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Pavel Crhonek et al.

OPERATING ENVIRONMENT

IMPLICATIONS FOR BUILDING AND DEVELOPMENT OF
CAPABILITIES OF THE CZECH ARMED FORCES 2021-2022

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**Implications for the Building and Development of
Capabilities of the Czech Armed Forces 2021-2022**

PAVEL CRHONEK ET AL.

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AUTHORS

Pavel Crhonek

Lucie Konečná

Jan Kovanda

Zdeněk Petráš

Martin Smejkal

Ján Spišák

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INTRODUCTION

The aim of the publication *Operating Environment 2021-2022* is to provide an alternative (academic) view of the capabilities of armed forces, which should be available not only in the context of recent or currently ongoing conflicts, namely the conflict between Armenia and Azerbaijan over Nagorno-Karabakh and the aggression of the Russian Federation against Ukraine, but also in the long term.

The publication is prepared on the basis of the results of CBVSS's analyses, using documents on the respective topic, both from the perspective of actors participating in the conflict, as well as from the perspective of NATO and the EU, mapping the current state and expected development of the operating environment.

For the purpose of the study, the operating environment¹ is defined as follows: "*The operating environment is part of the security environment. It is the space for the interests of military and non-military, international, transnational, national bodies and other actors of international affairs. The operating environment is composed of a combination of factors, conditions, circumstances and influences determining the manner of use of the armed forces and their capabilities, influencing the decisions of the commanders in the planning and conduct of military operations.*"² The term operating environment is associated with the use of the armed forces and with the requirements for their building and training.

In the first chapter, the publication assesses the development of the operating environment in the context of the security environment and strategic threats resulting from the current geopolitical situation and the impact of political and economic globalization. A brief summary of the current armed conflicts (i.e., the conflicts of 2021 and the beginning of 2022) in Ukraine and Nagorno-Karabakh in the following chapter provides the framework for the subsequent analysis of the 7 main military capabilities defined by NATO and the EU and the implications for the armed forces of the Czech Republic described in the final part of the publication.

¹ AAP-06 NATO GLOSSARY OF TERMS AND DEFINITIONS (ENGLISH AND FRENCH) defines the operating environment as follows: "A composite of the conditions, circumstances, and influences that affect the employment of capabilities and bear on the decisions of the commander."

² Future operating environment 2035, ref. 1.

DEVELOPMENT OF THE OPERATING ENVIRONMENT

Understanding the nature of the security environment of the Czech Republic (CR) is one of the key factors for identifying and subsequent analysis of the state and possible development of the operating environment. The development of the operating environment is thus determined by the development of the security environment, which currently exhibits a large degree of instability, uncertainty, complexity and interdependence of various phenomena and threats. The security environment is currently more difficult to identify with a reduced possibility of control due to the high degree of globalization. The undisputed fact is that the security environment has visibly deteriorated recently and the nature of the threats resulting from it is associated with a significant increase in risks to Western civilization. In the current situation, we can basically talk about a system of international relations where there is no functional confident supra-state authority or global power that would determine and effectively enforce the rules of the game and thus regulate the behaviour of the actors in this system. Some facts resulting from the development of the security environment or national interests of other states may conflict with the national interests of the Czech Republic, may threaten it, and thus become a threat that the Czech Republic must respond to. Therefore, the analysis of the security environment and the processes taking place therein is extremely important for further analysis of the operating environment. Strategic threats resulting from the analysis of the security environment provide an important input for examining the dynamics of development of the operating environment and the underlying analysis of the characteristics of future conflicts, their intensity and possible duration.

From the point of view of the overall development of the security situation in the world, securing stability will be based primarily on the principle of collective defence and participation in foreign crisis management operations, under the leadership of NATO, the EU, the UN, or in ad-hoc coalitions. This principle stems from the need for a rapid and effective solution to the emerging crisis situations that threaten the local security situation before the crisis grows into a much larger conflict, possibly stretching beyond the borders of the region and affecting the territory of the Euro-Atlantic countries.³

Globalization and global security challenges

The analysis of the current security environment⁴ shows that a critical factor that will have a significant impact on the development of the operating environment is, in particular, the increasing degree of globalization along with the increase in the use of force and coercive means in international and national politics. This trend includes not only the management of armed conflicts, but also coercive economic sanctions, raw material blackmail, military threat and domestic conflicts. The consequence of

³ NATO (ed.). *Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organization*. NATO Public Diplomacy Division, Brussels, Belgium, 2010. Also available from:
http://www.nato.int/nato_static_fl2014/assets/pdf/pdf_publications/20120214_strategic-concept-2010-eng.pdf

⁴ DIVIŠOVÁ, Vendula, et al. *Operating Environment 2018. The Implications for the Use and Development of the Armed Forces of the Czech Republic*. Brno: University of Defence, 2018. ISBN 978-80-7582-093-8.

globalization is also that conflicts become less predictable and their consequences significantly affect the functioning of society.

The source of future conflicts will be, in particular, competition for natural resources, regional rivalry, culture and value related contradictions, growing tensions between the wealthy and the poor and ongoing disputes in various areas and environments. Future crises and conflicts will have both military and civilian aspects and will be characterized by asymmetric and irregular actions involving non-state actors, who will make greater use of unrestricted methods of conflict and will focus on non-traditional goals.⁵ In order to resolve conflicts, states will be forced to use the full range of their instruments ranging from the provision of basic humanitarian assistance to the conduct of high-intensity military operations.

One of the negative consequences of the ever-evolving globalization is the interconnection of various areas of national infrastructure, including critical infrastructure, the functioning of which has a major impact on the security of the state, the economy, public administration and securing the basic living needs of the population. The negative consequence of the increase in globalization consists, above all, in the fact that the disruption of critical infrastructure in one area may affect other areas and may also have international impacts. The protection of critical infrastructure requires the sharing of responsibilities of the public administration with the private sector and the exchange of information between the public administration and other concerned organizations, as well as international cooperation.

⁵ EUROPEAN DEFENCE AGENCY (ed.). *An Initial Long Term Vision for European Defence Capability and Capacity Needs*. EDA. Brussels, Belgium, 2006, pp. 6-8. Also available from: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=URISERV%3A133238>

ARMED CONFLICTS IN UKRAINE AND NAGORNO-KARABAKH

The authors focused on the last two most recent armed conflicts, namely in Ukraine and Nagorno-Karabakh, that are described in this publication. Although in the case of Nagorno-Karabakh it is a conflict that took place already in 2020, while the conflict in Ukraine started in early 2022, there is a clear parallel in both of these events with the escalation of security problems, which have a direct impact on the strategic context of the operating environment the Armed Forces of the Czech Republic can be deployed in.

The disintegration of the Soviet Union in December 1991 disrupted the bipolar division of power and affected the international security environment. Many conflicts, which had been suppressed by the superpowers' power involvement before, broke out mainly in the less developed parts of Africa and Asia. With the collapse of the bipolar system, there was a rapid increase in national conflicts, where state and non-state actors faced each other and also the so-called non-state conflicts, where two non-state actors fought each other without any government involvement, became widespread. The number of interstate conflicts, where two opposing governments fight each other, has sharply reduced to several units over the last thirty years. This is all the more surprising because in the last two years, there have been two inter-state conflicts in the relative vicinity of the Czech Republic. The first one of them is the conflict over Nagorno-Karabakh, which took place in 2020. The second one is the ongoing war in Ukraine.

The conflicts in Ukraine and Nagorno-Karabakh have several common features. Both of these conflicts can be described as interstate wars, where two state actors, in both cases represented by their national armies, face each other. Therefore, in the case of Nagorno-Karabakh, the primary actors in the conflict are the Armenian and Azerbaijani governments, represented in the field by their respective armies. In the case of the war in Ukraine, the primary actors in the conflict are the governments and the armies of the Russian Federation and Ukraine. Both conflicts involve a number of secondary actors who, primarily through financial, technical and logistic support, have influenced or are influencing individual parties in the conflicts. The secondary actors in the Nagorno-Karabakh conflict include the Republic of Türkiye, Israel and the Russian Federation, while Belarus, the EU countries and NATO can be included among the secondary actors in the conflict in Ukraine. The specificity of the conflict in Ukraine is the fact that the armies of the self-proclaimed Donetsk and Luhansk People's Republics, i.e., separatist groups, are also involved in the fighting, and may also be considered primary actors of the conflict. The war in Nagorno-Karabakh is sometimes referred to as the Second Nagorno-Karabakh War, as there was already an interstate war between Armenia and Azerbaijan in the region of Karabakh between 1988 and 1994.⁶ The second war over Nagorno-Karabakh took place from September to November 2020, being a much shorter conflict. However, in terms of intensity, it can be described as a high intensity conflict, as the number of victims in the conflict exceeded 7000.⁷

The Nagorno-Karabakh region itself is a mountainous region located between Armenia and Azerbaijan. From the point of view of the cause, the conflict can be described as an inter-ethnic dispute over control between the two nations. The area has a cultural-historical significance for both nations, and therefore, with some exaggeration, this dispute is sometimes compared to the dispute between Arabs and Jews about Jerusalem. In general,

⁶ ŠMÍD, Tomáš, and Vladimír VAŽURA. *Etnické konflikty v postkomunistickém prostoru*. Brno: Centrum pro studium demokracie a kultury, 2007.

⁷ The Uppsala Conflict Data Program (UCDP), online edition, Uppsala, 2022. Available from: <https://ucdp.uu.se/conflict/388>

it can be said that it is a conflict of values. By contrast, the war in Ukraine began with a large-scale invasion of the territory of an independent and sovereign state. The main representatives of the Russian Federation described this invasion in the media as a so-called peacekeeping operation and declared the pursuit of denazification, demilitarization and the creation of a neutral Ukrainian state without direct ties to NATO or the EU as the main reasons for their aggression.⁸ Based on the public Russian proclamations, it can be concluded that the leading Russian political representation wants to influence the internal and external political orientation of the Ukrainian state. In general terms, the classification of the causes for the conflict can thus be described as the so-called power conflict, which, unlike the Nagorno-Karabakh conflict, falls into the category of a conflict of interests.

The conflict in Nagorno-Karabakh began on 27 September 2020 with the disruption of the so-called Line of Contact, i.e., the zone that should separate the Armenian and Azerbaijani armed forces according to the Bishkek Protocol of 1994.⁹ From 1994 until 2020, the conflict could be described as a frozen conflict, which was not resolved by a peace agreement and occasionally escalated into violence in the area. In 2020, the conflict thawed and the fighting started again. On the very first day of the conflict, mobilization and curfew for the civilian population were announced, followed by the deployment of heavy artillery, drones and air force in order to expand territorial gains. It is not clear who initiated the fighting, both sides blamed each other for unleashing the conflict, but the professional community often recognizes Azerbaijan as the culprit, as it displayed an increasingly lower willingness to conduct a peaceful dialogue while rapidly adding up its armament expenses.¹⁰ During the fighting, Armenian troops relied on the knowledge of the mountainous terrain and occupation of elevated positions and bunkers by artillery, while Azerbaijani troops relied mainly on the air force and technological superiority that they had achieved thanks to the extensive assistance of the Republic of Türkiye. With the help of Turkish unmanned aerial vehicles Bayraktar TB2, Azerbaijani troops quickly managed to destroy the Armenian air defence systems and subsequently took control of the airspace with Turkish F-16 and Azerbaijani Mig-29 fighters. It was also crucial that the Russian Federation did not engage physically in the conflict and rather assumed the role of a mediator. In addition, this war was characterized by widespread disinformation, mainly related to the losses of the opponent, propaganda use of social platforms, involvement of mercenaries from Syria on the Azerbaijani side, or the use of state-of-the-art combat technology. The whole conflict ended when Azerbaijani troops conquered Shushi, the historical centre of Karabakh. This was followed by a two-day peace negotiation, the deployment of Russian peacekeeping forces in the area, and the division of the territory based on the conquered territorial gains. Armenia remained in control of most of the territory of Nagorno-Karabakh, however, Azerbaijan acquired new territories mainly along the border with Iran.¹¹

⁸ BBC. Why has Russia invaded Ukraine and what does Putin want? online edition, 2022. Available from: <https://www.bbc.com/news/world-europe-56720589>

⁹ LUCHTERHANDT, Otto. *Learning from Georgia: A Non-Use-of-Force Treaty for Nagorno Karabakh*. London: Palgrave Macmillan, 2013.

¹⁰ STRAKES, Jason E. *The Second Nagorno-Karabakh War in a Global South Perspective*. Washington: Eurasian Ponnars, 2021.

¹¹ INTERNATIONAL CRISIS GROUP. *The Nagorno-Karabakh Conflict: A Visual Explainer*. Online edition, 2022. Available from: <https://www.crisisgroup.org/content/nagorno-karabakh-conflict-visual-explainer>

The conflict in Ukraine began with the Russian invasion on 24 February 2022.¹² The conflict itself was preceded by the Ukrainian internal political crisis in 2014 and the subsequent national war with separatist groups in the Donbas region, which lasted since 2014 and is also often described as a frozen conflict. The Russian Federation started to gather hundreds of thousands of soldiers and military equipment at the border of Ukraine as early as mid-2021. However, Russian political leaders publicly rejected that these movements should be of any nature other than training.¹³ Subsequently, in February 2022, the independence of two self-proclaimed republics in the Donbas region was recognized and the State Duma approved the use of armed forces abroad. Russian troops advanced from three directions: Russia, Belarus, and Crimea. The separatist troops of the Donetsk and Luhansk People's Republics joined them, too. The Russian strategy was to destroy the Ukrainian air defence systems, military and critical infrastructure with the help of ballistic missiles and air force. Subsequently, large cities incl. Kharkiv, Kyiv and Kherson were surrounded. However, the conquest of most large cities did not succeed even after more than a month of fighting. Ukraine responded to these attacks by declaring a state of war and general mobilization. Rapid financial and technical assistance from the EU and NATO countries was also crucial. The Russian Federation failed to destroy all Ukrainian air defence systems and Ukraine continued to operate in the air mainly thanks to Turkish unmanned aerial vehicles Bayraktar TB2. The activities of the air force can be considered the most critical part of Russia's failure. Regarding naval forces, Russia achieved some major partial successes. In the first days of the war, the Russian navy achieved its goals of establishing maritime control in the northern Black Sea.¹⁴ The logistic capabilities of the Russian army were also highly criticized. The conflict itself was accompanied by cyberattacks on both sides, but it could be assumed that these would be used to a large extent.

¹² BBC. *Ukraine war in maps: Tracking the Russian invasion*. Online edition, 2022. Available from: <https://www.bbc.com/news/world-europe-60506682>

¹³ NEW YORK TIMES. *Tracking the Russian Invasion in Ukraine*. Online edition, 2022. Available from: <https://www.nytimes.com/interactive/2022/world/europe/ukraine-maps.html>

¹⁴ SPIŠÁK, Ján, ŠPOK, Tomáš, KONEČNÁ, Lucie. *Vojensko-strategické a operační souvislosti konfliktu na Ukrajině*. Brno: University of Defence, 2022.

IMPLICATIONS FOR THE ARMED FORCES OF THE CZECH REPUBLIC

Typical features of the operating environment will continue to involve elements of chaos, uncertainty, unpredictability, disinformation, deception and asymmetry with significant implications for the way of employing the Armed Forces of the Czech Republic (AF CR). Future operations will aim to achieve a stable security environment rather than a mere victory over the enemy in the form of their neutralization or physical liquidation.

General requirements for the AF CR

The AF CR must be able to operate independently and jointly with partners in the entire spectrum of operations. Critical prerequisites for a successful operation will be managed information, speed of deployment, effective deployment and long-term sustainability in the area of operation. The ability to adapt quickly to unexpected developments in the operation theatre and to interact with non-military actors will be important. The tasks that will be performed by the AF CR will require a high degree of multifunctionality. Their action will also permanently require non-military special support skills in the fields of engineering, communications, radiological, biological and chemical defence, special operations, civil-military cooperation, logistics and medical support. The AF CR will be a permanently indispensable tool for ensuring the defence of the state and the security of its citizens.

A wide range of potential tasks and roles. The multidimensional concept of security requires that the AF CR, alone or together with their allies, contribute to a credible deterrence and are adequately prepared to conduct both conventional combat and non-traditional forms of warfare. They will have to cope with a variety of tasks, assist in managing crisis situations both globally and on domestic territory, and be able to contribute to maintaining, strengthening and building peace, providing disaster relief also in humanitarian operations.

Balance of forces. A permanent requirement for the AF CR will be their ability to fulfil tasks of both territorial defence and expeditionary nature within the common defence in any space, terrain or climate and also in a different cultural and religious environment. At the same time, a larger number of smaller long-term operations may be conducted at different distances from the territory of the Czech Republic.

Accuracy and efficiency. Accurate and effective use of armed forces is important not only from the point of view of eliminating the opponent, but also in terms of limiting the negative attitudes of the civilian population of the country that the conflict takes place in. The requirements for the legitimacy and legality of the use of force shall remain in place. When conducting operations, even accidental or unintended collateral damage is ethically unacceptable.

Multifunctionality of the armed forces and versatility of their use. The tasks that will be performed by the Armed Forces of the Czech Republic require a high degree of multifunctionality. This implies the need to develop capabilities suitable for the compilation of modular structures of forces according to the specific environmental conditions and tasks to be performed.

Timeliness of response and short reaction time. Effective intelligence will enable anticipating the emergence of a crisis situation and creating conditions for its prevention, timely stopping its escalation, or sufficient preparation of forces to conduct operations. Timely deployment of forces in the early stages of the crisis situation will require a much higher level of their readiness and preparedness as well as the elimination of unwanted

obstacles limiting the speed of deployment (political decision-making, transport, freedom of movement and operation in global spaces).

A multidimensional battlefield. The reality of the development of the operating environment will fundamentally affect the manner of conducting combat activities. Military operations will be conducted in all dimensions. Omnipresent non-linearity will prevail, requiring the deployment of standalone small mobile units over a large area. The importance of high-precision weapons systems and the deployment of autonomous unmanned systems will increase. Having an overview of the operational situation in real time will be critical. Conducting large-scale defensive or offensive activities of larger groupings in a linear way will become less frequent. Dominant is the requirement for simultaneous operation of well-equipped and well-armed small groups of fighters.

All kinds of manoeuvres and combat activities (ambush, outflanking, leaks and forays, etc.) will become more important. There will be growing importance of irregular activities performed by special forces and deployment of battalions and platoons to carry out the operation and to subsequently disperse in the area of operation.

The conduct of combat activities will depend heavily on the sophistication of data communication technology and systems capable of acquiring, processing and transferring information, materials and analyses in real time. The planning and conduct of operations will remain cyclical in the long term, requiring a comprehensive approach with the need for coordination between all elements of the joint forces and the involvement of international, governmental and non-governmental bodies and organizations.

The transfer of responsibility to the tactical level and further to the lowest commanders within this level will be critical in the operation. In view of the expected use of a large number of small units operating in a large area, it can be assumed that these units will perform different types of activities within one operation at the same time; in one area they can fight with high intensity and in another, at the same time, they will perform stabilization or reinsurance operations, or humanitarian aid tasks. This will result in the complexity in command and control at the various stages of the operation.

The subsequent use of high precision weapon systems will be highly efficient as long as accurate evidence for the selective identification of targets is achieved. This will be reflected mainly in the built-up areas; the effort to reduce collateral damage and losses to property and the lives of the civilian population will be imperative. At this stage of operations, the requirement to use combat forces will be reduced and the demand for combat security and support forces, or 'specialized' police forces or provincial reconstruction teams will increase.

After the end of the dominant phases of the conflict, the armed forces will participate in providing post-war (post-conflict) arrangement in the concerned area to ensure a gradual transition from the post-war state to normal civilian management. In the period between the termination of combat operations and the re-establishment of civilian control, many civilian tasks will require the support of military forces. The requirement of interoperability and the adaptation of the general principles of tactics and conducting combat activity in the framework of the deployment of national troops and allied forces will remain necessary.

Conceptual framework for the creation and development of military capabilities

The conceptual framework for the creation and development of military capabilities must meet the following conditions:¹⁵

- Mutual coordination of activities (*Synergy*), representing not only the interconnection of activities of various types of forces (of combined military nature), but also determining the level of coordination between military and non-military elements in the operation.
- Mobility (*Agility*), including not only the speed of the manoeuvre and reaction, but also the ability to quickly reconfigure forces in response to a newly occurring situation. NATO, the EU, the UN, or any other ad-hoc coalition must show sufficient flexibility and speed in coordinating a combined military grouping of ground, air and navy components. This condition must be also sufficiently visible within the command structures, including intelligence and survey components (*C3ISR – Command, Control, Communication, Intelligence, Surveillance, Reconnaissance*) and needs to be sufficiently implemented in cooperation with the civilian and non-governmental actors participating in the operation.
- *Selectivity* represents the ability to make the correct choice of means at a given stage of the operation corresponding to the desired objective of the operation. In essence, it is a choice of kinetic and non-kinetic systems aimed at achieving lethal (deadly) or non-lethal (not deadly) effects. This aspect is also justified in view of the need to minimize collateral damage to the civilian population and infrastructure.
- *Sustainability* includes elements and forms of logistic and health security, which, just like the whole task force, must take a multinational form.

The design of such a conceptual framework has been confirmed by analyses of the development of the conflict in Ukraine so far as well as the conflict in Nagorno-Karabakh. The results of the analysis of both conflicts confirm the need for an effective system of command and control of the deployed units at the operation theatre to coordinate their activities (*Synergy*) and the need for effective logistical support of the deployed units (*Sustainability*), which has also proved to be a necessary condition for the successful conduct of the operation and the achievement of the planned goal.

The above aspects are also important due to the fact that the armed forces of the NATO and EU member states should be able to engage in operations of a combined (*Combined*) and all-military (*Joint*) nature, which, in addition, in terms of its complexity (*Comprehensive Operations*) requires cooperation with civilian or non-military and non-governmental organizations and units involved in the operation. The overall diversity of threats may impose the need for the ability to conduct operations abroad over a considerable distance, in order to effectively eliminate threats directly at their beginnings. In addition, national armed forces will need to preserve those capabilities that are essential to meet national security and defence requirements.

The content definition of requirements for development of capabilities is the result of elaboration of basic national conceptual strategic documents, incl. Security Strategy of the Czech Republic, Defence Strategy of the Czech Republic, Long-Term Outlook for Defence, Concept of Building of the Czech Army, annual evaluation of the state of securing defence of the Czech Republic and similar NATO and EU assessments focused on

¹⁵ *An Initial Long-Term Vision for European Defence Capability and Capacity Needs*, approved by the EU Council on 3 October 2006

the state of capabilities and plans of their development. The conceptual framework for the building and development of military capabilities builds on 7 main areas of military capabilities that are defined in the defence planning process, both under NATO and the EU¹⁶, as:

- *Prepare*;
- *Protect*;
- *Engage*;
- *Project*;
- *Sustain*;
- *Inform*;
- *Consult, Command and Control (C3)*.

In the following subchapters, the theoretical framework of capabilities is partially applied to the aforementioned conflicts in Ukraine and Nagorno-Karabakh.

Prepare

While the current development of the conflict in Ukraine, similarly to the conflict in Nagorno-Karabakh, does not explicitly confirm the fact that future operations will be characterized by the co-existence of military and non-military elements at the operation theatre, it cannot be excluded that, compared to the past, a much wider field of action will occur for non-military actors in the operation, including governmental and non-governmental organizations, which will play a crucial role in the successful completion of the operation and the achievement of its planned political goal.

In the light of all of the above, it should be borne in mind that the implementation of military operations will not be possible without prior extensive preparation in the fields of operation of the political, economic, social, cultural and other aspects of the operating environment concerned, which may, of course, lead to deterioration in the position of national components responsible for the planning, preparation and deployment of the respective national element in the operation. Currently, adaptability and flexibility are becoming key factors for effective deployment of units in any operation. Operations that will be conducted in the near and distant future will require planning, preparation and maintenance of a sufficient, effective and timely military presence in the operation theatre. This fact will require the ability to generate forces through an appropriately set system of planning forces and resources, which are primarily designed for operational deployment in multinational operations outside the territory of the state; this also entails an increased emphasis on mutual coordination of the activities of individual types of forces and services, i.e., the combined nature of cooperation, and also on modularity and selectivity in the allocation of appropriate units, which constitutes the ability to properly choose resources at a given stage of the operation corresponding to the required objective of the operation.

The *Prepare* area of capabilities will therefore primarily focus on the need to ensure, prepare and maintain sufficient and effective staffing of forces in real time, including the ability to build forces, through adequate and continually increasing readiness of forces to defend the Czech Republic against an external attack. The performance in this area of

¹⁶ SHAPE/ACT (ed.). *Bi-SC Capability Hierarchy*. SH/PLANS/JCAP/FCP/15-310118. Mons, Belgium, 2015.

competence must then be consistent with the focus on the development of flexibility, preparedness, mobility and interoperability of forces. In the scope of the requirements of NATO, the EU and other commitments of the Czech Republic, it is necessary to achieve the ability to participate effectively in the entire spectrum of possible missions, operations and activities, from large-scale collective defence with high intensity combat activities to a wide range of tasks within stabilization operations of potentially small scale but long duration (anti-terrorist operations, training, peacekeeping, etc.).

Protect

The experience and results of the analysis of the conflicts in Ukraine and Nagorno-Karabakh clearly demonstrate the importance of effective protection of the forces, i.e., manpower and material, for successful fulfilment of the operational objective. Thus, it becomes a critical requirement to minimize the vulnerability of personnel, equipment, material and infrastructure as well as to minimize the risk in any of the operational activities of the deployed units. The key capability of all deployed units of the AF CR must be the ability to remove or reduce the effectiveness of hostile chemical, biological, radiological or nuclear threats as well as vulnerability to spills of toxic industrial materials and to prevent the proliferation and use of weapons of mass destruction.

Achieving the required level in this area will concentrate on the ability to minimize, through a common multinational and holistic approach to protection of forces, the vulnerability of personnel, equipment, material and activities to any threat and in all situations, including the effects of WMD. This includes communication lines, supply lines and cyberspace during the mission or operation. From the point of view of developing the ability to eliminate or reduce the effectiveness of hostilities, the fundamental emphasis will be placed on the relevant types of threats produced by a potential opponent, especially within the terrestrial, aerial and IT/cyberspace domains. Due to the involvement of the AF CR in operations of a complex nature, the focus will also be on the development of capabilities to monitor threats created in the maritime and outer space domains.

Engage

In particular, the development of the operational situation of the Ukrainian-Russian war clearly indicates that it is important to take over and maintain a strategic initiative, for which the manoeuvre of task forces and effectively conducted fire are decisive factors in order to achieve the superiority and thus also the set operational objective. The development of the conflict in Ukraine also proved that once a party loses its freedom to manoeuvre, it will also lose momentum, even if it tries to acquire it using rocket units, artillery and heavy equipment. This way of conducting conflict entails high losses in terms of material and manpower as well as destruction of infrastructure.

Operations conducted in the future will increasingly require the rapid deployment of forces, on land, in the air or at sea, with combat in urban areas becoming a specific form of future operations. Likewise, the combined military nature of the forces will require an effective security and supply system. The nature of the new operations will require that troops have both weapons designed to physically destroy enemy forces as well as to eliminate them with non-lethal weapons systems. Future operations will require an accurate and selective form of searching for and targeting targets, minimizing collateral damage in their liquidation or neutralization, especially in developed urban areas. The accompanying phenomenon will be the effort to eliminate negative impacts on the environment in the areas of operational deployment. It is clear that this aspect, together

with the development of the operation and its impact on the overall socio-political development of the region, will be under a constant supervision of media.

The capabilities in the *Engage* area are related to operational tasks that directly contribute to the achievement of partial objectives in the context of the implementation of the planned political and military-strategic objectives of the entire operation. This area includes all capabilities necessary to defeat the enemy in the course of the combat activity as well as other capabilities required for further operating activities, such as the extraction of allied units, evacuation of non-combatants, prevention of an outbreak of an armed conflict, or participation in stabilization and reconstruction operations associated with professional-military advisory activities, training of local security forces and monitoring of the security situation in the area of operation. In relation to the AF CR, this means the availability of capabilities to perform tasks that directly contribute to the achievement of the defence of the Czech Republic, or the objectives of the operation in the context of crisis management, including all capabilities needed to defeat the enemy, if necessary, as well as other capabilities, such as those that are required to evacuate non-combatants, prevent the use of force by the enemy, train local security forces and participate in stabilization and reconstruction.

The implementation of this core area of capabilities will include the acquisition of the ability of joint manoeuvring to obtain a positional advantage in relation to the enemy as well as the ability to use both lethal and non-lethal joint firepower in a coordinated and effective manner in order to suppress, degrade and destroy enemy forces, equipment and infrastructure in all dimensions of the operational area, while avoiding unwanted side effects. The deployed combat units will be required to be able to use both kinetic and non-kinetic/non-lethal firepower in a coordinated and effective manner in order to neutralize the enemy living force and destroy equipment and infrastructure in all dimensions of the operational space, which in its effect will enable decisive manoeuvring and, at the same time, eliminating the undesirable effect of the enemy forces. The development of existing and future threats also requires the appropriate development and improvement of weapons systems for the given types of forces, while the key factor will be the implementation of operational and technical standards.

In addition to the requirements for effective manoeuvring by forces and resources as well as achieving the desired effect of firepower, particular emphasis will be placed on the ability to shape and influence opinions and the value system. This includes, inter alia, the ability to build trust with the host country through understanding and support of strategic planning in order to prevent the host country's failure or the ability to implement and coordinate appropriate use of communication activities and capabilities such as public diplomacy, public affairs, information and psychological operations in line with other military actions in support of missions, operations and other actions.

The ability to manoeuvre effectively will be required in all operating dimensions, blending across all levels across the tactical to strategic scale. Emphasis will be placed on conducting joint coordinated manoeuvring using the capabilities of various types of forces and services in order to eliminate the coherence of the enemy and thus to obtain a strategic momentum. The need for increased manoeuvring efficiency will mainly concern ground forces, which will be expected to maintain free access and secure free movement in areas of interest, while maintaining the principle of economy of deployed forces. On the other hand, the requirement for the most efficient manoeuvring with a minimum potential of deployed forces will require an increased level of logistic support as well as improved ability to communicate and provide information even at the lowest levels of command and control.

A specific role in the common operating environment will further consist in the involvement of special forces, which will play a decisive role in achieving a positional advantage for their own forces or forces of the host country against a potential opponent. Units deployed in operations must be able to achieve and maintain superiority in cyberspace as cyberspace will become the primary communication and information domain throughout the course of preparation and conduct of the operation as well as after its completion. The continued increase in enemy activities and thus threats in cyberspace will have to be eliminated by an appropriate concept, which will determine the creation and implementation of appropriate standardized operational procedures (SOPs) for the successful conduct of the units' activities in the area of operation. Operating in cyberspace will also require a thoughtful and well-planned communication strategy to maximize the positive impact on the target part of the public. In addition, due to the growing importance of the influence of cognitive domains, it will be necessary to plan and perform activities in the field of mass communication, such as social media, in order to prevent possible disinformation influences of the opponent. Sensory, i.e., cognitive perception and assessment of the activity of the armed forces in the area of operation is and will continue to be an integral part of the inform function, emphasizing the importance of the cognitive aspects of future operations. The cognitive domain represents a dimension that must continue to be used to manoeuvre and gain advantage over the adversary. This activity is not only limited to the production and distribution of news or the use of media, but it also concerns the ways in which the effort of the armed forces will be interpreted not only by the local population, but also in the media.

Project

The ability to quickly transport and deploy troops in the area of the operation proved to be a key moment for conducting the entire operation, both in the case of the conflict in Ukraine and the conflict in Nagorno-Karabakh. The problems with the deployment of forces in the area of the operation, manifested in the Russian army in the first days after the invasion, as well as the problems related to the second part of the operation, in which the intention was to bring the east of the country under military control, are a clear proof of this.

Therefore, if the armed forces are expected to effectively operate in any setting outside the national territory, they must have the means to ensure the strategic transport of forces and resources, especially air transport, and must also have the means to ensure the fastest possible reception, concentration and dispatch of material and units (*RSOM – Reception, Staging and Onward Movement*).

In terms of the preparation of the operation, the armed forces will face increased requirements to provide technical and organizational support for rapid and effective concentration in the assembly areas and subsequent loading into the means of transport, i.e., ships, vehicles, aircraft. Requirements for the *A2/AD (Anti Access/Area Denial)* strategy emphasize the increased likelihood of movement in an unfavourable environment partly controlled by opposing forces. This will result in an increasing need to transport and use own forces and resources to enable access to the area and to ensure safe movement within this area. This increases demands for securing the movement and manoeuvring, providing full scale infrastructure, especially supply routes and communication and information infrastructure, ensuring the organization of the command and control system at the required level according to the specified standards. In addition, the deployed units must have teams for cooperation with local authorities and NGO components to provide technical and material support (power generation, securing local drinking water resources, etc.).

Although logistic support activities will often be carried out together with the host country, deployed units of the AF CR must be able to carry out independent and autonomous logistic manoeuvring toward the designated RSOM area. In the area of passage of all or part of the allied forces after formation, units must possess the capabilities to carry out standardized and automated planning and implementation of the receipt of material in the required quantity and quality, its internal handling and redistribution, further transfer in the area of operation and subsequent integration into the task force assembly based on the plan of the operation. This activity will require full compatibility of the classified means of communication and information used as well as use of standardized means for planning and operative management of logistic support in multinational operations.

In terms of preparation and conduct of future operations and in terms of providing the strategic flexibility, the ability to build and maintain adequate accommodation and logistic infrastructure in the area of operation and to ensure communication and transport links with the required logistic and supply centres, either on our own national territory or in the vicinity of the area of operation, will be among the key factors. For this reason, it is also necessary to ensure the ability to build, maintain, operate and protect the respective port and airport infrastructure and facilities (*SPOD - Sea Port of Debarkation* and *APOD - Air Port of Debarkation*).

Sustain

The current operating environment reflects, in a significant way, the high pace of technological development. Thanks to modern technologies, the course of operations on today's battlefield can be more dynamic while, at the same time, being conducted over longer distances. At the same time, these attributes place increased demands on the sustainability of troops and overall logistic support. The current armed conflicts confirm the need and importance of robust and flexible logistics for the general success of operations. It is the balance of robustness of logistics and its flexibility that can be assessed on the basis of today's knowledge as one of the most important principles of logistics security.

In the context of operational logistics, flexibility is defined by the ability of the logistics system to adapt and respond effectively to changes in operational conditions and combat tasks. Logistics enables to quickly update the allocation of resources in the operational logistics system and effectively change the logistic flows according to new requirements. This means that logistics is flexible if, at a given stage of the operation, it can potentially support as many variants of future operations as possible. There are two types of flexibility - internal or technical flexibility and structural flexibility.¹⁷ Internal flexibility increases when logistic means are more versatile and techniques and procedures are more general and less mission-specific. Structural flexibility of the logistics system is embedded in its design and operating procedures. The logistics system is structurally flexible if it is able to respond to changes quickly and efficiently. The flexibility of logistic solutions, and above all the applied technical and structural flexibility, thus enables to respond operationally to progressive changes in the situation in terms of stock flow and replenishment by technology, material or logistics personnel.

The robustness of the logistics system consists in increasing the system's resistance to overloading or disruption. In the context of the operating environment, it is mainly

¹⁷ KRESS, Mosche. *Operational Logistics: The Art and Science of Sustaining Military Operations*. ISBN 978-1-4615-1085-7, Kluwer Academic Publishers, New York, 2002, p. 62.

disturbance by the enemy's action or other possible agents such as weather, terrain or obstacles. The robust logistics system is thus characterized by high durability, efficiency and speed. A possible disadvantage of a robust logistics system may consist in an undesirable reduction in flexibility, or vice versa, an increase in requirements for logistic resources. The fact that logistics is a highly sensitive part of the forces on the battlefield was confirmed several times in the past. In the conflict between Russia and Ukraine, it turned out that logistics without the protection of the forces is easily vulnerable, while consistent defence and protection of logistics convoys, logistics hubs and resources clearly contributes indirectly to the robustness of the entire logistics system.

As recent armed conflicts have shown, the appropriate balance between flexibility and robustness of the logistics system is the key to successful operations in the current operating environment. The continuous flow of material and logistic services must closely observe the situation on the battlefield, while remaining resistant to sudden changes and interruptions. Therefore, logistics must always be 'tailor-made' and use state-of-the-art knowledge for its support as much as possible, whether it is information technology or automated delivery systems, and just like any other types of troops, it must be sufficiently resistant to the action of the opponent in cyberspace and, last but not least, provide a comprehensive picture of the state of the logistics system in real time.

Inform

Rapid development of information technologies and interest in alternative Internet news, together with the popularity of social networks, have resulted in an increasing impact on the operating environment. Public opinion, especially in Western countries, has an increasing influence on the conduct of these countries' operations. Through media, influence operations are generally carried out to influence the attitudes and thinking of potential opponents. Information operations are part of strategic communication, for which a range of information activities are used. Strategic communication is more globally focused, while information operation is aimed at a clearly defined and approved audience. For the coordination of information operations and strategic communication, the annexes to the operating plans for strategic communication and for information operations, or the so-called frameworks for strategic communication, where the operation takes place over the long term, are used.

The aim of information operations is to protect the freedom to operate in the information environment, to influence approved target groups in military operations, and to act against the command and control, decision-making and propaganda of the opponent. They focus on the will, understanding and capabilities of the opponent. Compared to the previous focus on destroying the capabilities of the opponent, information operations today focus directly on influencing the will, understanding and those skills that support the understanding or implementation.

Information operations are also part of the war in Ukraine, aimed at winning the public opinion, both Ukrainian and Russian, as well as of the world, which is generally the primary task of all involved actors in the war in the information domain.

In its information campaign, Russia is trying to support the achievement of its political and strategic objectives. According to the available published information, it can be said that it is doing well with its domestic audience. In the West, this campaign is not entirely successful. Defence against these influence operations also involves a kind of restrictions, which may carry certain elements of censorship, but also the overloading of media space with one's own interpretation of reality.

The information war is part of a hybrid war between Russia and NATO on the brink of an open conflict. Hybrid warfare takes place in all spheres, from political to economic to military, with NATO weapons in the hands of alliance-trained Ukrainian soldiers. There is no known and accurately described border how far NATO can go in its assistance to avoid an open war between NATO and Russia. The sensitivity of this assistance is confirmed by the US consideration and approval of weapons that can or cannot be sent to help the Ukrainian army. The intelligence of individual states, which is provided to the Ukrainian army, also significantly helps in the orientation on the battlefield and planning of operations.

The basic input for information (influence) operations planners is the requirement: “tell me what you want the target population to think and I will arrange it”. Based on the knowledge of the population’s mindset, moods and expectations, an information (influence) operation strategy is prepared. The results of information operations are continuously evaluated and future reports are corrected based on the conclusions of these evaluations. In the event that the influence or the impact of some repetitive information is reduced, additional influencing information is prepared to deepen the required thinking. As a rule, it includes an increasing number of victims, possibly even children, especially inhumane treatment and other similar reports, accompanied by images that usually appear more convincing.

Strategic communication is one of the most important tools to combat the influence of the opponent. It is a complex system consisting of civilian and military parts. The military part is significantly limited by the impossibility of disclosing classified information. A separate chapter concerns information operations as a tool designed to directly affect the opponent, including deception and other features.

Information operations will need to focus on the ability to influence decision-makers in the interest of political and military objectives. This can be achieved, along with other methods (corruption, blackmail, etc.), by adjusting the information they are supposed to receive. In addition to a thorough knowledge of these persons, it will be necessary to focus on the knowledge of processes related to information management, command and control systems, and processes directed against the intelligence of the opponent.

Warfare is based on deception, whether it be armed conflict or hybrid warfare. Since hybrid warfare primarily uses information activities, it is necessary to focus especially on strengthening information and operational security, measures against and reduction of the impact of enemy propaganda. Other tools that need to be developed are psychological operations, electronic warfare and cyber warfare.

In the field of intelligence, the goal nowadays is not to obtain documents with top secret information, but to understand the opponent’s way of thinking. Using the knowledge of decision-makers, decision-making systems, their setup and principles is the key to the success of influence operations. The ability to map public opinion and possibilities to influence it also lead to changes in decisions made by decision-makers.

The goal of information operations is not to achieve a specific state, rather it is a permanent activity with developing goals. This implies the need to build the ability to conduct information operations to weaken or to influence, but not necessarily to fully defeat the opponent, preferably in such a way that the opponents do not initially know that they have been attacked.

Consult, Command and Control (C3)

One of the key prerequisites for the field of command and control is that it should be a basic element in ensuring an effective decision-making process as well as a flexible

response to new security threats.¹⁸ If we look at the functionality and effectiveness of this premise in the case of the Ukrainian conflict, there is a fairly clear difference in the approach between the two main actors. In the case of Ukraine, it is, of course, an effective defence of its own territory, including the preservation of territorial integrity. This is also adapted to the system of communication, penetration of signals and orders, even though some combat activities are in the form of guerrilla resistance or militia; national pride and awareness, however, do not allow Ukrainians to step down from the set level. Ukraine also relies on strong cooperation with NATO and Western countries; this is also adjusted by the system of preparation of their own leaders at all levels and their way of applying methods and forms of command and control.

For the Russian Federation, this is strictly an ideology and a repeated attempt at domination of people and territory, which was historically linked to today's Russia, but has long preferred its own independence and sovereignty. The Russian system is more or less based on the mass approach and the ability to accumulate a large number of forces and resources. It also depends on the repetition of state-sponsored phrases ('denazification and demilitarization of Ukraine'), which are also pounded into the heads of commanders at all levels through propaganda. The Russian problems with connection, and therefore with the functioning of the command and control system, are largely known.

The military supreme command apparently faces lack of relevant information not only about the movements of Ukrainian troops, but also about the situation of its own forces. In many cases, Russian generals are forced to command personally at the front line. The most striking in this respect was the information about the presence of the Chief of the General Staff of the Armed Forces of the Russian Federation, General Gerasimov, in the first line of the battle front. In this way, Russia probably tried to motivate leading commanders, who were struggling with poor morale of the troops and the failures of their own campaign. In such a situation, it is very difficult for the Russian forces to maintain a centralized command and achieve a decisive advantage on the battlefield.

From the point of view of the AF CR, the C3 area is constantly evolving. A fundamental event for command and control was the change in the organizational structure, in particular, the restoration of its operating level. This has a key role in the preparation, planning and management of operations. Together with the decision on the deployment of forces and resources at the political-military strategic level, the operations commander acts as a fundamental facilitator, who constantly monitors the situation together with his staff, evaluates it and, based on the changing security environment, ensures effective command and control of designated units and groups.¹⁹

In the context of the Russian-Ukrainian conflict, this was particularly evident in the deployment of the national task force in Slovakia as part of the *enhanced Vigilance Activities (eVA)*. These and similar activities clearly indicate that the AF CR must be significantly more effective in implementing, in particular, Alliance's communication and information systems and means, such as Federated Mission Networking (*FMN*).

¹⁸ *Doktrína Armády České republiky*. 4th ed. Praha: Ministerstvo obrany České republiky – Odbor komunikace a propagace, 2019, p. 64.

¹⁹ *Koncepce výstavby Armády České republiky 2030*. Praha: Ministerstvo obrany ČR - VHÚ, 2019, p. 55.

CONCLUSION

The operating environment is not static; in recent years, it has been affected by a number of unforeseeable and fundamental events. The COVID-19 pandemic also affected the military sector, as defence spending was reduced in several countries in favour of other sectors, but also the functionality of the existing international system was questioned.²⁰ There were two interstate conflicts in the more distant, but also in the immediate vicinity of the Czech Republic, which can be considered as very intense wars. In both cases, one of the active actors in the conflict is Russia, which was indirectly involved in the war in Nagorno-Karabakh and which is considered to be the aggressor and primary actor of the conflict in Ukraine. It is clear from recent events that Russia is revolutionizing its approaches to warfare. So far, we assumed that Russia was trying to win in the European space 'without a fight', using hybrid warfare, propaganda, or some form of assistance to certain actors in conflicts, without its own direct physical involvement in the fighting. However, the last years have brought a completely new turn, when the Russian troops became involved in Syria first and then the invasion of Ukraine followed. The armed forces face increasingly challenging issues in a highly variable or unpredictable form.

Current events have brought attention to the fact that, despite selective actions with the concentration of forces being still relevant and highly important, the massive direct deployment of military personnel and the clash of two national armies is also present in the 21st century and the armed forces must be prepared not only for various types of threats, but also for facing state and non-state opponents. It is still true that conflicts are characterized by the multiplicity of domains where forms of force manoeuvring in several domains of the operating environment are important, while the importance of the fifth domain - cyberspace - is increasing.

Modern technologies are a very important aspect of current and future wars. In the conflicts in Ukraine and Nagorno-Karabakh, unmanned aerial vehicles used for reconnaissance and monitoring activities as well as for the destruction of military equipment and manpower proved to be very important. Their use in confined, often urban terrain appears to be very effective. The technological superiority itself, involving the use of drones and other autonomous and robotic elements, will be increasingly crucial in the future, not only for gaining air superiority over the enemy, but also for other aspects of fighting.

Critical for the successful operation of the armed forces is managed information, speed of deployment, and long-term sustainability in the area of operation. In terms of the conceptual framework, the key is to ensure a sufficient and effective military presence, effective decision-making processes at the level of command and control, comprehensive intelligence, rapid deployment of forces in all dimensions, effective protection of own forces, effective mobility and deployment of troops, as well as adequate logistic security of operations. Fulfilling this conceptual framework is a fundamental pre-requisite for the success of future deployment of armed forces.

Predicting the future, especially the more distant one, is a complex task, but the global trends in the development of the operating environment, as captured in this document, express the dynamics and shaping of future aspects of society and international developments, including security policy and warfare, also taking into account the

²⁰ US ARMY. *The Operational Environment 2021-2030*. 2021. Available from: <https://oe.tradoc.army.mil/2021/05/26/the-operational-environment-2021-2030-great-power-competition-crisis-and-conflict/>

conflicts in Ukraine and Nagorno-Karabakh. The analysis of the operating environment shows that these trends are inexorable and bring along rapid and often inconvenient changes, which force us to rethink many aspects of strategy, politics and everyday life. The main and most important aspect is to understand and internally embrace the idea that the existing capabilities of the AF CR, the method of their preparation, doctrine, material, but also personnel are probably not sufficient in the short term and are not likely to be sufficient even in the longer term, if they are not revised, reassessed and developed.

With this awareness and understanding of the transformational impact of technology and the increasing speed of human interaction, the analysis of the operating environment shows that individual trends intensify and often proceed faster than human progress. The distance between our own abilities and the effectiveness of our opponents recedes, disappears, or reaches a position where the abilities and technologies of various actors are relatively even and the real advantage is only the ability to handle a number of interconnected processes and activities in all known domains.

For the AF CR, the outcome of their effort in the future will largely depend on the immediate decisions that are made today in the fields of strategy and policy, concepts, innovation, adaptation and the ability to be a valid and fully integrated actor of the security structures that we are a member of. Although the future, as suggested by this paper, is uncertain, the trends we observe prove that the nature of warfare is changing. In order for the AF CR to succeed, it is necessary to learn from this fact.

Operating Environment. Implications for the Building and Development of Capabilities of the Czech Armed Forces 2021-2022.

Authors:

LTC Pavel Crhonek, MSS

Lucie Konečná, Ph.D.

Jan Kovanda (COL ret.)

Zdeněk Petráš (COL ret.), Ph.D.

COL Martin Smejkal

Ján Spišák, Ph.D.

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