING PROCESS

goals - level of ambitions in terms of defense. In this line of thought, the operating concepts also represent an input for acquisition processes. The defence planning actions are aimed towards the development of these capabilities.

3. Inputs and imperatives for the operating concept development in accordance with available resources

The future security and operational environment describe conditions under which the military forces will be engaged. They primarily concern analyses of the operational/security threats, resources development/allocation, technological progress, membership of an international organization / alliance and other possible influences on the future use of the armed forces.

The security and operational environment assessment represents a critical part of the security policy formation process and development of follow-up the country’s defense planning concept. It is the main starting point for rational allocation of the country’s limited resources.

The assessment and prediction of security threats is important primarily for the assessment of phenomena and processes taking place in the security environment of the state. This term means the area where the interests of the country are met and get into conflicts with the interests of other stakeholders (countries, international organizations, multinational corporations, interest groups, etc.) and run the processes that significantly influence the level of security. Moreover, there are processes and phenomena within the security environment that demonstrate a significant security impact, such as the struggle for strategic resources, hybrid conflicts, terrorism, weak states and failure states. But, the most substantial source of threat to a country, remain the intentional actions which targeting internal vulnerabilities.

The main purpose of the operational environment analysis is to identify potential future threats and risks (determine severity and imminence and sets their priorities) the armed forces will face and against which they will have to develop their capabilities. The identified future threats and resulting risks form the basic framework for the development of scenarios which later will describe the operating concepts.

The basic characteristics of the operational environment include: opponent, civil population environment, condition of the physical environment (terrain, climate, infrastructure), technological factors (including information technology).

In defense planning, the future operational environment has a critical influence on the concepts development defining the employment of forces in future operations. These considerations are the underlying information and decisive element for the building and development of the armed forces in the long-term horizon. The operating concepts thus become one of the critical elements in the building and development of the armed forces in long-term planning[4].

The operational environment where the future forces will be deployed determines the requirements for their building-up, preparation and employment.

After the assessment of threats resulting from the future operational environment, is elaborate Political directive for defense planning (or Political Guidance for NATO), which defines the principal frameworks of the defense planning, such as objectives, preparation time, time horizon for capabilities planning and achievement of the desired status (level of ambitions), responsibilities, relations to the available capabilities (existing capabilities), etc. The directive/guidance also defines defense priorities.

In the next step are developing the scenarios. The scenarios are based on the security and operational environment description and concern predicted planning situations that may require the employment of the future armed forces. The scenario are not a
THE RELEVANCE OF THE OPERATING CONCEPTS IN THE DEFENSE PLANNING PROCESS

prediction of the future but is an instrument of minimization of threats by solutions being searched for these scenarios, answering questions of how to prevent them, eliminate them or how to limit their consequences.

And in the content of the scenarios, the operating concepts give a rational and cautious assessment of how the future forces intend to operate in the medium to long term, based on the changes in emerging trends in strategic, security and technological areas. The operating concepts will be detailed in another chapter.

In this respect, we must have a Capabilities Package or a Pool of Capabilities, means military forces which are capable to manage the full spectrum of operations in the future, in accordance with the elaborated scenarios.

The process of developing a Capability Package starts with a requirement and the list of those requirements comes from the Defence Planning Process, in the form of Minimum Capability Requirements. The Minimum Capability Requirements placed on the capabilities of the forces represent a list of capabilities that are necessary for efficient fulfilment of the tasks under planning situations and scenarios of threat demonstration.

The capabilities are generally classified into groups in order to ensure manageability of the process of their build-up and maintenance. In addition, this classification usually expresses the responsibility for the areas of capability development and assurance of the resource framework. Under the defense planning process, there is a partial process of comparing the current, planned and minimum required capabilities of the forces. This partial process compares the qualitative aspect of the capabilities and results in an overview documenting gaps and surpluses in the future capabilities, compared to the present status[5].

The option of development of the forces means the definition of priorities in the capabilities development of the forces and a proposal of the direction of development, modernizing programs and focus of the requirements for the research. This activity also usually includes the calculation of the required resource framework.

The ideal situation would be that the balance of investments covers the allocation of the necessary capabilities development. If the resources represent a limitation it is necessary to go back and newly set (modify) the capabilities. The settlement of investments results in an achievable plan of capabilities development, covering the programs of modernization of the armed forces, research, development, acquisitions etc.

The place and role of the operating concepts in defense planning and capabilities development processes can be seen in figure no. 1.

![Fig.1 Operating concepts in defense planning and capabilities development processes](image-url)
THE RELEVANCE OF THE OPERATING CONCEPTS IN THE DEFENSE PLANNING PROCESS

In order to ensure actual enforcement of the outcome it is thus absolutely necessary, while preparing the operating concepts, to respect the political barriers set by the National Security Strategy and the National Defense Strategy and the financial, human and technological constraints.

4. Operating concepts as basic idea

The NATO Glossary of Terms and Definitions defines the concept as "a notion or statement of an idea, expressing how something might be done or accomplished, that may lead to an accepted procedure"[6]. The method of problem solution may be innovative, evolutionary or revolutionary, leading to the development of new military forces, implementation of new technologies, organizational structures or processes.

From a personal point of view, the operating concepts represents a set of ideas and value, a vision, a way of thinking and looking at the realities of the military operations’ space from a certain scientific point of view; ideas and expression on how a certain operational task should be performed, governed by the impact that new technologies have on the field of weaponry and information as well as the communications systems.

An operating concept is a visualization of future operations that describes how a commander, using military art and science, might employ capabilities to achieve desired effects and objectives. A concept may, after further development, experimentation, assessment and refinement, lead to an accepted way of doing something.

An operating concept treats the principles and basic ideas rather than details. It covers more general cases rather than particular situations. It needs to be further developed in subsequent documents. Additionally, it also requires an extensive interpretation in practice.

Each operating concept has its own attributes. Attributes are not individual structural parts being discussed by the concept. They rather represent qualitative characteristics that the concept aims to achieve.

The main feature of an operating concept rests in the fact that they serve their purpose. It means they describe a specific problem addressed in the concept and provide conclusions relevant to the addressed decision making problem of development or employment of military tools. This description should be sufficiently specific to allow its implementation, however, not too narrow as then it would not give enough scope for creativity and invention. The goal of the concept development is not to elaborate an acceptable document but to propose, impartially verify and justify the concept of the employment of military tools. Only after the concept is objectively verified, may it be applied in the defense planning.

The operating concepts are designed to support a vision how to use the forces in combat or in other operations. As such it should use a comprehensive thinking and also a terminologically comprehensible language.

The development of operating concepts process starts with expressing the initial hypothesis that is to be verified and supported with arguments. The concept should be comparable to historical and experimental examples. A newly proposed operating concept does not automatically guarantee its acceptance. It may be accepted with lack of confidence. Therefore, it needs to reflect the depth of the thinking and research. A good concept is developed in a way of thinking allowing as well as evoking critical views.

Operating concepts should be clearly distinguished from other concepts. This may be achieved by describing one operational problem and options for its solution. The main differentiating elements in the concepts include a planning situation definition and scenario description, main hypothesis of the forces employment and the description of the integrated
THE RELEVANCE OF THE OPERATING CONCEPTS IN THE DEFENSE PLANNING PROCESS

application of the military functions under the given scenario. In this respect a comprehensible description is better than numerous details, distracting the attention from the principal arguments confirming the main hypothesis of the forces employment. A concept may also be differentiated by its explicit comparison to and contrasting from other historical, present or future concepts. Sometimes it may be more comprehensible to describe the new concept in relation to a known one. In this way, it may emphasize its distinctness in terms of the scenario and methods of the forces employment[7].

Operating concepts describe a wide range of military actions. In the broader sense, they describe what should be done in a respective situation and how it should be done, in terms of a military action. It means how the military forces will be employed. In specialty literature we may find terms “operational concept” or “operating concept”, both with the same contextual meaning.

An operating concept is, in the broader sense, an expression of an opinion about the method of employment of troops. It is created under the application of military science and military art within a certain set of parameters given by the background and inputs for the development of the respective concept. Most simply put, it describes how the armed forces operate (function).

The operating concept represents the basic idea for the conduct of future operations by the armed forces and their units. They are one of the bases for defining necessary capabilities enabling the conduct of operations against an enemy in an expected operational environment.

The system of operating concepts may not separately address just one functional area or activity in the battlefield, such as sustainability, intelligence, fires or maneuver.

5. The U.S. and NATO operating concept system

The operating concepts play an important role within the doctrinal system. If the operating concept addresses the assumed future security threats and risks, development in the operational environment, including the nature of the potential enemy, then it also forms the basic features of the future doctrine. Gradually the concept is transformed into a doctrine, firstly only roughly but as the forecasted horizon approaches, the doctrines get more specific and they eventually reach the status when they are fully applied in daily activities of the troops. The future concept and the future doctrine resulting from it is based on the prognosis of the operational environment, accompanied with the planned capabilities of the armed forces.

That was the main reason why U. S. Secretary of Defense decided a development plan for a family of new concepts for conducting joint operations (Joint Operations Concepts – JOPSC). This joint operations concepts family consists of[8]:

- **Capstone Concept for Joint Operations** - broadly describes how the joint force is expected to operate in the mid to far term, reflects enduring national interests derived from strategic guidance, and identifies the key characteristics of the Future Joint Force (e.g. Homeland Defense and Civil Support, Deterrence Operations, Major Combat Operations, Military Support to Stabilization, Security Transition and Reconstruction Operations, Irregular Warfare and Military Support to Cooperative Security Engagement);
- **Operating concepts** - which address military problems associated with broad force operations. Applies solutions and joint force characteristics to a more specific military problem. Identifies challenges and key ideas for solving those challenges, effects to be generated to achieve objectives, essential capabilities likely needed to achieve objectives and the relevant conditions in which the capabilities must be applied (e.g. operational concepts from **US Joint Vision 2020, America’s Military: Preparing for Tomorrow**).
THE RELEVANCE OF THE OPERATING CONCEPTS IN THE
DEFENSE PLANNING PROCESS

- **Functional Concepts** – address broad enduring functions across the range of military operations;
- **Integrating Concepts** – address specific military problems associated with narrowly scoped operations or functions.

According with US Joint Vision 2020 the main operating concept is *Full Spectrum Dominance* that is the “ability of US forces, operating unilaterally or in combination with multinational and interagency partners, to defeat any adversary and control any situation across the full range of military operations”[9].

This approach can only develop based on *Information Superiority* and on other concepts like: *Dominant Maneuver, Precision Engagement, Focused Logistics* and *Full Dimensional Protection*.

The *dominant maneuver* is the modality of identifying, choosing and categorizing the objectives, of establishing the weak points of the enemy lines and of striking very precisely, every time it is needed, the ability to combine informational operations with the space, air, naval and land actions, to rapid transport of the forces, to choose the types of actions that can best be used for simultaneous attack of the vulnerable parts of the enemy for the achievement of the planned success.

The employment of dominant maneuver may lead to achieving objectives directly, but can also facilitate employment of the other operating concepts. For example, dominant maneuver may be employed to dislodge enemy forces so they can be destroyed through precision engagement.

*Precision engagement* is the ability of forces to locate, surveil, discern, and track objectives or targets, select, organize, and use the correct systems, generate desired effects; assess results, and reengage with decisive speed and overwhelming operational tempo as required, throughout the full range of military operations[10].

*Focused logistics* is the operating concept that links with the resources needed to carry out successful military operations. Applying this concept will provide military capability through ensuring delivery of the right equipment, supplies, and personnel in the right quantities, to the right place, at the right time to support operations objectives. It will result from revolutionary improvements in information systems, innovation in organizational structures, reengineered processes, and advances in transportation technologies.

According to the NATO vision, seven operating concepts will support the capability requirements and will drive the development of relevant NATO package of force. These are[11]: **Effective Engagement, Joint Maneuver, Enhanced Civil-Military Cooperation, Information Superiority, NATO Network-Enabled Capability, Expeditionary Operations and Integrated Logistics**.

From the foregoing discussion, two operating concepts have been identified as main contributors for a very important objective (related to the NATO level of ambition) - *Decision Superiority: information superiority* and *NATO network-enabled capability*. Information Superiority is a condition where an entity has the information needed in time to assess, decide and act decisively. Information Superiority is the capability to collect, process, and disseminate an uninterrupted flow of information while exploiting or denying an adversary’s ability to do the same. Information Superiority requires the ability to acquire, take advantage of and share information wherever and whenever needed. It depends heavily on a **NATO Network Enabled Capability** to foster the exchange of information[12].

*Coherent Effects* - another objective of NATO transformation - is a state wherein forces have the ability to integrate their capabilities with those of other instruments of power. To arrive at this state, the concepts and capabilities encompassed by the **Effective Engagement, Joint Maneuver and Enhanced Civil-Military Cooperation** are necessary.
Effective Engagement and Joint Maneuver (provides a practical application of Effective Engagement) can be described as the prosecution of the right target, in the right manner, at the right time, for the right reason to achieve the right effect for the situation. Increasingly, accurate weapons, supported by precise targeting, will be used to create the desired effects by lethal or non-lethal means, causing minimal damage to civilian infrastructure or loss of life. A high priority research and development, procurement and training must be given to accurate weapons and precise targeting methods. By leveraging knowledge and decision superiority with effective engagement, Joint Forces will significantly increase the speed and efficacy of its operations. Importantly, this capability will also facilitate rapid post-conflict stabilisation and reconstruction.

A desired NATO Comprehensive Approach in operations indicates that the conduct of such operations will require forces and capabilities characterized by the ability to achieve joint deployment and sustainment - objective of NATO transformation. From within this context, the operating concepts of Expeditionary Operations and Integrated Logistics are derived.

Expeditionary Operations describes the conceptual ability of Alliance forces to deploy (and redeploy) sufficient task-tailored forces when and where required[13] or “the projection of military power over extended lines of communications into a distant operational area to accomplish a specific objective”[14]. The transformed forces must have the ability to mount military operations beyond NATO boundaries over extended distances with the possible absence of secure lines of communication and/or host nation support to meet the challenges of the future.

Integrated Logistics is the ability to provide the joint force the right personnel, equipment, and supplies in the right place, at the right time, and in the right quantity, across the full range of military operations.

These concepts will be translated into capabilities requirements and scenarios (plans) through the defence planning process (and will guide the development of the NATO Forces) and incorporated into training programmes set within the context of a comprehensive approach to operations across the spectrum of conflict.

6. Operating concepts in Romanian vision

In Romania, the Military Strategy defines the principles and strategic and operational concepts that ensure the fulfilment of the national military objectives and the established missions. The strategic and operational concepts describe how armed forces are engaged in achieving the objectives set and are hierarchized as follows[15]:

a. Institutional concepts - result from the National Defense Strategy (White Paper of Defense) and describe how the armed forces contributes to the national security, describing also, the organization and materially technical facilities of a military institution;

b. Operating concepts - define the practical application of military art and science and highlight the way in which the armed forces act; describe the method of employment of the military forces;

c. Functional concepts, describing the activity (performance, behavior) of the individual military functions and sub-functions;

Institutional concepts rank the highest within all military concepts. The institutional concepts provide a description of the higher level features and the functioning of a military institution or institutions. They provide contents (context) and give advice to all other military concepts. Institutional concepts are also frequently made public and are presented as the vision statement covering a specific future time horizon.

In Romania Military Strategy view, the operating concepts are[16]:

- Integrated Crisis Management;
THE RELEVANCE OF THE OPERATING CONCEPTS IN THE
DEFENSE PLANNING PROCESS

- Integrated Logistics;
- Full protection.

In my opinion, the operating concepts from this strategy must be correlated with the specific elements of the Romanian Armed Forces Transformation Strategy, where exactly the concepts of the NATO Vision (Strategic Vision: The Military Challenge) are presented, as can be seen in figure no. 2.

As a consequence for the Romanian Armed Forces, the operating concepts must be the following: Effective Engagement, Joint Maneuver, Enhanced Civil-Military Cooperation, Information Superiority, Network-Enabled Capability, Expeditionary Operations and Integrated Logistics, with the same content and application methods as NATO operating concepts.

Concepts should reflect the understanding of its own evolution of Romanian Armed Forces as well as of previous concepts. History offers many perspectives of employment of the armed forces, describing factors which may be, at present and in the future, perceived as unique.

A systemic organization of assumptions about the nature of warfare and successful conduct of military actions forms the foundation of operating concepts. These assumptions may clearly be expressed in the concept or they may result from it. The assumptions in the concept have to be expressed as a hypothesis, constants or variables and have to be sufficiently supported with arguments. The assumptions expressed in this manner establish the necessary basis for the operating concepts.

7. Conclusions

From the above, it can be noted that the operating concepts are not the main node points of the defense planning process, but, nevertheless, the information, conditions and requirements for the capabilities of the armed forces resulting from the operating concepts represent fundamental inputs for the actual process. Without structured operating concepts
that take into account the assumed development of the security and operational environment it is not possible to responsibly set any future minimum requirements for the capabilities of the armed forces, name and describe them correctly and determine the responsible entity and performance indicators.

The operating concept itself usually does not answer the question of what armaments, weapons and organization the armed forces will have to have in the future – these are usually not specified or are specified only generally. With respect to the capabilities the operating concept has to be interpreted by experienced commanders and staffs or doctrinal centers.

In the next stage, if it is possible, but is desirable to use modelling and simulations to verify the impacts of the assumed changes in the capabilities of the armed forces on the accomplishment of appropriately selected military action scenarios within the boundaries given by the operating concepts. By doing this it allows to prevent wasting of resources for purchasing armament, weapons and organizational structures that have no future and will not generate the required and expected effect from the very beginning.

Scenario based capability planning provides a logical basis for the defense planning process. The operating concepts allow the military organizations not to only identify the future security challenges and appropriately get prepared to address them, but also focus on the existing challenges as efficiently as possible. This is not even in sharp conflict with the capability based planning since the requested “product” of the defense planning process concerns the capabilities of the armed forces to be used to face threats and risks in the future.

To sum up, the utilization of outcomes from the operating concepts in the process of build-up and development of the armed forces is done through the defense planning. The planning documents represent a means ensuring an efficient utilization of the available resources within the set time frameworks in order to achieve the required capabilities. The requirements placed on the minimal capabilities of the armed forces, based on the operating concepts, form an integral part of the process of modernization or acquisition of the armed forces.

References:
[1] NATO Allied Command Transformation defines capabilities as an ability to produce an effect the user of certain goods or services needs. In the military context, there are four main components of the capability: the processes (policy, strategies, doctrine), the people (personnel, leadership, education) the forms of organization (scheme, schedule) and the technology (armaments, materials, facilities).
THE RELEVANCE OF THE OPERATING CONCEPTS IN THE
DEFENSE PLANNING PROCESS

[16] Ibid, chapter VI.