

THE REALITY OF OPERATIONAL ENVIRONMENT IN MILITARY OPERATIONS

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The strategic and operational environment affecting national security is complex, multifaceted and variable. Even in the long term, it will be characterized by high dynamics of changes, the growing diversity of players and increasingly complex interdependence of security trends and factors. Threats, risks and their sources are often difficult to localize and nowadays have mostly non-state and transnational character. Many of the specific threats and their impacts are difficult to predict. It all adds up to a further blurring of distinctions between internal and external national security. The operating environment consists of a set of factors arising from the nature of an area where the operation is carried out or will be. Operating environment is also formed by the character of a potential enemy, possibilities of effecting technological and informational areas and further by terrain, climatic conditions and level of own forces and coalition forces.

Key words: *operational, security environment, operations, organization*

MOTTO:

The basic human weakness lies in that the human being does not predict the storm when the weather is nice.

Niccolo Machiavelli

1. INTRODUCTION

The strategic and operational environment affecting the security of the Czech Republic is complex, multi-faceted and volatile. Even in the long term it will be characterized by a high dynamics of change given the growing diversity of players and the increasingly complex interdependence of security trends and factors. Needless to remind that, all of the above, emerge from a global security environment continuously undergoing dynamic changes. Nevertheless, it is possible to determine some of the latter's

relatively constant determinants and primarily trace down trends which most likely will determine its character even in the following period. Threats, their sources and propagators are both of a state and, increasingly, non-state and supranational character and that makes their impacts hard to predict. Internal and external security threats mingle and a blurring occurs between them. The stated characteristics have a fundamental impact on the available means needed to ensure defense and security. As a result, a complex approach which combines military and civil instruments, including diplomatic and economic resources,

to threats' prevention and moderation of their negative influences is on the growth [2].

2. CHARACTERISTICS OF THE SECURITY ENVIRONMENT

We can apprehend the security environment as an external area implementing national interests of states, where a collision of participants will occur. This area will be marked by a higher rate of ignorance, uncertainty and reduced availability of control. Rational security and offensive politics of the individual states must focus on analyzing, predicting the development of a possible security area and adjusting the instruments

to its influence in order for them to be as effective as possible in terms of their reaction to this environment. The instrument of individual states for maintaining and increasing their security are the armed forces, which are created for this purpose. The possibility of a threat to the territory of the Czech Republic is very low. The fundamental guarantee to this favorable situation is the membership of the Czech Republic in NATO and EU, and good relationships with neighboring countries. However, this situation contrasts with the increase in asymmetric security threats. These are linked with trends within the global environment, which strengthen the latter's potential and increase the possibility for threats from relatively

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remote areas characterized by local or regional conflicts and feeble truces to spread. A distinctive feature of the current environment is that even instability and conflicts outside the European borders can have a direct impact on our security [1].

The beginning of the 21st century can be characterized by an environment continuously demanding reaction to arising critical situations. The characteristics of the military forces deployed to solve critical situations nowadays, but also in the future, are as follows:

- **deployment of smaller units;**
- **a large diversity of missions and tasks similar to those of the enemy (including the unconventional type);**

- **the use of the latest technology to approach the opponent;**

- **most tasks will be undertaken by coalitions.**

All of the above demand to establish modularly structured units with the ability to form groupings of assignments including headquarters and its digitized means of automated command and control. The automated command and control systems are nowadays in the centre of action and attention of modern armies with the task to provide **knowledge of the situation**. The meaning of this effort is to provide perfect **knowledge of the situation on a battlefield** to ensure effective accomplishment of the task.



In this respect, the Network Enabled Capability (NEC) is not a goal. NEC is a means to achieve capabilities that allow the creation of a connection of sensors, command and control and weapon systems, where the information is exploited in a synchronized timely manner.

3. CHARACTERISTICS OF THE OPERATIONAL ENVIRONMENT

In the future, the operational environment will be characterized by two dimensions: the situation in the social environment, primarily *the opponent, local population and social-political and cultural structure, history and traditions, state of environment, infrastructure, technological factors, state of information area, and the natural environment, particularly terrain, climatic conditions and other factors* [3].

3.1. Opponent

The future possible opponent will be very diverse in terms of its form of organization, goals, level of technology, values upheld and so on. As a result, the opponent can be described as falling into one of the categories below:

- armed forces with a firm and well-known organizational structure acting in accordance with accepted doctrinal principles and rules and respecting international law regulations.

- partially militarized organizations and groups of a militia character, and civil defense associations usually relying only on light weapons and characterized by a low level of respect towards generally accepted law regulations.

- partisan (guerrilla) units acting against domestic government and their potential allies, that have little to no regard for general law enforcement and regulation.

- terrorist organizations acting both at national and supranational or global level aiming at generating a large number of victims and thus, benefitting from a psychological impact exceeding state borders and influencing public view not only in one country, but in the whole region or even in the whole world.

3.2. Local population, social, political and cultural structure

Given the increasing number of tasks and missions of the armed forces outside the European territory, awareness of local population, of its ethnic composition, economic and religious stratification and its relation to cultural, as well as life values and traditions becomes important. Moreover, understanding local customs, the roles of local religious as well as social authorities in society, and identifying ways to gain their support or at least achieving their restrained attitude in relation to deployed forces and to their determined operational tasks is vital.

3.3. History and traditions

Understanding the historical development in a country or a region of an anticipated armed forces deployment can be very significant for the success of an operation and for eschewing potential mistakes and errors that are very hard to repair post factum. Therefore, it is very important to understand a country's historical context and position in a region, its relationships with neighbors, its religion, the roles of national minorities and majorities, historical personalities, the role of religion in the private and social organization.

3.4. State of environment

The impact of the evolving global changes on climate and the continuing devastation of environment can lead in some areas of the world to catastrophic shortages of drinking water resources, food, or to inaccessibility of energetic sources. All of the above contribute to social disintegration and migration pressure in areas that are more developed from an economic point of view and with less ecological problems. Issues of environment, water, resources and energy, food, health, information connections, righteous bank, economic and homestead system in relation to social and political environment will even more distinctly influence the situation in the operational environment.

3.5. Infrastructure

Infrastructure in the area of deployment can cause complications both in terms of troops' deployability and mobility, and in terms of logistic provision due to its non-functionality or its inexistence. It will have significant impacts on attitudes of local population and vicariously on the matter of protection of armed forces to the extent that they can become a substitute problem and rationale of malcontent attacks and interest groups.

3.6. Technological factors

There will be an increase in the availability of developed military and commercial technologies exploitable in military areas. That will present new opportunities even for potential opponents. Knowledge from the area of information technologies, nanotechnologies and biotechnologies will be applied for military purposes. Science and technologies will allow further development of command and control systems (with a large increase in data flows at the lowest levels of command), allowing for the gathering, evaluation and transfer of information in real time. The development of sensors, satellite technologies and unattended automated systems will continue. There will be an increase in accuracy, range and targeted effectiveness of weapons and weapon systems.

3.7. The state of information resources

The increasing dependence of society on information technology is crucial to sustain the functionality of the state in all its domains, including the armed forces, which will be highly dependent on computerization and functioning within a network environment. Information in the operational environment will play the role of independent agents and gradually become the main element of any conflict. Information improves the ability to command in combat, and increases or reduces the possibility of combat. It will grant combat and non-combat operations a new dimension and can also affect current activities like thinking, planning, decision making and feedback.

An increasingly globally dependent world will require information timing, availability, dissemination and application. In regions with technically advanced home media competing to influence the opinions of local and international public the understanding of crisis or conflict, as well as the likelihood to gain the initiative will be effectively influenced. In this context, military forces must be capable to conduct operations under the supervision of the media and the public, all of which requiring greater transparency and openness.

3.8. Terrain and climatic conditions

Geographical distance, as well as the varied terrain and climatic conditions raise increasing demands on troop deployment, both in terms of people and material. The future outlook on operations needs to take into account any type of terrain, from plains and depressions to mountains, deserts, jungles, forests and relatively isolated islands in all climate zones [4].

The operating environment consists of a set of factors, conditions, circumstances and influences determining the characteristics of future military operations. These are part of the security environment and have an effect on the activities of any area of operation. Both environments are interrelated and, therefore, the evaluation of environmental safety must be part of the overall evaluation of the operational environment [4].

4. THE OPERATING ENVIRONMENT AND ITS EFFECTS ON PLANNING

Planning as a process is launched by creating a full range of skills which deployable forces need. The whole military planning should be linked to other non-military and potentially multinational and non-governmental initiatives designed to stabilize and create a self-sustaining security environment. Military response must therefore be

incorporated into a broader overall framework or comprehensive approach. If we take into the account these and other safety factors, there is no fundamental difference in the planning and execution of any operation across the full spectrum of military capabilities within an armed forces alliance. Various defense establishments across the world have changed their planning approach from “*threat based planning*” to “*capability based planning*”.

Threat based planning is a process based on creating specific scenarios for which the Alliance must be prepared. In addition, particular states contribute forces and resources to plan “*the optimal forces for a defined range of threats*”.

Capability based planning aims at creating “*powerful, adaptable forces able to face a wide range of threats*”. As a process it starts by creating a full range of skills which deployable forces need and later moves on to verifying the accuracy of scenario planning.

Operational capabilities are understood as a means to achieve appropriate operating and organizational structure of units and adequate starting position to fulfill the combat mission and parallel tasks. Operational capabilities become the basis for determining the operational (combat) tasks and not only, because these tasks may occasionally affect the efficient use of available forces and resources and their abilities.

Future activities underlying the conduct of operations will have a complex character that, besides its three-fold dimensionality, will increasingly benefit from the information dimension as well. This increases the importance of the initiative of the lower commanders at the tactical level of command and control. The mass character of the armed forces and resources is being replaced by smaller units (forces) with increased mobility, increasing range and greater operational accuracy. Timely and accurate deployment of appropriate forces, their mobility and sustainability in the operation until the fulfillment of a mission, including their own protection is crucial. Moreover, within the context of an expanding role of stabilization and reconstruction efforts, there is also a dynamic change in the nature of the tasks fulfilled within the operational environment.

Operational space and ground battlefield will be characterized by:

- varying density of forces and resources – the battlefield will be non-linear, forces and resources will be more dispersed;
- air superiority will have a decisive influence on the conduct of a warfare;
- fighting in built-up areas, which has already become a real life scenario;
- increased level of force and resources protection – coupled with technical and technological progress;

- rapid sequence of events on the battlefield – coupled with technological progress and usage of high-precision weapons will make demands on people while shortening the time for the decision-making process undergone by commanders at all levels;

- diversity of participating forces and resources - will place great demands on forces interoperability requiring them to use their own resources at a high price and to have their protection and security ensured;

- dispersion forces and resources – will place increased demands on troops' mobility, reliability, continuous communication, interoperability and time and space interaction in combat and on the battlefield;

- precision attack – with high-precision weapons;

- information superiority – ability to collect, process and disseminate information in a continuous information flow horizontally and vertically for users with predestined access;

- integration and interoperability of forces and resources – consistency of information and communication system of allies, alignment and harmony while fulfilling common tasks.

The shaping of the operating environment is aimed at working to the Alliance's advantage and to the enemy's disadvantage. Successful

shaping of operations may also deter the enemy and thus prevent the development of the crisis. It includes locating such areas where the power of the Alliance can be used and information superiority achieved while the opponent's power is minimized. Deterrence of the opponent may be perceived as a threat, while the use of coordinated information operations (Info Ops) can seriously impair his understanding of the environment and limit his freedom of action. Current effect within the political context, legality, and authorization for the use of force should be conducted in order to build and maintain a support for troops' actions both at home and for any parties with a stake in the conduct of operations.

5. CONCLUSIONS

The transformation of the security environment also impacts the character of the armed forces since they have to adapt to a number of the changing tasks. Compared to the second half of the twentieth century, nowadays security cannot be only identified with the absence of military conflict. It actually becomes a much broader phenomenon involving civilian and non-military parties, and more often than not subject to perception. In the process of building modern armed forces, a greater emphasis is placed on interoperability, flexibility, professional performance and technological superiority.

When planning the leading of operations a number of different factors influencing the achievement of partial objectives and desired goal is taken into account. It is a coordinated action against the enemy using all available resources in assumed conditions. The complexity and uncertainty of future tasks will still require a wider involvement of resources, and not only military ones, to achieve operational objectives. Therefore, a new comprehensive approach to tasks based on setting effects to be achieved (Effects-Based Approach to Operations – EBAO) by taking into account the context and consequences of a comprehensive management of operations is on way. EBAO is a thoughtful and

comprehensive use of various tools of the alliance (military, political, economic and civilian) in combination with practical cooperation with all stakeholders, who are non NATO members, to create an effect (effects, results, impacts) that is necessary to achieve planned objectives and ultimately the desired final state of NATO [1].

In its present form, this comprehensive approach to leading operations represents the full spectrum of activities of the armed forces, characterized by an objective, a number of forces and resources, through the activities of troops, space and time. All these magnitudes are variable.

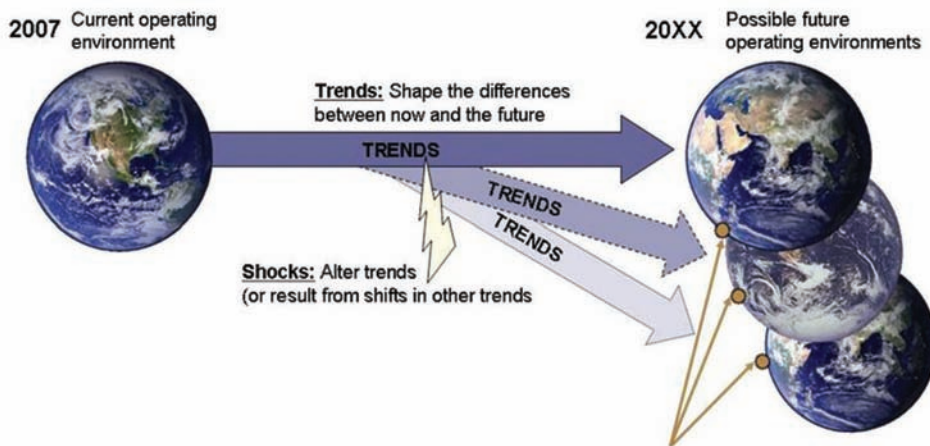


Figure 1: Future operating environment [6]

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