OPERATING ENVIRONMENT
IMPLICATIONS FOR THE CAPABILITIES
OF THE CZECH ARMED FORCES 2019

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- Scientific and research activities in the field of security studies, strategic leadership, military art, strategic management and defence planning, carried out for the purposes of strategic level of decision-making, state defence management and the construction of the Czech Armed Forces.
- Preparation of military and civilian experts of the Ministry of Defence and the Armed Forces in professional and career courses (KGŠ, KVD).
- Expert, publishing and popularization activities (among other things, it guarantees the publishing of the magazines *Vojenské rozhledy* and *Obrana a strategie*).

INTRODUCTION

The publication *Operating Environment. Implications for the capabilities of the Czech armed forces 2019* is an update of the version from 2019[1]. Its aim is to provide alternative perspectives on trends in the development of the operational environment, which will have a major impact on the development of the capabilities of the Czech Armed Forces in the perspective of the next 10 to 15 years. The intention of the publication is also to take into account new phenomena that manifested themselves during the year 2019, and thus prepare a common ground for professional discussion in order to set conditions for the conceptual development of the capabilities of the Czech Armed Forces. The trends in the development of the operational environment, as captured in this document, express the shaping of the future aspects of society, international development, security policy, way of warfare and the dynamics thereof.

The publication is based not only on the results of research and analysis of the Centre for Security and Military Strategic Studies - War College, but it uses relevant NATO and EU documents addressing the issue, as well as findings and research outputs from publications from selected countries mapping the current situation and expected development of the operational environment in geographical areas of interest.

The operational environment is characterized as follows:

> *"The operational environment is part of the security environment. It is an area of interest for military and non-military, international, supranational, national, etc. units and other actors in international affairs. The operational environment consists of a set (combination) of factors, conditions, possibilities and influences determining required capabilities and the way the armed forces are used, which, in the end, influence the decision-making process of commanders in planning and conducting military operations."[2]*

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[1] SPIŠÁK, Ján a kol. *Operační prostředí: Implikace pro použití a rozvoj ozbrojených sil ČR 2018.* Brno: Univerzita obrany, 2018. ISBN 978-80-7582-094-5.
[2] 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*".

STRATEGIC CONTEXT

The development of the operational environment will be permanently determined by the development of the security environment, which consistently shows a high degree of instability, uncertainty, complexity and interconnectedness of individual threats. Its significant features remain a significant degree of ambiguity, further deepening globalization and the associated reduced ability to control such complex environment. The security environment has deteriorated recently and the nature of the threats arising from it leads to a significant risk surge for the Western civilization. Some consequences arising from such development of the security environment may conflict with national interests, endanger them and thus become a threat, which the state and its armed forces will have to respond to.

Ensuring stability of the security environment will be based primarily on the premise of participation in crisis management operations abroad led by NATO, the EU, the UN or ad-hoc coalitions. This principle is based on the need to quickly and effectively address the emergence of crisis situations threatening the local security situation, before this local crisis grows into the dimensions of a larger conflict exceeding the borders of the region and possibly affecting the territory of Euro-Atlantic countries.[3]

Respecting the strategic context, the following aspects need to be further emphasized outside the already mentioned areas:

GLOBALIZATION AND GLOBAL SECURITY CHALLENGES

The analysis of the security environment[4] shows that a critical factor that will have a major impact on the development of the operational environment is, in particular, the growing degree of globalization and the increased use of force and violence in international and national politics. This trend includes not only the conduct of armed conflicts, but also economic coercive sanctions, raw material extortion, military threats, and domestic conflicts. One of the consequences of globalization is that conflicts are becoming less predictable.

The source of future conflicts will be the competition for energy and natural resources, regional rivalry, cultural and value conflicts, growing tensions between the wealthy and the poor, and ongoing disputes in various fields and environments. As a result, the armed forces will operate in a wide range of conflicts; regional, national and transnational, including actions against international organized crime and global terrorism. Future crises and conflicts will have both military and civilian aspects, will be characterized by asymmetric and irregular actions involving non-state actors, who will make greater use of hybrid (unrestricted) warfare and be focused on non-traditional targets.[5] In order to

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[3] NATO (ed.). *Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organization*. NATO Public Diplomacy Division, Brusel, Belgie, 2010. Also available from: https://bit.ly/2PxUq8s

[4] DIVIŠOVÁ Vendula a kol. *Bezpečnostní prostředí 2018: implikace pro obrannou politiku a ozbrojené síly ČR*. Brno: Univerzita obrany, 2018. ISBN 978-80-7582-093-8.

[5] EUROPEAN DEFENCE AGENCY (ed.). *An Initial Long Term Vision for European Defence Capability and Capacity Needs*. EDA. Brussels, Belgium, 2006. S. 6-8. Also available from: https://bit.ly/3iiaV4A

resolve conflicts, states will be forced to use the full range of their instruments, ranging from providing basic humanitarian assistance to conducting intensive military operations.

One of the negative consequences of ever-evolving globalization is the interconnection of individual areas of national infrastructure, including critical infrastructure, the functioning of which has a major impact on the state security, economy, public administration and the population's standard of living. The main consequence of continuing globalization is that the disruption of the critical infrastructure or services in one area can affect other connected areas and can also have international impact. Critical infrastructure protection requires the sharing of public administration responsibilities with the private sector, exchange of information between public administration and other relevant agencies, as well as international cooperation.

Tensions rising in various parts of the world may expand in unexpected ways, with negative effects on security, strategic and vital interests, and the overall prosperity of the countries of the Euro-Atlantic area.

> *"The erosion of international organizations, regimes and agreements can further destabilize the global security environment and reduce its predictability. From the point of view of the security of the Czech Republic, the main risk is destabilization in the Middle East with possible intra-regional conflicts, which are accompanied by increased migration flows and growing fundamentalism."[6]*

From the Euro-Atlantic area security point of view, the main risk is further destabilization in the Middle East followed by regional conflicts, where the termination or eventual resolution of these protracted conflicts cannot be expected in the next few years.

In addition to the Middle East, there is an ongoing armed conflict in eastern Ukraine. In the context of EU-NATO relations with the Russian Federation, the deployment of Member States' armed forces in the Baltic will remain a priority. In order to deter the potential Russian threat, it can be assumed that this area will be the centre of the primary European presence and diplomatic activities and deployment of NATO forces and assets.

ALLIANCES AND PARTNERSHIPS

Recent developments show an effort to deepen cooperation between NATO and the EU in planning, preparation and conduct of multinational operations. In mutual cooperation, the emphasis is on the elimination of duplications and conflicts of interest and on complementary roles between the two organizations. Both the EU and NATO share common strategic interests, respect the same values and face the same challenges.

In addition to NATO and the EU, the UN will play an important role in maintaining global security and stability. The UN Security Council is a major actor in providing a legal framework for the use of force outside self-defence in unforeseen situations under Article 51 of the UN Charter and Article 5 of the NATO North Atlantic Treaty. NATO considers the leading role of the UN in coordinating multilateral stabilization and reconstruction operations as highly desirable. Future military operations will be based on international law, including the principles of the UN Charter.

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[6] DIVIŠOVÁ Vendula a kol. *Bezpečnostní prostředí 2018: implikace pro obrannou politiku a ozbrojené síly ČR*. Brno: Univerzita obrany, 2018. s. 8. ISBN 978-80-7582-093-8.

The NATO and EU armed forces must be prepared to work together with other non-member countries and with national and international organizations, in particular, the United Nations, as well as with non-governmental organizations.

DEMOGRAPHIC DEVELOPMENT AND RELATED PHENOMENA

The population of the globe will continue to rise overall. The slowdown in population growth in Europe and North America will gradually increase the proportion of older people in the population. Globally, the number of people over the age of 60 is expected to double by 2050 and more than triple by 2100. The growing global population will strengthen migration trends, exert pressure on resources and ensuring global food security and sustainability of socio-economic systems. This may result in political and social tensions, especially among the young population in the Middle East, Central Asia and sub-Saharan Africa, which will become a storehouse of highly dissatisfied young men, more prone to radicalization. Most the world's population will live in cities and the trend of urbanization will continue to prevail.

CLIMATE CHANGE, LACK OF RESOURCES AND ENERGY

Global warming is unlikely to be the main cause of dramatic climate change in the short or medium term. However, it could have a greater impact on some areas with big deficit of precipitation and potentially lead to humanitarian crises. Climate change may lead to a shortage of drinking water and basic raw materials, thus contributing to limited food supplies. Because many countries share the same water resources, they can try to regulate them locally. If done in a non-coordinated manner, the results will include smaller harvest, famine, continued migration on the territory of neighbouring states and possibly the emergence of national or international conflicts.

From a short-term and medium-term perspectives, there will be a significant reduction in the sources of drinking water in certain areas of the subtropical and mild climate zones. This can lead to an increasing tension and conflicts can occur in areas affected in this way, especially in the less developed ones. Requirement for humanitarian operations, in some cases with the participation of the armed forces can occur. Secondary consequences will be increasing migration, social unrest, instability and the emergence of conflicts. The armed forces will be more often involved in assistance and support activities, such as the provision of humanitarian aid.

There is a constant increase in energy consumption associated with the growing world population and globally rich society. The structure of fuels and production technology is changing. Despite increased energy savings, consumption and demand for energy will continue to grow. This important factor influences a few other trends, in particular, climate change, global economic growth and food security. Demands for the availability of (and access to) natural resources are likely to grow in the future. Global energy demand will grow rapidly, while the use of alternative energy sources will increase only marginally. The rising costs associated with the above-mentioned trends can lead to intolerance and inequality between states and communities. The dependence of developed countries on energy imports will increase significantly. The actual state of fossil fuel reserves will have a significant impact on the global economy and thus affect international stability and

prosperity in Europe and beyond. Securing the lines of supply of fossil fuels and free access to commons could be a major security challenge.

ACTORS

The type and characteristics of the main actors in the operational environment with a significant impact on the activities of the armed forces are unlikely to change significantly:

- **State actors.** For the next 15-20 years, the nation state will remain a central player in the international order. Adaptable states, working with a number of ever-influencing non-state actors, international organizations and even individuals with extreme influence, are likely to be more successful. Growing competition among countries in terms of access and control over increasingly limited resources will be seen. In upcoming years, the traditional conflict between states cannot be ruled out, however, cyber-attacks, proxy wars, or state-sponsored terrorist attacks will be much more likely.

- **Non-state actors.** Non-state actors (multinational corporations, NGOs and municipal authorities) are likely to have a greater say in world affairs. Reflecting the trend of increasing urbanization, their involvement will be particularly important for the conduct of military operations. Non-state actors will be able to make greater use of information technology with the potential to significantly disrupt communication, information and economic routes. To a limited extent, they will also get a range of military capabilities to attack national critical infrastructure with WMD-like mass effects, possibly causing significant economic, social and institutional impacts.

OPERATIONAL ENVIRONMENT AND ITS CHARACTERISTICS

Identification and grasp of the main characteristics (variables) of the operational environment create favourable conditions for planning and conducting military operations in which the state and its armed forces may participate in the near or distant future. There are a number of variables that together form (and significantly affect) the overall nature of the operational environment. The main factors and elements that are the subject of the evaluation of the operational environment include: the enemy, the terrain and climate conditions, the local population, the environmental and cultural environment, technology, information and the information environment. The publication further deals only with the enemy variable, in the context of the type of environment in which it will operate.[7]

ENEMY

With regard to the nature of the enemy, the Czech Armed Forces will basically perform their tasks in two different types of operational environment.

The first type of operational environment will involve the execution of tasks within a collective defence operation on the territory (or in the vicinity) of the attacked NATO / EU Member State. Here, the armed forces can clash with the highly advanced enemy armed forces, capable of manoeuvring at the level of division and army corps, with WMD, state-of-the-art C4ISTAR systems and offensive and defensive cyber capabilities. The main feature of the enemy will be its ability to conduct not only classical conventional large-scale operations, but also activities with significant elements of asymmetry and irregularity. It can be assumed that in many respects it will be able to conduct operations with capabilities at the same or even higher technological level than Alliance or European Union forces.

The second type of operational environment will be characterised by the fulfilment of tasks in stabilization, peace or humanitarian operations within the international community in areas geographically, climatically and culturally distant and different from the conditions of the Czech Republic. In this environment, it can be very difficult to clearly identify the enemy and distinguish its fighters from the civilian population. As a rule, the enemy will use unconventional and irregular methods of warfare, will try to prolong the conflict, avoid decisive clashes, involve the struggle in urban areas, seek to change the nature of the conflict and gradually create noncompliance of the local population.

It is assumed that the potential enemy in both types of environments will remain:

- Regular armed forces of the state, alliances and coalitions with a solid and well-known organizational structure, operating according to accepted doctrinal principles and rules, respecting the norms of international law.

- Regular armed forces with a variable and often lesser-known organizational structure operating outside accepted doctrinal principles and rules, which do not respect the norms of international law (e.g. military forces of the so-called Islamic State).

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[7] Other variables - see 2018 version of the publication.

- Regular military or paramilitary groups of a state or non-state actor (special forces groups), in the form of unmarked masked militants (e.g. the so-called "green men" in Crimea in 2014).

- Paramilitary organizations and militias or civil defence associations with a purposeful organizational structure, usually only with small arms and a low level of respect for generally accepted legal norms. It will be difficult to clearly determine to which faction and to whom these military forces belong.

- Guerrilla units operating against the domestic national government and its potential allies, respecting almost no legal norms. These units will be well trained and will have high moral; they are likely to have light-type armaments and technology.

- Terrorist and criminal organizations or drug cartels operating at both national and supranational or global levels, which do not respect any legal norms and use technically advanced equipment of a light to medium type.

- Private paramilitary armed forces, contracted to civilian companies, operating throughout the conflict, with well-trained soldiers. The type of armament can be from highly modern to common types, used globally.

KEY CONCLUSIONS FROM THE ANALYSIS OF THE OPERATIONAL ENVIRONMENT

As a result of growing globalization, crises and local conflicts taking place outside the geographical framework of the Euro-Atlantic area will have a direct impact on the security situation within these areas. Immediate and effective crisis management will become a priority, especially for NATO and the EU. Over the next few years, the United States will continue to be the world's leading military power, but it will increasingly compete for this role with China and the Russian Federation.

The upcoming period will be associated with a massive relocation of the population to large cities located mainly in coastal areas. From a security (safety of inhabitants) point of view, these areas are in many cases located in places where natural disasters such as earthquakes or floods can occur as well as industrial accidents (due to insufficient security and protection of critical infrastructure).

Elements of our own critical infrastructure may become targets of terrorist attacks, therefore, the protection of critical infrastructure must focus on eliminating all possible risks threatening the full functioning of critical infrastructure facilities.

Climate change will lead to the necessity to organize large-scale humanitarian aid in the most affected areas. These will be mainly tropical and subtropical areas, where the highest increase in water loss and the impact of drought on agricultural production is expected. Humanitarian aid organized by various organizations of the international community will require the presence of military assistance, to ensure both the supervision of the distribution of humanitarian aid and the protection of the local population. This will also entail the need for militarily protection of lines of communication, accesses to material and energy resources, etc.

The growing globalization will facilitate access to new technologies, especially information technologies, and therefore, their misuse by criminal organizations, terrorist groups and by state actors will be more frequent. This trend is already leading to an increasing number of cyber security threats and incidents - the escalation of hybrid threats will continue in the future.

IMPLICATIONS FOR THE ARMED FORCES OF THE CZECH REPUBLIC

With regard to the characteristic of operational environment variables, the structure and development of the Armed Forces of the Czech Republic (ACR) will be executed by acquiring the military capabilities as declared by Long-Term Outlook for Defence 2035. The ACR will continue to be ready to defend the state, its territory and to meet its allied obligations. Emphasis will be placed on increasing interoperability with the Allies for the entire spectrum of operations and on capabilities in the host nation support (HNS) for Allied troops on the territory of the Czech Republic. The capabilities of manoeuvring units will be strengthened.

The range of tasks, in which the ACR will participate, requires a higher degree of multifunctionality, associated with the acquisition of new armament and equipment, as well as modernization of the existing military hardware, especially for the land and air forces. Immediate impact projects will provide troops with tactical equipment, small arms, ballistic vests or night vision devices in the coming years.

For more efficient execution of tasks, combat units, in particular, will be fully manned and the number of active reserves (AZ) will be increased. The promised increase and stability of the defence budget will be key to meeting all commitments and targets.

The warning time for the preparation and deployment of the ACR has shortened significantly, therefore, for the ACR it will be necessary to have the human and material reserves, which cannot be obtained in a short period of time, available already in the peacetime, and have guaranteed supplies of materials and services from industry. To do this, the ACR will have to use the knowledge, experience and skills of all soldiers, the ability to quickly reinforce and grow into a war structure using selective mobilization, including the capacity to perform operational tasks under national command.

THE HUMAN FACTOR AND THE IMPACT ON THE STAFF OF THE ARMED FORCES

Comprehensively trained personnel are the base for successful operations of the armed forces. Commanders, even at the lowest echelon of command, must accept increasing responsibility for completing tasks. Their decisions can have strategic implications. The complex environment and engagement in the whole spectrum of operations rules high demands on the preparation and specifically focused training. Related to this is the frequent use of a synthetic environment (virtual reality), enabling comprehensive preparation for potential tasks, the framework of which is difficult to create in normal conditions.

Future potential conflict will require staff with high mental agility. Military professionals will have competencies especially in the use of new tools and technologies. As modern technology has impacted the way war is conducted, the ways and procedures in combat as well as combat service and support will change.[8]

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[8] Winkler, John D., Timothy Marler, Marek N. Posard, Raphael S. Cohen, and Meagan L. Smith, *Reflections on the Future of Warfare and Implications for Personnel Policies of the U.S. Department of Defense*, Santa Monica, Calif.: RAND Corporation, PE-324-OSD, 2019. As of February 04, 2020: https://bit.ly/2Dk0oqZ

The dynamically evolving operational environment will bring a number of complex challenges. Commanders will deal with a number of factors, impact of their activities included, and must be able to think critically, creatively, perceive developments in different variants and anticipate the consequences of their decisions. Modern information technologies will allow processing of high volumes of data and information, supporting effectiveness of the decision-making process.[9]

Deployment of the armed forces, especially in a multinational and multicultural environment, will place high demands on military professionals, both in terms of their communication skills and appropriately chosen way of acting and behaving. Military professionals must be able to think ethically in order to understand other cultures and the way the others think and behave as a necessary precondition competence for leading multicultural teams.[10]

An appropriately chosen style of leadership will play a crucial role in leading units. Commanders (leaders) will communicate with subordinates through the virtual domain more often than through personal contact. In particular, highly developed emotional intelligence[11] will allow them to understand both themselves and the needs of subordinates, including their motivation and development.

Meeting the requirements for the quality of human resources will require innovative approaches to their preparation. Current modern trends in staff training are increasingly applying a competence-based approach to training. This approach allows participants to solve complex and multi-layered problems in the future. For members of the armed forces, complex and intricate problems will stem from the likely nature of the future conflict in which they will be deployed.

READINESS AND SHORT REACTION TIME

Effective intelligence will make it possible to anticipate the emergence of a crisis situation and create the conditions for preventing it or stopping its escalation. Quick deployment of military capabilities, especially in the early stages of a crisis situation, requires a much higher level of alert and readiness of the armed forces and the elimination of obstacles limiting the speed of deployment, such as slow political decision-making, lack of strategic lift, freedom of movement in the global environment, etc. There will be a growing demand for ensuring timely deployment to the area of operation.

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[9] ŠTĚPÁNEK, Přemysl and Richard SAIBERT. Officer's Competencies. *Vojenské rozhledy*. 2020, 29 (1), 051-070. ISSN 1210-3292 (print), 2336-2995 (online). Available from: www.vojenskerozhledy.cz

[10] *Future Land Operating Environment 2035: Dirección de Investigación, Doctrina, Orgánica y Materiales*. DIDOM_IV-22. Spanish Army, 2018.

[11] Emotional intelligence is about understanding oneself and others. It includes the five components of self-awareness, self-control, motivation, empathy and social dexterity. The concept of emotional intelligence may be more difficult to understand, but it is one of the keys to the identification and development of so-called soft competencies that help the professional growth of employees in every organization, including soldiers.

SUSTAINABILITY

The remoteness of operations from the national territory, limited support from the host country and need for continuous logistical support require effective international cooperation, support from the private sector and strengthening of field logistics forces and resources. The selection and protection of communication lines, availability of supplies and security lines of supply by industry are essential for the armed forces.

FORCE PROTECTION

Requirements for high combat effectiveness of weapon systems both of the military units and individuals must be consistent with ensuring an adequate degree of their protection. Equipping the armed forces with security systems and hardware will require the cooperation and involvement of a number of different military and non-military scientific, research and development institutions, which will contribute to the development of the required security capabilities.

RESERVE FORCE READINESS

Relatively small professional forces require an adequate number of (in advance) prepared reservists to carry out, support and sustain long-term operations. It is essential to have a sufficient number of officers to manage the mobilization or build-up phase of the armed forces.

MULTIDIMENSIONAL BATTLEFIELD

The development of the operational environment is also influenced by the way in which combat operations are conducted. This reflects the non-linearity, deployment of small mobile units over a large area, use of high-precision weapon systems, deployment of autonomous systems and creating a recognized picture of the situation in real time.

Combat activity will be conducted in all domains (land, air, water, space, cyber domain). A large number of small mobile groups will be deployed over a large area. The importance of irregular and asymmetrical activities used by special forces will grow on both sides along with the requirement for the capacity for massing the force for the operation through centralization of combat groups and their consequent re-deployment in the area of operation.

In terms of tactics, it is possible to assume further deviation from the management of defensive and offensive activities in a linear manner. The dominant will be the effort to control as many key objects as possible in as large an area as possible with well-armed and equipped small groups of fighters. To achieve initial success, a concentrated effort will be prepared by all components of the armed forces, which will be used later in resolving the post-conflict situation. In the final stages of the operation, the military presence will be minimized and the priority will shift to the constant readiness of reserves at the tactical, operational, but also strategic level of command.

The conduct of combat operations will fully depend on communication network, data processing technology and IT systems capable of acquiring, processing and transmitting information, data and analysis in real time within the FMN concept.

The planning, preparation and execution of operations will have a long-term cyclical character. It will require a comprehensive approach with the need for coordination among all components of the joint forces and the involvement of international, governmental and non-governmental agencies and organizations. The importance of computers and software compatibility will grow, as will the emphasis on harmonizing planning processes and procedures (standards), regardless of language and national barriers.

The progress in information systems, means of cooperation, situational awareness, space systems, and military hardware will enable the planning and conduct of military operations at a higher pace. Extensive use and reliance on information and related processes and systems will create vulnerabilities and opportunities for allied armed forces themselves and the enemy as well, so the importance of information operations will grow.

The adopted concepts and practical management of activities in the FMN environment will enable short reaction and decision time to solve the situation almost in real time. Responsibility will be delegated on the tactical level and within it to the lowest-level commanders; operational yet effective command and control will become a crucial prerequisite for success in conducting combat operations.

Due to the expected use of a large number of small, well-equipped units operating in a large area, it is very likely that in one operation, these units will engage in different types of combat and non-combat activities at the same time. Quite realistically, it can be assumed that at the same time these groups will be involved in a high intensity combat in one area, while in another area others will lead a stabilization or security operation to enforce peace or humanitarian aid tasks at the same time. This will complicate the control and command in various phases of the operation.

The activities of the units will show great differences between the armed forces due to different preparedness of soldiers, but also in terms of technological differences in the weapons and communication systems used. In some situations, it will be necessary to maintain the ability to operate without advanced devices or technologies. Intelligence activities will be far more important in the operation. Not only collecting information, but mainly distributing it on to all actors on the battlefield in real time using highly sophisticated communication systems based on satellite and digital communication.

In the stabilization phase of operations, emphasis will be placed on minimizing collateral effects (damage) of weapon systems. By obtaining accurate data for selective targeting, the subsequent use of precise weapon systems will be highly effective. This will be reflected especially in built-up areas, where efforts will be made to reduce collateral damage, loss of property and civilian lives. At this stage, the demand for the use of combat forces will decrease and the demand for combat service and support forces, or specialized police forces or "provincial reconstruction teams", will increase.

The armed forces will be involved in ensuring a post-war (post-conflict) arrangement in the area, which should ensure a gradual transition from the post-war situation to a normal civil government. The transition from combat to stabilization activities will require involvement in institution building and training of the armed forces (capacity building). In the period between the end of combat operations and the resumption of civilian control, many civilian tasks will require the support of military forces.

Future operations will almost always be conducted as multinational operations. In order to maximize effects achieved in the conduct of combat operations, high demands (already in the planning and launch of the operation) will be placed on the fast build-up of forces with emphasis on procedural, technical, armament and equipment interoperability of all units.

It will be necessary to unify the tactics, as well as the conduct of the combat activities of all participating units and nations. This requirement is critical because of many existing differences between more and less technologically advanced countries, and not only in terms of military equipment and material, but also in terms of low levels of doctrinal interoperability.

CAPABILITY REQUIREMENTS

The armed forces must be able to operate in a whole range of operations. Critical prerequisites for successful operation include mastering the information flow, speed of deployment and long-term sustainability in the area of operation. The armed forces must be able to adapt rapidly to the development of the operation and to interact rapidly with civilian officials, non-governmental organizations and other agencies in the Joint Operations Area. Broad scale of "special" support skills in the field of engineering, communications, radiological, biological and chemical defence, special operations, civil-military cooperation, logistics, and health protection will be required (also provided through the reach-back concept).

Great diversity of threats may require a set of capabilities to conduct operations on the national territory, but also at a considerable distance from the state border in order to effectively eliminate threats directly in their early stages. The armed forces will need to build and maintain all the capabilities necessary to meet national security and defence needs.

The conceptual framework for the development of military capabilities[12] specifies these main areas of military capabilities.

- **Preparedness:** Ensuring a sufficient and effective military presence in a given geographical area, in order to respond to the requirements arising from a change in the strategic environment.

- **Command and control:** A crucial building block for ensuring a flexible and efficient decision-making process and for ensuring the ability of the armed forces to respond flexibly to new security threats.

- **Intelligence:** Success in planning, preparing and conducting future operations depends on effective intelligence and ability to collect, select, analyse and share the obtained information. The need to gain information and dominance of intelligence bring about the need to control and effectively protect the cyberspace as well.

- **Engagement:** Future operations will require rapid deployment of forces in all domains, a characteristic feature of future operations will be combat in urban areas. The nature of the operations will require units to have not only weapons intended for physical destruction, but also non-lethal weapon systems. The effort will be to

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

eliminate as much as possible the negative impacts on the life of the population and the environment in the area of operation.

• **Force protection:** In order to achieve the necessary level of force protection, it will be crucial to detect these types of weapons that are not available to the Allies for legislative, moral or ethical reasons, but which the enemy can use against the Allied forces (especially weapons of mass destruction). Given the likelihood of their possible use and the consequences, it will be necessary to prepare effective protection of our own forces. Priority will be given to the treatment of affected soldiers and units and their evacuation.

• **Deployability:** The armed forces must have access to the means of the strategic transport for both forces and material and must also have the logistic means to ensure the reception, storing, processing and dispatching of material to units. The ability to transport force efficiently out of the area of operation as well as the units' mobility on the battlefield will be among of the basic conditions for victory.

• **Sustainability:** The course of operations and their final outcome will be significantly affected by the available support and services. In the environment of a multinational operation, considerable demands will be placed on multinational logistics, especially in the field of interoperability. Compliance with the minimum requirements for logistical support and harmonised operational procedures will become a determining criterion for the successful conduct of future operations.