

# Czech Armed Forces Development Concept 2035 (CAFDC 2035)



# Czech Armed Forces Development Concept 2035

Motto: "Only organisations able to adapt early will maintain their relevance".

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### Foreword by the Chief of General Staff

We are in a critical period. The Russian attack on Ukraine in February 2022 refuted the illusion of everlasting peace or a long warning time. We are adapting to a new security situation. We are revising defence plans and analysing lessons from the Ukrainian battlefield. We are assessing future challenges and the nature of future warfare. After long years of financial instability, we have been provided with a foreseeable defence budget.

In accordance with the new reality, new NATO defence plans as well as the new national security strategy and defence strategy, we must prepare for the most difficult scenario. We must prepare for a large-scale high-intensity war with a technologically advanced enemy who owns nuclear weapons. And we must get ready fast. The direct threat to our security and our potential military opponent is presently Russia. Its rhetoric as well as conduct towards us and our Allies are increasingly aggressive and ever less predictable. Our goal is to avoid war and thus minimise the possibility for mass violence, which was present here during most of our long history, to return to Europe. The only way to attain that is to effectively deter potential aggressors. That means to have real capabilities, capacity and will to defend and show it clearly to all potential aggressors. For that, we need a combat capable military force standing ready to defend its homeland as well as our Allies as part of NATO forces. The present concept describes how we aim to build such armed forces.

We will seek an active involvement in the implementation of NATO's deterrence and defence concept. In order for the Allied defence plans to materialise, we will actively contribute units to the new force model. We will emphasise the development, rearmament, preparation and training of the Czech Armed Forces' units in order for them to achieve the required combat capability and readiness. We will place an equally high premium on the performance of tasks associated with the host nation role for our territory to support the reception and transit of Allied forces.

The upcoming ten-year period will represent a major technological transformation of the Czech Armed Forces. New generation weapon systems will be introduced and full transition to modern western technology will take place. In our planning, we also respond to the accelerating development of emerging and disruptive technologies, such as administering of large quantities of data, introduction of autonomous systems, utilisation of quantum technologies, artificial intelligence and robotics. We will strengthen interoperability with Allies in the frame of multi-domain operational environment. Digitalisation and development of an adequate command and control system will continue.

The events in Ukraine have again proven the vital need to prepare for war already in peacetime. The so-called deferred need principle was overcome by the harsh reality. We need to procure sufficient stocks of materiel and ammunition and ensure a functioning replenishment system.

Canvassing and retaining highly motivated and qualified personnel will nevertheless be always the highest priority. We will improve the working conditions and the environment of military service, and modernise academic and field training of service personnel. We will introduce and leverage advanced technologies. We have to invest a greater effort into the building of an effective reserve system as well. With the updated Czech Armed Forces Development Concept, we address the changes in the security, technological and operational environment. The CAFDC 2035 defines the key strands of building and developing the Armed Forces till 2035. Its implementation will strengthen the national defence posture, the ability to deliver on our NATO commitments and thus ensure the security of our citizens. I am confident that we will jointly succeed in meeting the challenging assignments.

Lieutenant General Karel Řehka Chief of the General Staff



# The Concept's starting points

The Armed Forces of the Czech Republic (AFCR) have the key role for ensuring defence as part of the national defence system of the Czech Republic. The AFCR comprise of the Military Intelligence, the Military Police, the Military Office of President and the Castle Guard, and their principal pillar - the Czech Armed Forces (CAF)1. The CAF primary mission is to prepare for the defence of the Czech Republic, defend it against external aggression and fulfil tasks arising from the Czech Republic's international commitments to common defence against aggression<sup>2</sup>. To that effect, the Czech Republic ensures the building and development of the relevant CAF capabilities in the long run. The Czech Armed Forces Development Concept (CAFDC), whose development is mandatory<sup>3</sup>, is a strategic policy document authorised by the Government of the Czech Republic, defining key avenues of the CAF building and development.

### Strategic starting points

The CAFDC reacts to the significant worsening of the security environment and based on the Czech Republic's Security Strategy (2023), Czech Republic's Defence Strategy (2023) and law. The CAFDC reflects the following strategic assumptions:

- the likelihood of military aggression against the Czech Republic or some other NATO Nation or EU Member State is the highest since the end of the Cold War;
- the warning time before occurrence of a conflict has shortened dramatically;
- the Russian war against Ukraine confirmed the essentiality of our active membership in NATO;

- the global strategic competition is growing and the efforts by some states to change the world order are on the rise;
- emerging and disruptive technologies are changing the ways how wars are fought;
- From 2024 on, the Czech Republic's defence spending will be maintained at least on the level of 2% GDP<sup>4</sup>.

# Military implications of the security environment

As a result of significant worsening of the security environment, the key priority shifts to the building and development of CAF capabilities as part of NATO collective defence for conducting a sustained high-intensity armed conflict with a technologically advanced opponent<sup>5</sup> possibly equipped with nuclear weapons. That necessitates the building of robust, adaptable, and comprehensively mission-ready Armed Forces that are deployable despite minimum warning time and operate across a broad spectrum of both combat and non-combat operations. Provisioning of sufficient stocks including the development and use of the state material reserves and an effective recruitment and materiel replenishment system has a key importance for the Armed Forces' combat sustainability. The ability to deter the opponent from attack and defend against the opponent's aggression is substantially greater in cooperation with allies. Therefore, the key factor in the development of the Czech Armed Forces is the ensuring of the capability to operate in NATO environment and interoperability. At the same time, the Czech Republic's geographical location predetermines the Czech Republic to provide operational preparation of its state territory and to provide the capability to receive, stage and support onward movement of potentially large allied forces. A growing importance is also attached to an effective cooperation between the Armed Forces and the Gover-

<sup>&</sup>lt;sup>1</sup> Act No. 110/1998 Coll., on the Security of the Czech Republic.

<sup>&</sup>lt;sup>2</sup> Act No. 219/1999 Coll., on the Armed Forces of the Czech Republic.

<sup>&</sup>lt;sup>3</sup> Section §6 of the Act No. 219/1999 Coll., on the Armed Forces of the Czech Republic.

<sup>&</sup>lt;sup>4</sup> Act No. 177/2023 Coll., on the Financing of the Defence of the Czech Republic.

<sup>&</sup>lt;sup>5</sup> An opponent is a party considered a potentially inimical party, against which legal use of force can be assumed.

nment, regional governments, municipalities, citizens, academic and scientific communities and the industry, as well as the support and whole-of-society recognition of the Armed Forces' role in ensuring national defence.

Fast technological development opens up new possibilities in employment of the armed forces. Experience from the current armed conflicts also point out new ways of using the fielded weapons and equipment, mass use of uncrewed aerial systems, the use of combinations of multi-generation technologies, new materials and procedures. The importance is growing of systems for rapid, precise and lethal engagement over long ranges as well as the need to provide an effective air defence, both in areas of deployment and over national territories, especially for the protection of critical infrastructure. The need appears as essential for national tactical airpower to possess the capability to effectively operate in areas of operation covered by advanced air defence of potential opponent.

In the area of command and control, the trend is on the rise of decentralised command and mutual integration of individual systems. That generates the requirement for a secure access to electronic communication network, data services and intelligence, and high-speed processing of big data. The importance of space any cyber increases for ensuring national defence capability and effective performance of multi-domain operations.

The emerging and disruptive technologies such as the big data processing, artificial intelligence, robotization, hypersonic, quantum and space technologies, additive manufacturing of new materials, biotechnologies and human enhancement all furnish new opportunities for the development of Armed Forces' capabilities. Concurrently, the need arises for the Armed Forces to define new requirements for research, development and production of defence industry.

The global retreat from fossil fuels, either for geopolitical or environmental reasons, represents a revolutionary technological impulse that is going to affect the systems and technologies used in the Czech Armed Forces. The provision of infrastructure, fuel and energy for the operations of the Czech Armed Forces, in the states of crisis<sup>6</sup> and outside them, represents a principal challenge for ensuring national defence. That purpose needs to drive the generation and structure of strategic stocks including the state material reserves.

The climatic change is a multiplier of threats and a source of instability, affects strategic and operational environments and places new operational requirements on the Armed Forces' capabilities. Therefore, the development of the Czech Armed Forces has to ensure its operations in environments with extreme climatic influences. These new requirements will particularly reflect in the training of personnel, specifications of newly introduced weapons and equipment, infrastructure and force sustainability requirements.

The security situation and instability growing in the longterm in geographically regions of interest and of importance accentuate the need to engage in international crisis management in the frame of NATO, EU, UN or ad hoc coalitions. That may practically mean the participation in peace enforcement or peace keeping operations, stabilisation and counterterrorism operations, humanitarian operations, natural disasters, and rescue and evacuation operations.

Likewise, the requirements are increasing for involvement in observer and assistance missions, much like the demands for financial, technical, advisory and training support to third countries, for example in building defence capacity and security sector reforms. That increases the demands for force mobility and sustainability, both in the territory of Allied and Partner nations in Europe, and in geographically distant regions, in different climatic conditions and cultural environments.

# The use of the Czech Armed Forces

The Czech Armed Forces is the primary military tool for ensuring national defence and it primarily performs the following missions in this order of priority:

1. National defence and collective defence. The Czech Armed Forces is developed as an all-arms, highly ready, modernly equipped and technologically advanced military force capable in the NATO context to ensure the defence of the Czech Republic in a protracted and intensive confrontation with a technologically advanced opponent possibly equipped with nuclear weapons. The Czech Armed Forces performs tasks to the effect of ensuring se-

<sup>&</sup>lt;sup>6</sup> The states of crisis relevant for the present Concept are the state of national emergency and the state of war.

curity and defence of the Czech Republic under national command and concurrently fulfils NATO Article 5 collective defence commitments.

- **2. Conflict prevention.** The Czech Armed Forces develops the capabilities contributing to building of credible collective deterrence in both national and NATO context. The goal is to mitigate international tension and deterpotential enemies from military aggression.
- **3.** Involvement in international crisis management. The Czech Armed Forces makes use of its capabilities in international crisis management operations to manage the consequence of security crises, conflict area stabilisation, countering terrorism and for humanitarian operations.
- **4. Contribution to cooperative security.** The Czech Armed Forces makes use of its capabilities for the development or renewal of the security sector and military capacity of failed or conflict-afflicted states and defence capacity building in partner nations.

**5.** Assistance on non-military crisis management. In case it does not impair on its defence capabilities, the Czech Armed Forces provides support to the primary components of the Integrated Emergency System in consequence management following emergencies or crises. In order to perform those missions successfully, the Czech Armed Forces needs to closely cooperate both on the international level with Allies and Partners, as well as with the armed security services, intelligence services and other government agencies, the industrial sector, academia and the civic society.

### Resourcing starting points

Stable resourcing starting points provide the basis for a systematic and early attainment of required capabilities.



#### Personnel

The key presumption for the Czech Armed Forces combat capability is to attract and retain sufficient quantity of qualified, highly trained and motivated personnel including in negative demographic trends and growing competition in the labour market. The Concept envisages the Czech Armed Forces' personnel strength to increase up to 30,000 service members and up to 10,000 members of the Active Reserve Component at 2030. New capabilities and those with high future prospects may claim the growth of personnel strength or increased demand for specific specialties, which will be specified in time. The measures designed to provide for a sustainable recruitment primarily include:

- Continuous increasing of the Czech Armed Forces' competitiveness in the labour market,
- Reflection of life values as well as health and physical fitness of the incoming generation,
- Revision of some restricting conditions for enlistment in the Czech Armed Forces,
- · Supporting the mobility of personnel,
- Strengthening the Czech Armed Forces' presence in regions with a higher recruitment potential,
- Permit members of the Active Reserve Component to perform liability to conscription even after age of 60 years,
- Increase effectiveness of communication with persons interested in military service through the Armed Forces using new technology (e.g. virtual recruitment centre).

#### Financial resources

A foreseeable funding stable in the long run is essential for ensuring the development of capabilities, building and training of the Czech Armed Forces. The funding model for the realisation of this Concept is based on the political commitment to increasing defence appropriations at least to the level of 2% GDP beginning in 2024 with the application of the Act No. 177/2023 Coll., on Financing of Defence of the Czech Republic. The Concept presumes that investment expenditures allocated for strategic modernisation projects to be realised from 2024 through 2030 represent up to 60% of the Czech Armed Forces' budget. This steep increase of investment expenditures is a con-

trolled process driven by the need to quickly respond to the worsened security situation and the need to tackle the effects of the Armed Forces' underfunding in the previous decades when the internal carryover debt accumulated. In the 2031-35 period, it will be possible to progressively decrease the volume of investment expenditures down to 35% in favour of expenditures for personnel, sustainability, training, system integration and life cycle support of the newly procured equipment and armaments. Sufficient funding will be allocated for training and deployment of forces in foreign operations, higher intensity of multinational exercises and strengthening of interoperability with Allies.

#### Material resources

The key aspects of securing resources include:

- Timeliness and security of supply in states of crisis and outside them;
- Procurement of platforms with open architecture and high modernisation potential;
- Flexible acquisition process reflecting the specificities of defence technology procurement;
- Support of the innovation cycle;
- Use of emerging technologies such as adaptive manufacturing and 3D printing.

The Concept envisions replacement of main types of armaments including the provision of life cycle of all used equipment. At the same time, it will be imperative to significantly increase stocks, especially battle decisive munitions and spares, and accommodate the associated requirements for expanding storage capacities and quality. The requirement for the generation and availability of stocks and the provision of life cycle for newly acquired technologies will claim a higher degree of interconnection between the MoD, the industry and the State Material Reserves Administration.

#### Immovable infrastructure

The present condition of immovable infrastructure in terms of quality and quantity represents a significant risk for the performance of tasks and implementation of the Concept. The immovable infrastructure does not meet requirements for respectable working environment, the needs of personnel and training, provision of the required level of safety, storage and maintenance of equipment and





materiel and does not create conditions conducive for full utilisation of new technologies. The Concept presumes a significant and systematic growth of investments into the development of immovable infrastructure, which will be maintained on the level of capacity of the MoD project management.

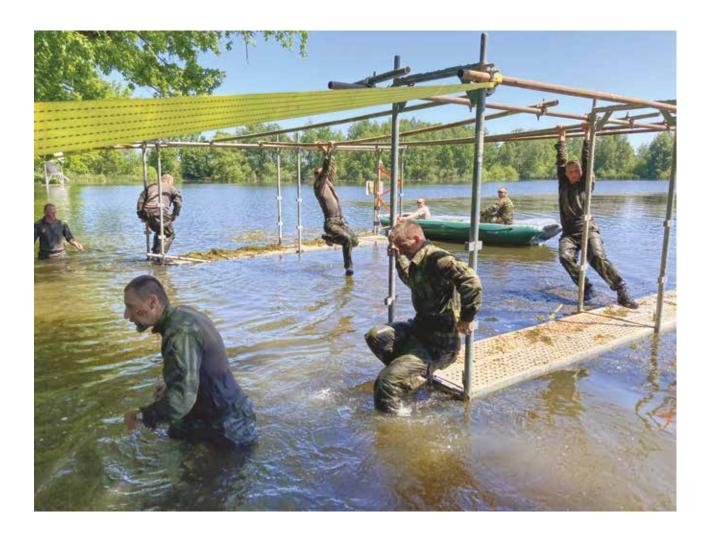
**Current status** 

The Czech Armed Forces' capabilities have been comprehensively assessed in relation to the performed mission in the context of preparation for meeting the most demanding scenario of the use of the Czech Armed Forces, which is its engagement in a high intensity

conflict. Observations from the Report on Ensuring National Defence and the evaluation of the achieved level of capabilities in the frame of NATO defence planning were also used. The evaluation of the current status generates the following conclusions:

### **Strengths**

- Full-fledged membership in NATO ensuring a functional system of deterrence, preparation and provision of collective defence.
- Lessons learnt from operational deployments both in foreign countries and in the home territory, including increase of interoperability with Allies.



- Highly motivated and ready personnel.
- Synergic development and increasing operational capabilities of the Czech Armed Forces in the land, air, space and cyber operational domains<sup>7</sup> including the development of territorial forces for the performance of national tasks.
- Development, increase of capabilities of the Active Reserve Component as an integral part of the Armed Forces of the Czech Republic with the possibility of operational deployment.
- A comprehensive system of the Czech Armed Forces' training and participation in international exercises.
- Reduced technical and material dependence on the Russian Federation.

- Comprehensive acquisition of capabilities in the whole spectrum of functional areas<sup>8</sup>.
- Introduction of unified vehicle platforms in the field of logistic support.

### Weaknesses

- Low manning levels, the service personnel age structure and limited retention possibilities.
- Limited capabilities of ground based air defence to cover the home territory with own assets and limited capabilities of precision fires over long ranges.
- Limited capability of flexible introduction of dynamically developing emerging and disruptive technologies into the Czech Armed Forces.



 $<sup>^{7}\,</sup>$  A designated part of operational environment demanding a unique set of combat skills and abilities.

<sup>&</sup>lt;sup>8</sup> Doctrine, Organisation, Training, Materiel, Leadership, Personnel, Infrastructure, Interoperability.

- The level of digitisation and incomplete integration of the Czech Armed Forces' command and control systems into a single vertically and horizontally integrated unit.
- Insufficient moving and operation stocks of materiel and ammunition including precision guided munitions.
- Limited capabilities of combat support and combat service support components, primarily consisting in slow pace of replacement and modernisation of equipment and materiel.
- The condition of immovable infrastructure, which
  does not meet the present requirements for the
  quality of working environment, needs of military
  training, maintenance, repairs, storage of equipment
  and materiel. The immovable infrastructure does not
  have the parameters required to provide host nation
  support in the home territory.
- Limited capabilities or providing repairs of specialised military equipment and material in the territory of the Czech Republic.
- Absence of whole-of-government approach to the provision of host nation support<sup>9</sup> in the home territory.
- Force protection is not adequately reflecting on the changing nature of warfare.

### **Opportunities**

- Whole-of-society approach to ensuring defence.
- Positive public image of the Czech Armed Forces and sustained high confidence of citizens.
- Strengthening of the notion of awareness and personal responsibility of citizens for national defence and the motivation of citizens to voluntarily adopt the performance of the liability of conscription.
- Revision of legislation framework for ensuring defence to reflect the specificities of training, development and operational use of the Czech Armed Forces in the states of crisis and outside them.

- Implementation of the Multi-Domain Operations concept.
- Utilisation of new trends and disruptive technologies as part of development of the Czech Armed Forces.
- Utilisation of the potential of the academia for the development of the Czech Armed Forces' capabilities.
- Utilisation of capacities and a higher degree of cooperation with defence industry and effective leveraging on international cooperation for the realisation of modernisation projects and sustainment of the Czech Armed Forces in operational deployments.
- Utilisation of the Czech Republic's education system for the training of personnel in specific specialties.
- Involvement in NATO and EU projects to secure strategic capabilities the Czech Armed Forces does not have available.

### **Threats**

- Non-observance of resourcing framework for ensuring defence in time and underfunding of the Czech Armed Forces.
- Structurally and qualitatively imbalanced manning of the Czech Armed Forces.
- Inadequate development of national defence system as a whole.
- Unpredictability of the global security environment, uncertainty of intentions and an increasing possibility of a surprise attack by the assumed opponent shorten the warning time.

The observations from assessment of the achieved level of Czech Armed Forces' capabilities are reflected into the CAFDC 2035.

<sup>&</sup>lt;sup>9</sup> The capability of the host nation to provide reception, staging and onward movement of NATO forces in the home territory.



### **Objective force 2035**

The 2035 objective force status of the Czech Armed Forces is defined by the Armed Forces development vision. The strategic goals are designed to achieve the vision. Under Annex 1 hereto, the strategic goals are complemented with the concept of development of forces, combat support and combat service support.

# Armed Forces development vision

- The Armed Forces is resolved and ready to defend the Czech Republic and provides an adequate contribution into credible collective deterrence and defence. It fulfils the requirements of NATO defence planning.
- The Armed Forces is capable of synergic engagement by all forces in the multi-domain environment, either autonomously or together with Allies. The Armed Forces is capable of conducting effective combat activity in a high-intensity conflict against a technologically advanced enemy<sup>10</sup>, who may be equipped with nuclear weapons. In cooperation with other components of the government, municipalities

- and communities, the Armed Forces is further ready to provide support to NATO forces in the territory of the Czech Republic, get involved in non-military crisis management in the home territory, and face asymmetric and hybrid threats.
- The Armed Forces has an all-arms nature and develops the capabilities of all branches and services in a balanced manner. It is agile, sustainable, highly ready, internally coherent, technologically advanced, resilient and capable of protecting own forces and assets against engagement by the enemy.
- The Armed Forces has a resilient, interoperable, digitalised and integrated command and control system (C2S) across operational domains. The decision-making by commanders and staffs is done real-time and is informed by big data.
- The organisational structure is manned with educated, motivated and ready personnel. The Czech Armed Forces capabilities are complemented by well-trained, motivated and equipped reserves. The personnel, especially the command corps, are ready for future conflicts. The Czech Armed Forces is capable of building up into wartime structure in the required timeframe.
- The legislative, structural and process conditions for continuous development of capabilities and effective use of the Czech Armed Forces reflect future warfare requirements.



<sup>&</sup>lt;sup>10</sup> The enemy is regarded as a party, whose conduct is inimical, who leads combat activities against our forces and against which a legal use of force is authorised.

### Strategic development goals

The following strategic goals will be achieved in order to build and develop the capabilities of the Czech Armed Forces:

- **1.** Investments into the development of the human capital.
- **2.** Strengthening readiness, deployability and sustainability.
- **3.** Digitization of the command and control system.
- **4.** Effective engagement in all operational domains.
- **5.** Deepening of international cooperation and development of interoperability.
- **6.** Agile innovation and introduction of emerging and disruptive technologies.

# 1. Investments into the development of human capital

The way modern wars are fought is increasingly changing, but their essence remains the same. Wars are not won by machines, but mainly by humans, their abilities, resolve and will to defend the homeland and commonly shared values. To the effect of successful performance of tasks, the Czech Armed Forces has a highly ready and motivated personnel, whose generational and professional renewal is supported by an advanced and effective personnel management system. The personnel management system ensures their sustainability in required strength and specialties.

Investments into the development of human capital primarily involves a continuous process of enhancing





knowledge and skills of personnel, which reflects the ongoing technological development and the scope of armaments modernisation. Service personnel have a high degree of resilience against cognitive interference by the enemy, are comprehensively ready and fully embrace all potential of new weapon systems, and emerging and disruptive technologies.

The average age of service members reflects the societal demographic development. As a modern and highly trustworthy organisation, the Czech Armed Forces will maintain its competitiveness in the labour market despite the negative demographic development, worsening medical and physical fitness of the population and the changing motivational priorities of incoming generations. Changes in leadership, improvement in service conditions and working environment, acceleration and simplification of personnel management processes all strengthen the ability to obtain and retain specialists in niche military specialities. Recruitment activities are simplified and accelerated through the use of data from government systems. The project of virtual recruitment centre is developed. Recruitment of selected specialties is supported with scholarship programmes. Human resources management embraces the principles of talent management. The personnel training system ensures the meeting of increasing qualitative requirements primarily determined by changes in the nature of warfighting, technological progress and dynamically changing security and operation environment. The training of specific specialties utilises the Czech Republic's education system and education abroad. The MoD academic and field training facilities have enough qualified personnel and their capacity is aligned with the increasing requirements of the Czech Armed Forces. The facilities are equipped with advanced trainers and simulators that use virtual reality technologies.

# 2. Strengthening readiness, deployability and sustainability

The Czech Armed Forces is comprehensively ready to defend the homeland and Allied territory in accordance with NATO's and Czech Republic's defence plans. A training system is implemented to accommodate the changing requirements for the readiness of the Czech Armed Forces. The CAF organisational structures are filled with personnel and materiel in line with the outcomes of defence planning. A flexible system has been created for an early build-up of the Czech Armed Forces into the wartime organisational structure.



There are capabilities available for deploying the forces and assets of the Czech Armed Forces in the home territory as well as abroad. Own limited strategic airlift capabilities are complemented with outsourced capabilities. Deployment, operation and sustainability of own forces in operations under both international and national command is provided. In line with the NATO plans, the host national support capabilities have been built in own territory. The Armed Forces has stocks for high-intensity combat in the scope defined by the requirements of defence and operation planning. In the compass of available resources and storage capacities, stocks have been increased for the wartime organisational structure of the Armed Forces. Logistic support and medical support capabilities have been strengthened to support the Czech Armed Forces operations both in the homeland and abroad. A life cycle management system has been established for the newly acquired and existing equipment and materiel, including modernisation and renewal. Secure supply chains are provided in states of crisis and outside them. Cooperative links have been built with

state enterprises, MoD on-vote organisations, the State Material Reserves Administration and defence industry to support the Czech Armed Forces operations in states of crisis and outside them. Protection measures have been implemented across all operational domains and environments.

### 3. Digitalisation of the command and control system

Command and control enables the Czech Armed Forces to effectively respond to threats employing the potential of all available forces and assets in states of crisis and outside them. The operational echelon of command has the capabilities to plan and control MDOs. The tactical echelon of command has provided the necessary degree of coordination and synchronisation of individual arms in space and time across all operational domains. All levels of command and control enable the subordinates to take their own decisions that are in line with the intent of the superior, according to the mission command principle.

The rationale is to enable commanders at all levels to flexibly respond to the changing situation while maintaining the command and control hierarchy.

The C2S architecture forms a flexible, vertically and horizontally interconnected and full digitalised unit with integrated military and non-military entities involving both government and non-government organisations on national as well as international level. Command and control processes are fully digitalised, command authorities and command posts are fully interconnected into a single integrated information environment, including the provision of adequate cyber security.

The C2S has implemented the requirements for the NATO digital transformation. The system reflects the changing nature of contemporary conflicts and utilises emerging and disruptive technologies in support of decision-making at all levels. The C2S makes use of artificial intelligence tools for processing large volumes of data from all used sensors and weapon systems. Credibility of information, human supervision over key decision-making processes, and secure data sharing and processing are ensured. The C2S generates a joint situational picture across all operational domains in real time. The system is technologically advanced, resilient, reliable, flexible and with a sufficient reserve of assets. The probability of

survival of command posts in the battlefield is increased through the reduction of their size, higher mobility, lower concentration and increased resilience against engagement by the enemy.

#### 4. Effective engagement in all operation domains

The Czech Armed Forces has the capabilities to provide early identification and analysis of both symmetric and asymmetric threats in the multi-domain environment. The Czech Armed Forces stands ready to respond to those threats decisively in physical, virtual and cognitive dimensions, in land, air and cyber operational domains and in the electromagnetic and information environment. The Armed Forces uses the possibilities of the space and sea domain. It is able to harmonise military activities defined by the joint functions<sup>11</sup> across all operational domains and environments while coordinating activities with both state and non-state actors in order to achieve a timely synergic effect. In order to achieve an effective engagement in all operational domains, capabilities defined by the MDO Concept are developed across all functional areas.

In **the land and air domain**, the Czech Armed Forces builds technologically advanced, interoperable and resilient for-



<sup>&</sup>lt;sup>11</sup> The Czech Armed Forces Doctrine defines the following joint functions: (1) manoeuvre, (2) fires, (3) command and control, (4) intelligence, (5) information activities, (6) sustainability, (7) force protection, (8) civil-military cooperation.

ces able to integrate lethal and non-lethal effectors. It is crucial for the forces operating in both domains to have capabilities to initiatively exploit opportunities and create tactical and operational dilemmas synchronised in space and time with other domains for the enemy.

In the cyber domain, the Czech Armed Forces is capable of continuous monitoring and analysis of the cyber space, provides early warning to possible threats or attacks and is able to perform both defensive and offensive operations as part of MDOs. It closely coordinates activities in the cyber space with other state and non-state actors. The space domain is used by the Czech Armed Forces for the provision of autonomous and resilient communication, data storage and sharing, obtaining guaranteed time, positioning and navigation data, early warning and prediction of space weather, intelligence cycle support, conduct of electromagnetic warfare and gaining situational awareness.

In the **sea domain** the Czech Armed Forces does not develop own capabilities, but it has access to sealift and is able to communicate and cooperate with Allies as part of multinational operations.

The **electromagnetic environment** enables the Czech Armed Forces to fully perform MDOs. The Czech Armed Forces develops capabilities of active measures with the objective to deny the enemy to utilise the electromagnetic spectrum. Concurrently, the Armed Forces strengthens the capability of gathering information from that environment and own force protection against engagement of the enemy's electromagnetic warfare assets.

In the **information environment**, the Czech Armed Forces is able to cognitively engage all target groups as part of conducting MDOs and concurrently is able to provide own force protection against cognitive engagement by the enemy.

## 5. Deepening international cooperation and developing interoperability

International cooperation with Allies and Partners multiplies the combat potential of the Czech Armed Forces and contributes to deterring potential opponents. The realised activities and international modernisation projects strengthen the Czech Armed Forces' capabilities





that would otherwise not be accessible for the Czech Republic. Interoperability with NATO forces is achieved and maintained in all capability areas so as to attain an effective readiness, deployability and sustainability of the forces and assets of the Czech Armed Forces.

The Czech Armed Forces service personnel are appropriately and effectively integrated into the command structure and force structure of NATO, EU and other components as part of international cooperation with Allies and Partners. Lessons learnt and their leveraging in practice strengthens interoperability and supports the development of institutional knowledge in all components of the Czech Armed Forces.

NATO and EU tools are used for a higher effectiveness of common acquisitions to achieve capabilities and share costs in joint projects. Activities of international components in the home territory is supported.

#### Agile innovation and introduction of emerging and disruptive technologies

The introduction of emerging and disruptive technologies, specifically big data processing tools, artificial intelligence, quantum technologies, robotization and uncrewed

systems, additive manufacturing and new materials, biotechnologies and human enhancement technologies all increase the Czech Armed Forces' competitiveness over technologically advanced enemies. The technological quality level of armaments, materiel and equipment is increased as part of armaments life cycle.

The process of innovation leverages modelling and simulation, including the establishment of non-permanent experimental units for verification of development concepts. A purposeful utilisation takes place of the potential of scientific-research and academic institutions of the Czech Republic, domestic industry capabilities, international scientific institutions, NATO and EU defence research and development projects and owners of specific know-how for the modernisation and support of the Czech Armed Forces.

The emerging and disruptive technologies are broadly used for academic training of personnel in academic and field training facilities to the effect of approximating training to real-world conditions with the possibility to verify the concepts. The introduction of emerging and disruptive technologies takes place in line with NATO and EU strategies, processes and standards.



# Strategy to attain the objective status

The objective status of the Czech Armed Forces' development will be achieved in two phases. Phase one between 2024 and 2030 will focus on increasing the capability of leading a high intensity conflict. Ongoing and prepared strategic modernisation projects listed in Annex 3 will be completed. Organisational structures will be adapted and relocation changes performed in line with those projects. The high priorities of phase one include: (1) completion of the building of the heavy brigade; (2) achieving higher manning levels in the Armed Forces' organisational structures; (3) acquisition of the F-35 aircraft; (4) strengthening of the ground based air defence capabilities; (5) stock generation; (6) MDO concept implementation, and; (7) force training. Phase two from 2031 through 2035 will emphasise the completion of integration of acquired armaments and development of capabilities on a new quality level with the use of emerging and disruptive technologies. The immovable infrastructure will be modernised and expanded in both phases.

The Czech Armed Forces strategic development goals will be attained in the following manner.

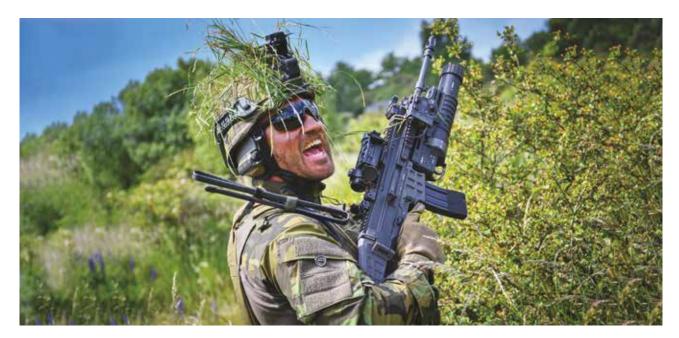
# Investments into the development of human capital

In order to ensure a sustained relevance of the Czech Armed Forces in future battlefields, comprehensive changes will be implemented in the human resources management system. The changes are designed to make sure necessary manning levels are achieved as well as qualification of the personnel, including available and ready reserves, in an unfavourable demographic environment, high competition in the labour market and changing behavioural patterns of the incoming generations.

- 1. The service personnel career management and academic training system, service appraisal, the decisive period of service, years in rank and years of service will be revised. The career management and academic training system will make it possible to develop strengths of individuals and offer motivating careers.
- 1. 2. Conditions will be created conducive to a more effective recruitment of personnel in the labour market in the form of targeted programs reflecting both general and specific requirements of the Czech Armed Forces. Gender policy and changing medical and physical fitness of the incoming population will be reflected. A nationwide marketing strategy will be realised

with the use of advanced technologies, virtual recruitment centre and cooperation with the civilian sector. Defence personnel databases will be interconnected with other government databases to the effect of rationalising the processes of recruitment, drafting procedure and call-up for active-duty military service. Recruitment centres will be modernised, their location revised, and specialist and communication skills of the recruitment centres' personnel will be enhanced.

- 1. 3. In order to provide sustainable retention of personnel and manning of the Czech Armed Forces organisational structure, the human resources system will newly include parameters reflecting the system of values, personality traits, as well as comprehensive eligibility of incoming generations while maintaining traditional military values and requirements.
- 1. 4. The training of personnel will reflect the challenges associated with technology development and modernisation of the Czech Armed Forces' armaments. Education to traditions and patriotism, military ethos and determination to defend the homeland will be strengthened. The organisation's internal culture will be developed with emphasis on superiority of collective interest to personal interest, supporting initiative, self-reliance and creativity in mission performance. Comprehensive and critical thinking of commanders, adaptability to the change of environment and resilience to cognitive warfare will be developed.
- Conditions of performance of service and the system of welfare and benefits will be realigned to increase motivation to service and achieve better harmonisation of professional and personal life of service members to the effect of strengthening personnel mobility.
- Consideration will be given to possible substitution of some service posts in administration or support functions by civilian employees. Possibilities will be considered for substituting personnel with new technologies on the basis of artificial intelligence and robotization.
- The Czech Armed Forces will perform an analysis of efficiency and effectiveness of its existing and planned processes and structures to the effect of optimising the utilisation of the planned personnel strength.
- The Czech Armed Forces will initiate steps to achieve changes in the remuneration and social policy of the MoD and the Armed Forces to maintain their competitiveness in the labour



market and realign the internal regulations to the effect of their early adaptation to the changing environment.

- 1. 9. The policy on extending and terminating the service relationship will be reviewed so that it motivates personnel to further service. The offer of retraining for outgoing service personnel will make it easier for them to return to civilian life. Assignment of outgoing active-duty personnel into the Active Reserve Component will be rationalised. Flexible conditions will be implemented for possible return of ex-service members into active-duty service. The medical care system will be maintained for ex-service members, modern war veterans, the Active Reserve Component and the families. In the regions, the Czech Armed Forces will create community centres for war veterans.
- 1. 10. Academic training of personnel will take place in both defence and non-defence educational institutions both in the Czech Republic and abroad. The Czech Armed Forces will be involved in the development and updating of study programmes. The selection and academic training of teachers, instructors, lecturers and trainers will be continuously enhanced. Defence academic training institutions will increase their proportion in the overall provision of service personnel in line with the needs of the Czech Armed Forces.

# 2. Strengthening readiness, deployability and sustainability

Strengthening combat capability of the Czech Armed Forces will claim a substantial increase of readiness, deployability and sustainability of all forces. The aim is to ensure early deployments of comprehensively ready forces and assets in the required scope, into the designated area of operations, with adequate level of stocks and support and the necessary level of resilience to the engagement by the enemy.

- 2. 1. The plans for the use of the Czech Armed Forces for ensuring national defence will be revised based on the NATO defence plans. As part of a fair participation in the collective defence system, the Armed Forces will expand the proportion of earmarked forces and assets for ensuring a credible deterrence and common defence.
- 2. 2. The required manning levels of the organisational structure will reflect the assumed use of the forces. The manning levels in the strategic and operational components will be maintained at least at 95%; in land, air, special and cyber forces at 90%; and in territorial forces at least at 70% of the tables of establishment strength.
- 2. 3. The training system will ensure the development of capabilities for meeting the most demanding use scenario of the Armed Forces in line with the NATO and Czech defence plans. The Czech

Armed Forces Operational Readiness Plan represents the primary tool for systemic increase of the level of readiness. Its realisation is regularly evaluated and reflects in the annual update. Commanders and staffs will realise measures designed for embracing the MDO concept and familiarity with all possibilities of the newly introduced equipment and armaments. The academic and field training system will be modernised with the use of new technologies including virtual reality and advanced simulation and its capacities will be expanded.

- 2. 4. The Czech Armed Forces will strengthen cooperation with crisis management actors with focus on managing military threats and hybrid interference. National as well as international crisis management procedures will be exercised on regular basis using realistic scenarios. The gained observations will inform revisions of internal regulations and all defence planning and control system processes.
- 2. 5. The Armed Forces build-up plans will be revised for transitioning into wartime organisational structure in the event of the state of national

- emergency or the state of war including the volume of mobilisation stocks and mobilisation reserves in the state material reserves systems. The Armed Forces mobilisation build-up system will be aligned so that it is able to quickly receive, equip, prepare and incorporate personnel and material assets into the wartime structure. This system will be based on elements existing already in peacetime to support organisational and resourcing build-up of the CAF into the wartime structure. Mobilisation and reserves concepts will be updated.
- The building will commence of Territorial Defence battalions and Active Reserve Component based territorial forces support element. Those units will achieve full operational capabilities after 2035.
- 2. 7. The preparation of citizens for national defence will be developed with the objective to increase whole-of-society resilience and strengthen the will to national defence, especially with the young generation. Motivation of citizens will be increased to all types of voluntary adoption of the performance of liability to conscription<sup>12</sup> including volun-



<sup>&</sup>lt;sup>12</sup> Defence Act No. 585/2004 Coll.



- tary earmarking. The Armed Forces will participate in the project of "Preparation of citizens for national defence" (POKOS).
- 2. 8. The Czech Armed Forces will strengthen the capability to plan the deployment of forces and assets in the home territory and abroad. The transport of forces including strategic lift will be provided through a combination of NATO and commercial outsourced means and through shared capabilities as part of international cooperation.
- 2. 9. Sustainability and autonomous operation of forces and assets will strengthened through an expansion of logistic, combat engineer and medical support. The scope and quality of stocks will ensure the conduct of intensive combat activity for the period of time defined by the requirements of NATO defence and operational planning. The generation of stocks will observe the principle of effectiveness, efficiency and of strategic scope and importance. A high priority will be assigned to the generation of stocks including the state material reserves with emphasis on the decisive types of ammunition including input materials for their manufacture and spare parts to support collective defence missions. Security of supply and armaments life cycle will be ensured in states of crisis as well as outside them.
- The Czech Armed Forces will step up the capability of receiving and supporting NATO forces in the national territory. On the level of the national defence system, the Czech Armed

- Forces will be involved in the generation of stocks with emphasis on fuels and food, provision of transport infrastructure and medical support capabilities, as well as rest-over-night conditions.
- 2. 11. Force protection will be developed comprehensively across all operational domains. The vulnerability of forces and assets will be reduced, especially to the effects of uncrewed aerial systems, loitering munitions and technologically advanced weapon systems. The capability will be strengthened of their early detection, as well as the possibilities of their elimination using active and passive systems and measures. The resilience in the cyber domain and resilience of personnel against cognitive interference will be increased.
- 2. 12. The modernisation of the Czech Armed Forces infrastructure will be accelerated to the effect of strengthening readiness and sustainability. The plan will be developed for the realisation of building and renovation of immovable infrastructure. Based on the technological development and changing requirements for connectivity, resilience and protection of the strategic and operational level of command, the plan will be prepared for the development of the General Staff and a Joint Multi-Domain Operations Command.
- The Czech Armed Forces will progressively reduce its energy intensity so as to strengthen its operational effectiveness and secondarily reduce the impact of its activities on the environment.

## 3. Digitalisation of the command and control system

In order to ensure an effective decision-making in future operations, major changes of the C2S<sup>13</sup> will be realised to the effect of its adaptation to the MDO concept. The C2S will be integrated and digitalised to achieve information superiority over opponents.

- 3. 1. The strategic level command will be represented by the General Staff of the Czech Armed Forces. The operational level will comprise the Joint Operations Command, which will develop the capability to plan and control operations in MDO conditions. The tactical level will comprise the commands of land forces, air force, special forces, territorial forces, information and cyber forces, and the Training Command Military Academy. The tactical level will pursue the capability to plan and control operations in its domain and coordinate and synchronise as part of MDO.
- 3. 2. All levels of command and control advance the principles of mission command ensuring a shared understanding of common intent and its decentralised performance and promoting delegation of authority, responsibility, autonomy, initiative, unity of effort and shared confidence in the performance of the mission. This organisational culture will be reflected into the training of personnel.
- 3. 3. The building of stationary and mobile command posts will be finalised and they will be optimised in terms of scope, structure and equipment. The C2S processes will be fully digitalised and the means of command and control will be modernised. The C2S as a whole will deepen its interoperability with NATO Allies and its integration across all forces of the Czech Armed Forces in the conduct of MDOs. The Czech Armed Forces will strengthen its capability of communication with government and non-government organisations as well as other actors.
- 3. 4. The sharing of data in the cloud environment will ensure mutual transmission of information and services among the command posts, strengthen their decentralisation and resilience. Information and communication technology projects will be realised to strengthen both mobile and stationary C2S infrastructure. Infrastructure will

- be prepositioned in the earmarked and reserve force staging areas, weapon systems prepositioning areas and materiel depots. In order to support the activities of uncrewed systems, the command posts will have available adequate data and information flows using standard interfaces and transmission protocols.
- 3. 5. Protection and resilience of the command posts will be enhanced through its rapid deployment and redeployment capability, introduction of active and passive concealment and camouflage systems, reinforcement against electromagnetic pulses, cyber attacks, the use of laser weapons, microwave radiation and positioning or time spoofing. Ballistic protection and defence against weapons of mass destruction will be enhanced. Robotic systems will be introduced for the perimeter security of command posts. Energy self-sufficiency of the command posts will be reinforced with sources generating minimum signature.
- 3. 6. The digitalised command and control processes of the Czech Armed Forces will be implemented into a single Integrated Information Environment (IIE), which will enable a controlled access to data with mandatory information tagging and its possible sharing in five security domains<sup>14</sup>. The IIE will use shared national data and services providing data storage as well as sharing of services with Allies and Partners and enabling the use of digitalised eGovernment services and data. The national information concept will be implemented, which will enable the utilisation of data and services of agenda information systems of other governmental ministries, agencies and local governments.
- 3. 7. C2S capabilities will be enhanced through artificial intelligence and advanced human-machine interface with the use of quantum technologies and neuron networks with a high data security. Automated processing, analysis and fusion of large quantities of information and big volumes of data from various sources will enable the maintenance of continuous multi-domain situational picture in real time to the effect of achieving a higher speed and precision in decision-making processes at all command and control levels. A fast sensor-to-effector loop will

<sup>&</sup>lt;sup>13</sup> The C2S comprises (1) command authorities, (2) command posts, (3) command and control processes, (4) means of command and control.

<sup>&</sup>lt;sup>14</sup> Stationary unclassified, stationary restricted, stationary secret, deployable unclassified, deployable secret.

- enable an effective targeting<sup>15</sup>. Wideband and narrowband satellite systems will be used with the possibility to use cloud services.
- 3. 8. The use of technological and sensor datalinks will enable the communication of weapon systems and support systems for the provision of technical or logistic status information on combat assets while ensuring a high degree of resilience to jamming. There will be back-up forms of connection and communication available to the effect of minimising the risk of loss of information flow. The introduction of secure long-range data and voice communication systems will enable a full use of the operational reach<sup>16</sup> of the introduced weapon systems and enhance the possibility of manoeuvring with forces and assets of the Czech Armed Forces.
- 3. 9. Besides the Czech Armed Forces' own resources, personnel from the civilian sector will also be employed in support of the C2S. The maintenance capabilities will be strengthened and operational stocks of spare components and technologies will be generated and maintained.

## 4. Effective engagement in all operational domains

The NATO MDO concept will be implemented to the effect of developing the capability of effective engage-

- ment in all operational domains. A successful implementation of the concept will however require a higher degree of integration of the Government's military, information, diplomatic as well as economic tools into a single effort.
- 4. 1. The General Staff will develop the Czech Armed Forces Multi-Domain Operation Concept to define the manner of the use of forces as in the frame of this concept and determine future requirements for the changes in the Czech Armed Forces' capabilities across all functional areas.
- 4. 2. Operational level of command and control will develop the capability of coordinated, early and synergic engagement by military and non-military instruments, state and non-state actors across operational domains and environments. The tactical echelon will accelerate operations planning and control processes and will develop the capability to coordinate efforts of joint force operation across operational domains. All levels of command and control will increase autonomy and initiative of commanders and staffs in seeking and utilising opportunities to engage the enemy.
- 4. 3. In the land operation domain, the capabilities of land, special and territorial forces will be developed to the effect of both lethal and non-lethal engagement of the enemy while



<sup>&</sup>lt;sup>15</sup> Targeting is the process of target selection and prioritization and identifying their appropriate engagement in accordance with operational objectives.

<sup>&</sup>lt;sup>16</sup> Operational reach expresses the range and time, during which a unit is able to project its capabilities.

- leveraging the synergy potential of other operational domains in support of joint operation. Operational effectiveness will be strengthened through a combination of decentralised command and control, increase of firepower, mobility, resilience and ballistic protection of forces and assets. The capabilities will be developed to lead to achieving information dominance, acceleration and decentralisation of commanders' decision-making, force dispersal, increase of operational tempo, reach and precision of engaging the enemy across operational domains.
- 4. 4. In the air operation domain, the air force capabilities will be developed to the effect of protecting and defending the airspace and provision of air support to own and NATO forces and services. The F-35 aircraft will substantially contribute to attaining information superiority over the battlefield within the MDO concept. The capabilities will be developed for interoperable operation of forces and assets of the NATO Integrated Air and Missile Defence System and the capabilities of the Czech National Reinforcement Air Defence System. Ground Based Air Defence fire posts will be identified for continuous coverage of critical defence infrastructures with integration into the C2S, as well as ensured logistic support

- and the functioning of the Allied system of electronic identification of own aerial and land assets. Strategic command and control, surveillance, lift and protection capabilities will be developed as part of NATO and EU international cooperation.
- 4. 5. In the naval operation domain, the Czech Armed Forces will have contracted for its sealift requirements. In order to ensure an effective coordination in multinational operations, the Czech Armed Forces will participate in command structures and have the capability to share data and information.
- 4. 6. In the cyber operation domain, infrastructure and technologies will be developed to enable continuous monitoring and analysis of the cyber space as well as early warning. The protection of own networks and weapon systems will be provided. Capabilities of both defensive and offensive operations will be developed as part of the MDO. Mobile cyber defence assets and the reach back capability will be developed. The posting of Information and Cyber Forces elements across the Czech Armed Forces structure will be optimised.
- 4. 7. In order to effectively operate in the space operation domain, an adequately efficient and secure satellite communication system will be built. The Czech Armed Forces will develop





capabilities to provide precision and reliable positioning, navigation and time. Own, NATO, EU and commercial systems on orbital level will be used. In order to ensure full availability of satellite data, products and services, a system will be introduced for their distribution to forces and integration into the C2S. Functional links will established with the Military Intelligence, NATO, EU and Partners' centres for sharing and exchange of data, products and services.

- 4. 8. In the electromagnetic spectrum, the protection of own forces and assets will be reinforced, as well as the capability to engage a technologically advanced enemy. The capability will be increased of detection and engagement with the use of advanced systems using infrared and ultraviolet band. Newly introduced weapon systems will be resistant to the use of directed energy weapons. At the same time, directed energy weapons will be used for elimination of the enemy's systems.
- 4. 9. In the information environment, the capability of early collection, analysis and distribution of information will be developed. On the operational level, the capability will be developed of conducting information operations across all operation domains and the capability of

- effective communication with various targets groups. For effective communication, traditional media sources and social platforms will be complemented with analytic tools with elements of artificial intelligence, automatically generated campaigns and the like. The capability of open source information gathering, including the monitoring of the so-called deep web<sup>17</sup>, will be increased.
- All Czech Armed Forces armaments projects will reflect the capability of the acquired armaments to integrate into the multi-domain engagement concept.

### 5. Deepening international cooperation and developing interoperability

For the needs of effective performance of joint operations, comprehensive development and sharing of capabilities, and the reduction of their acquisition and operating costs, measures will be realised to deepen interoperability and international cooperation with Allies and Partners.

- Standardisation agreements deepening operational interoperability will be consistently implemented.
- 5. 2. In accordance with the priorities of the Security Policy of the Czech Republic, the Czech Armed Forces will be adequately represented in inter-

<sup>&</sup>lt;sup>17</sup> The Deep Web is a part of the internet that is not indexed by web search engines. It is normally accessible only to users with access data or some technical knowledge.

national structures and command headquarters with the objective to advance the Czech Republic's interests and support the activities of international organisations. Posting of personnel will be goal-oriented and will reflect the Czech Armed Forces' specialisation and regional focus. The involvement of the Czech Armed Forces' service personnel in the international structures will be subject to regular evaluation.

- 5. 3. The support will continue of international structures and initiatives in the territory of the Czech Republic, which significantly contribute to the development of national and NATO capabilities. That primarily involves the JCBRN Defence Centre of Excellence active in the field of protection against weapons of mass destruction, and the initiative Multinational Logistics Coordination Centre that engages in multinational logistics.
- 5. 4. The cooperation with NATO partners in the domain for force training will strengthen force interoperability across all joint functions. In particular, decision-making and planning processes will be harmonised, connectivity of command posts will be strengthened and the MDO Concept will be operationalised.
- 5. 5. The capabilities that would be difficult for the Czech Armed Forces to develop on its own or their acquisition would not be effective or affordable, will be either shared with Allies or will be developed through international projects. That primarily involves the area of integrated air defence, strategic airlift and sealift, intelligence and surveillance, cyber defence and space technologies and services.

# 6. Agile innovation and introduction of emerging and disruptive technologies

In order for the Czech Armed Forces to keep its technological edge, conditions will be created conducive to continuous introduction of emerging and disruptive technologies. The sense of the realised measures is to accelerate the innovation of organisational structures, internal processes and armaments with the use of the potential possessed by the industry and the academia.

6. 1. Lower order concepts will define the plan for the introduction of emerging and disruptive techno-

logies with emphasis of big data processing, artificial intelligence, uncrewed aerial and ground robotic systems, 3D printing, quantum technologies, biotechnologies and other technologies for human enhancement in physical, physiological as well as cognitive functions. The Czech Armed Forces General Staff will develop a concept of introducing artificial intelligence as well as robotic and uncrewed systems.

- 6. 2. Conducive conditions will be created for the management and coordination of the process of introducing emerging and disruptive technologies into the Czech Armed Forces. A system will be institutionalised for obtaining observations on technological trends and their possible military applications. This approach will make it possible to define the requirements for the Czech Armed Forces' technological development and will help accelerate the process of introducing those technologies into use. Cooperation will be developed with innovation agencies and the academia on national and international level, particularly within NATO and the EU. The Czech Armed Forces will prioritise the outcomes of research, development and innovation providing comprehensive solutions to capability development.
- 6. 3. The Czech Armed Forces will develop an experimentation capability to the effect of development, testing and application of emerging and disruptive technologies, verification of operation concepts and concept development proposals across all functional areas. A high premium will be placed on testing technologies for the conduct of MDOs, robotics, mechatronics, HW/SW applications, electromagnetic coexistence, battlefield systems frequency, cyber resilience, big data processing, artificial intelligence and integration of sensor equipment.
- 6. 4. Steps will be initiated to deal with legal and ethical aspects arising from the introduction of new technologies, which will also be reflected into the personnel's academic training. Experimentation will evaluate the impact of the human-machine relations with a focus on decision-making processes, development of personnel and operational effectiveness.

# Implementation prerequisites

- Effective strategic management. The strategic defence management system will have included organisational and material conditions for the building of necessary organisational structure with established processes providing early achievement of the Czech Armed Forces' capabilities and enabling their sustainable development.
- Keeping the Czech Armed Forces competitive in the labour market. The Czech Armed Forces will have cultivated the image of an attractive and reliable employer, and have maintained a high trust by the citizens.
- Stable and adequate financing. Financing of national defence will have represented a high priority for the Government.
- Project management capabilities and capacities.
   The MoD will have had available or secured sufficient capabilities and capacities for the realisation of the growing volume of investments.
- Relevancy of effective legislation. The effective legislation will have permitted the implementation of the Concept. It will have reflected the specificity of the Czech Armed Forces' capability development, particularly in the domain of information security, introduction of new technologies, acquisition of property and services, defence management and planning processes, mobilisation and recruitment.
- Effective industrial cooperation. The MoD will have been instrumental to creating conditions conducive to the development and utilisation of capacities and capabilities of state enterprises established by the

- MoD in assignment of public procurement contracts placed with those state enterprises and industry, both in states of crisis and outside them. Industrial capacities and strategic input materials including an adequate level of state material reserves will have been secured for the security of supply.
- Quick build-up of forces and assets. Conditions will have been created for early build-up of the Czech Armed Forces into wartime organisational structure. Abilities and will of the citizens to defend their homeland will have been strengthened.

### Implementation Risks

- Further worsening of international security situation, which will have claimed an extensive deployment of the Armed Forces before the Concept is implemented
- Possibility of reduction of defence appropriations.
- For financial, capacity or time reasons, the Armed Forces infrastructure will have failed to be modernised so that its readiness would follow on modernisation and development projects.
- The Armed Forces will not have been able to canvass the demanded personnel motivated to serve in support of national defence.
- Introduction of emerging and disruptive technologies will have been neither fast nor flexible enough, nor accompanied by legislation framework. The risk especially consists in the high internal carry-over debt of the Armed Forces, which limits prioritisation of resources, unbuilt innovation structures and lengthy acquisition process. The introduction of emerging and disruptive technologies will have

brought about a variety of challenges, especially in the domain of ethical dilemmas, data privacy and security, regulatory risks, reliable management of robotic systems and the security and safety of their operation.

### **Conclusion**

The Concept is based on the evaluation of the current status of the Czech Armed Forces and the implementation of the CAFDC 2030. It also responds to an essential worsening of the security environment and possibilities of technological development. The Concept outlines the long-term vision and key avenues of development of the Czech Armed Forces' capabilities till 2035 for the needs of ensuring defence. Strategic goals and intentions to achieve those goals will be elaborated in detail in subordinate policies and implementation plans.

The required status of building and development of the Czech Armed Forces' capabilities will be attained in two phases. Phase one between 2024 and 2030 will focus on increasing readiness for leading a high-intensity conflict and on replacement of primary weapon systems. The high priority of this phase will be the completion of the building of the heavy mechanised brigade. Further efforts will focus on increasing the manning levels in the Armed Forces' organisational structures, acquisition of the F-35 aircraft, reinforcing the ground based air defence capabilities, generation of stocks, implementation of the MDO concept and on force training. Phase two from 2031 through 2035 will emphasise the completion of the integration of the acquired armaments and further development of capabilities at higher standards of quality with the use of emerging and disruptive technologies. Both phases will modernise and expand immovable infrastructure.

People are the key and most valuable part of any military force. People form the organisational culture and values driving the functioning the armed forces, they bear the knowledge and skills, and they are the driving force behind the development of the Czech Armed Forces. Thus, the Concept accentuates the retention and development of personnel.

The present Concept supersedes the CAFDC 2030. Its implementation will be evaluated after two years and it will be updated 2027, unless the need arises to do so earlier.

# Forces, combat support and service support development concept

The Czech Armed Forces comprises of land, air, special, information and cyber, and territorial forces, agencies and other components in accordance with the force structure stated in Annex 2. In the upcoming years, the development of those components will seek to achieve the six strategic goals of CAFDC described in the section Strategy to attain the objective status. Implementation projects and resources allocated for the realisation of the concept will be elaborated in subordinate concepts and the MoD Medium-Term Plan. The purpose of this Annex is to delineate the framework for the development of the concepts subsequent to the CAFDC.

#### **Land Forces**

The Land Forces represent the primary combat power for national defence and for collective defence in the land operation domain. The Land Forces are building the capability of deploying two brigade task forces of medium and heavy type and airborne regiment task force, or battalion and company task forces. The Land Forces will achieve the capability of synergic operation with other branches and services in the frame of the MDO concept. The Land Forces strengthen the flexibility of operating in in smaller task forces, mobility, firepower and the capability of reconnaissance and resilience to engagement by the enemy. The Land Forces introduce uncrewed and robotic ground and aerial systems and loitering munitions. The sustainability of the Land Forces will be increased through the transformation of the 14th Logistic Support Regiment.

**Mechanised units** will substantially increase their combat capability through the acquisition and systemic integration of the CV-90 infantry fighting vehicles and new main battle tanks. The 44th Light Motorised Battalion

will newly be equipped with armoured wheeled infantry fighting vehicles, and the PANDUR II vehicles will be modernised. The obsolete calibre 120 mm mortars in mortar batteries of mechanised battalions will be replaced. The concept of building the rapid deployment brigade's fourth battalion will be developed, which will be conceptually, technologically and structurally built for the conditions of conducting operations beyond 2040. Its nucleus will be the core of an experimental component that will conceive and verify the requirements for future combat use of the Land Forces.

**Airborne units** develop the capability of rapidly deployable, air transportable light infantry and air assault operations. The regiment's combat capability will be increased especially through the procurement of light assault vehicles.

**Artillery units**, through the introduction of the calibre 155mm CAESAR guns interoperable with NATO, will increase effectiveness and efficiency of fire support in terms of speed, accuracy, effects and range. Upgrading radar surveillance systems and the utilisation of uncrewed aerial systems will increase the beyond-line-of-sight target identification capability. The new artillery fire control system will ensure the integration of the joint fire support components and interoperability with the Czech Armed Forces and NATO C2 systems.

**Combat engineer units** will focus their development on increasing the speed of the provision of combat engineer support with specific emphasis on ensuring mobility and force protection, and denying the enemy's mobility. The role of general engineer support to other services will be significantly strengthened too.

**CBRN defence units** have the capability to perform the most complex and specific CBRN defence and chemical support measures requiring special personnel training and the use of special equipment. In line with that, the CBRN defence units develop the capabilities of detection, identification and monitoring radiation and chemical situation, decontamination, individual and collective protection against the effects of weapons of mass destruction and hazardous industrial contaminants. Autonomous stand-off detection and sampling systems will be introduced, and the chemical and radiometric labs will

be modernised. Progressive decontamination technologies will be introduced to include equipment to the effect of maintain combat readiness of advanced armaments and materiel.

#### Air Force

The Air Force provides a continuous monitoring, protection and defence of the airspace in the framework of the NATO Integrated Air and Missile Defence System (NATINAMDS). The Air Force performs the tasks of the National Reinforcement Air Defence System (NRADS). Likewise, the Air Force supports other services, performs NATO commitments including the reception and support NATO air forces in the home territory. The Air Force strengthens the protection and defence of the airspace through the introduction of the F-35 aircraft, modernisation of Ground Based Air Defence and by increasing the degree of interoperability with NATO forces. The Air Force will achieve the capability of synergic operation with other forces in the frame of the MDO concept. Effective engagement in the air domain is contingent on a continuous development of the capability enabling to win and maintain air superiority, suppress and engage enemy air defence assets, neutralisation of strategic facilities and force formations in the depth of the enemy's order of battle. The Air Force will increase sustainability through beginning to develop a support component. The capability will be strengthened to perform airfield manoeuvres, engineering modification of airfields and the capability of selected Air Force components to operate from other than the Main Operating Base.

Air surveillance and control system¹ provides, in the whole spectrum of air operations, a continuous air picture, early warning and effective planning and control of forces and assets in the NATINAMDS and the NRADS. The aerial target detection capability at the altitude over 20 km will be expanded. The quantity of mobile 3D radars able to monitor a broad spectrum of targets, including ballistic missiles, cruise missiles and hypersonic missiles, will be increased to the effect of providing a better coverage of the Czech Republic's territory. The compatibility with NATO command and control systems will be achieved. The system is mobile and uses a secure and jamming resistant communications.

**Tactical air units** provide the protection of the airspace and support of land and air operations in both national and NATO context. The tactical air units will strengthen their capability to operate in the conditions of Anti-Access/Area-Denial<sup>2</sup>. For this purpose, the tactical air units will introduce the F-35 aircraft organisationally assigned into two tactical squadrons. The plan will be developed for the replacement of subsonic aircraft with uncrewed aerial systems and a plan of integration the Manned-Unmanned Teaming<sup>3</sup> concept into the capabilities of tactical air units.

Helicopter units provide a comprehensive combat support and service support to all forces and services. It performs the missions of air search and rescue and is involved in the protection of the airspace. The capabilities of helicopter units will be strengthened with precision guided munitions. Transport capabilities will be enhanced through the introduction of medium through heavy helicopters. The plan will be developed for integrating the Manned-Unmanned Teaming4 concept into the capabilities of the helicopter units.

Air transport units develop force and assets airlift capabilities over strategic distances. The air transport units provide air medical evacuation, surveillance and photography, airborne operations, search and rescue service, transport of top state officials and other special tasks. Air transport units develop the capability of operating from both paved and unpaved runways and in-flight refuelling. Multirole medium transport aircraft and small transport aircraft will be acquired for passenger transport including top state officials. Strategic airlift of personnel and larger cargo, equipment, and air-to-air refuelling beyond the frame of own capabilities will be provided through the participation in international programs. The replacement of helicopters will maintain the capability of passenger transport, including top state officials. After 2028, the Air Force will downsize its involvement in the operation of the helicopter emergency medical service.

**Ground Based Air Defence** is layered and integrated into the NRADS and NATINAMDS. It stands ready to integrate reinforcing NATO forces and assets. GBAD capacity will be enhanced to the effect of protecting and defending critical defence infrastructures. The capability of defence against ballistic and hypersonic threats will be

<sup>&</sup>lt;sup>1</sup> Air Surveillance and Control System.

<sup>&</sup>lt;sup>2</sup> Expresses the capability of denying the opponent access into the given operational area or operating there.

<sup>&</sup>lt;sup>3</sup> A concept of synchronised operation of service personnel crewed and robotic aerial and ground systems and sensors to the effect of improving the air picture, increase of lethality and battlefield survival capability.

strengthened to include detection, warning system and an effector control system. C-RAM<sup>4</sup> and C-UAS<sup>5</sup> capabilities will be developed. The plan of GBAD components' disposition will be developed in order to attain an even coverage of the national territory and to increase the GBAD resilience.

Air traffic control and air radio navigation service provides the air navigation services to military and commercial air traffic in the states of crisis and outside them, and enables the performance of the airfield manoeuvre. An integrated military air traffic control centre will be built. Mobile airfield navigation and lighting systems will be introduced. The capabilities of joint terminal attack controllers will be developed in accordance with the MDO concept.

### **Special Forces**

The Special Forces develop and maintain strategic relevance in support of comprehensive defence and protection of the Czech Republic's national interests. The Special Forces have the capability of autonomous deployment and joint operation with other branches and services, security services, government authorities and allied forces, with which they have attained technological and doctrinal interoperability. The Special Forces are capable of flexibly responding to changes in the security environment. Process, organisational and system settings of the Special Forces ensures the performance of national, NATO and coalition operations across the whole spectrum of conflict from under threshold of armed conflict through to high intensity conflicts of equal opponents in own territory or abroad.

The Special Forces will develop the capabilities to eliminate mostly asymmetric threats, managing crises and emergencies and stabilising the security environment through generating strategic and operational effects. Operation in MDO will be strengthened through the development of operational science and implementation of advanced technologies with the integration of sensors and transmission of information into the tactical interface. The skills and abilities of personnel will be developed through leveraging the observations in scientific disciplines, artificial intelligence, virtual reality and biomechanics. The Special Forces will maintain the capability to conduct operations independently of these technolo-

gies. Precision weapon systems, loitering munitions and utilisation of unconventional techniques and procedures will eliminate collateral damage in performance of special operations. For capabilities not available to the Special Forces, advisory and expertise will be sought in the Active Reserve Component and cooperative public.

A transformed structure of the Special Forces with permanent operating reserve force, materiel support system and available strategic lift assets will provide the modularity of units with full integration of the Czech Armed Forces combat support and combat service support elements. Robotic weapon and reconnaissance systems will support combat effectiveness and the use of C-UAS will increase the protection of own forces and assets. Modular logistic support will provide combat sustainability, while information and weapon systems will be continuously modernised and protected against cyber attacks.

#### Information and Cyber Forces

The Information and Cyber Forces ensure for the operation of the Czech Armed Forces in the cyber information domain and the information environment. The ICF protect own information and weapon systems against terrorist attacks of the opponent and operate in the cyberspace as part of MDO at the same time. The ICF increase the resilience of own forces against the cognitive interference by the opponent and concurrently contribute to achieving synergic effect of all forces through active measures in the information environment.

To that effect, the ICF will develop the capabilities in the field of cyber, information and psychological operations, civil-military cooperation and support of strategic communication. A cyber warfare group and an information warfare group will be formed to report to the Information and Cyber Forces. Technical systems of the Information and Cyber Forces will be procured and continuously modernised. In order to provide early detection and reaction to future threats, the cyber threat hunting, penetration testing, and cyber ISR<sup>6</sup> will be strengthened. The protection of own networks and weapons systems will be reinforced with deployable cyber defence assets (mSOC, RRT) and with a reach-back capability. ICF will deepen cooperation on MoD, governmental and international level as well as cooperation with the academia and non-state actors. The Information Forces will develop capabilities to the effect of gaining cognitive superiority in the frame of

<sup>&</sup>lt;sup>4</sup> C-RAM: Counter Rocket, Artillery, and Mortar.

<sup>&</sup>lt;sup>5</sup> C-UAS: Counter Unmanned Aerial System.

<sup>&</sup>lt;sup>6</sup> ISR – Intelligence, Surveillance, Reconnaissance.

the MDO. Given the nature of the cyber space and major resourcing demands, some ICF capacities will be shared with NATO partners.

#### **Territorial Forces**

In mandatory scope, the Territorial Forces ensure the defence of national territory, and the reception and support of NATO forces in the Czech territory. The Territorial Forces provide the training of the Active Reserve Component in subordination to the RMHQs. The Territorial Forces realise selected measures of Operational Preparation of State Territory, manning of the Armed Forces of the Czech Republic and the preparation of citizens for national defence. The RMHQs provide the performance of government functions, perform selective manning and mobilisation in mandatory scope, plus they provide peacetime manning.

The Territorial Forces will increase their capability to respond to military and non-military threats, both of external nature during an attack against the state, and in performance of the missions in support of the components of the Integrated Emergency System. The capabilities of the Territorial Forces will be enhanced through the commencement of transformation of the existing RMHQ infantry companies into territorial defence battalions. The sustainability of the Territorial Forces will be strengthened through the commencement of the building of the Territorial Forces support component. The Territorial Forces' interoperability will be strengthened with other branches and services will be strengthened and close relations maintained with the civil emergency management components in the territories of the Regions. The RMHQs will remain Class I Military Administration Authorities.

# Training Command-Military Academy

The Training Command – Military Academy (TraCom-MA) is an academic and field training installation of the MoD with the mission to provide professional training for military professionals, Active Reserve Component personnel, participants in voluntary military training exercises, civilian employees and civil servants. In cooperation with

the University of Defence, the TraCom-MA realises in-career education of personnel. It ensures the development of methods, forms and means of training, the academic and field training system, Military Training Areas (MTA), simulation and trainer technologies. It is involved in the development of the doctrinal system and supports the lessons learned process. In states of crisis, the TraCom--MA realises measures for the transition of the Czech Armed Forces into the wartime organisational structure. Through the development of its capabilities, the Tra-Com-MA will ensure higher quality standards of personnel training reflecting the changes in warfare, the introduction of the MDO concept and new weapon systems. The TraCom-MA will provide accredited qualification in selected branches. The capability of planning, organisation and performance of collective training in accordance with NATO standards will be developed. The TraCom--MA will expand its capacity to the effect of meeting the increased requirement especially in the domain of basic and professional training<sup>7</sup>. The TraCom-MA infrastructure will be modernised. New technologies will be included in the methods, forms and means of training to the effect of making the training more effective, complex and realistic. TraCom-MA will create conditions and build structures enabling the Armed Forces to build up into the wartime organisational structure.

# Czech Armed Forces Intelligence Support

Intelligence support elements and intelligence information flows effectively and predictively support the decision-making processes of commanders and staffs at all levels of command and control. Intelligence support of the strategic and operational level will be strengthened. Open-source intelligence, human intelligence and imagery intelligence will be developed. Capabilities will be developed in support of analysis of the operational environment and targeting with emphasis on intelligence assessing identity data, weapons and weapon systems and geospatial intelligence. The capability will be strengthened for fusing data from all operational domains and environments into a joint situational picture, both in national and NATO environments. Intelligence products and activities will be efficiently shared within the MoD and outside in near real-time.

<sup>&</sup>lt;sup>7</sup> Professional training comprises career, specialist, specialisation, special, language and specific training.



Performance of reconnaissance and reconnaissance will be provided in all physical as well as non-physical operational domains and environments. Reconnaissance forces and assets will be difficult to detect, increase sustainability and resilience to the enemy's interference. The development of reconnaissance equipment will focus on mobility, autonomous operation, and employability in various types of warfare. The capability will be strengthened to utilise outputs from audiovisual, seismic, electromagnetic and acoustic devices. The quantity of force sensors will be increased and data from them will be more effectively integrated into the all-source intelligence cycle.

Electromagnetic warfare systems will utilise both active and passive technologies to perform electromagnetic operations in the land, air and cyber operational domain. Their development will seek to increase the capabilities of detection and operation in higher frequency bands and the integration into the MDO concept. Operationally, it will work closely with the Cyber Forces.

In the domain of geospatial and hydro-meteorological support, the capability will be strengthened to fuse standardised geographical and hydro-meteorological data with emphasis on visualisation of changes in the environment with possible impact on the activities of forces. The mobility of geographical and hydro-meteorological equipment will be increased on the tactical level.

### Logistics

In the authorised scope, the logistics ensures readiness, deployability and sustainability of forces and coordinates the reception and support of NATO forces in the territory of the Czech Republic. Those mandatory areas include logistic services, maintenance and recovery of equipment and materiel, and the support of movements.

Logistic capabilities will be strengthened at all four levels<sup>8</sup>. Level 1 and Level 2 will be adapted for field sustainability of newly introduced weapon systems. Level 2 will be strengthened through the reorganisation of the 14th Logistic Support Regiment and through the commencement of building of the Air Force logistic component and Territorial Forces support component. Level 3 will strengthen the capability of host nation support in the home territory and the support of own forces deployed abroad, specifically through the transformation of the Deployable Forces Support Battalion into a regiment and through the building of a logistic node. Level 4 components will

be modernised and the infrastructure in the national territory will be expanded to the effect of increasing depot capacities to store the stocks of the Czech Armed Forces and prepositioned stocks of NATO forces.

Emergency stocks will be maintained in accordance with defence planning requirements, but nevertheless for the period of thirty days of supply of intensive warfighting with emphasis on the battle decisive munitions, fuel, food and spares. Dialogue with industry will be maintained and cultivated in order to secure mobilisation supplies in states of crisis. An integrated support system of military equipment and materiel associated with strategic and particularly important projects in all life cycle stages will be comprehensively established. 3D printing will be systemically introduced, particularly into Level 4 and Level 2. Rationalisation and automation of logistic processes with the use of emerging and disruptive technologies will continue. Measures in support of carbon neutrality will be realised in the domain of logistics, with emphasis on energy production, distribution and consumption and waste management.

### Military medicine

The Military Medical Service provides a comprehensive medical and veterinary support to the armed forces in the states of crisis, in wartime build-up and outside of them, both in the national territory and in areas of operational deployment. The Military Medical Service provides medical and veterinary support to NATO forces in the territory of the Czech Republic. It performs government administration and supervision functions in the domain of public health protection and support and veterinary care, and government functions in the domain of medicaments management. It is involved in the operation of the helicopter emergency medical service to the effect of maintaining the skills and abilities of personnel.

The Military Medical Service will develop capabilities in the domain of personnel medical support, biological defence, medical logistics and veterinary support of the MoD. Emerging and disruptive technologies will be utilised with emphasis on e-health and telemedicine, reach-back for the needs of surgical care in areas of operation, robotization, use of biosensors, plus simulation and modelling in support of the decision-making process. The medical evacuation system will be rationa-

<sup>&</sup>lt;sup>8</sup> Level 1 is the unit's (battalion's) organic logistic element; Level 2 is represented by the logistic battalion of the brigade task force; Level 3 is the national support element, Level 4 is provided by the Logistics Agency.

lised. The Military Medical Service control system and the medical personnel training system will be optimised. Deployable forces and assets of the Military Medical Service will provide readiness, deployability and sustainability of two brigade task forces. The Role 2B and Role 2E capabilities in the 6th Medical Battalion, and Role 3 capabilities in the 7th Medical Battalion will be developed. The capabilities of the field dressing stations (Role 1) will be strengthened for the provision of prehospital emergency and medical evacuation.

The system of garrison medical facilities provides the primary health and preventive care and occupational health services. Medical logistics will increase the storage capacities of the Medical Materiel Centre in Bystřice pod Hostýnem and will modernise the compound in Loukov. Biological defence will be strengthened through the completion of the installation in Těchonín and modernisation of the equipment used by mobile bio defence elements. The veterinary service develops the capabilities to provide the veterinary care, the K-9 service and protection of the state territory against possible introduction of infectious and contagious diseases or their carriers. In cooperation with the Air Force Command, the command and control system will be optimised in the domain of wildlife hazard management to cover airfields and traffic.

# Signal Corps and informatisation

The Signal Corps provides a continuous communication and information support as part of the C2S at all levels of command<sup>9</sup> in peacetime locations, areas of operational deployment and in permanent missions abroad. At the same time, it thus forms the Critical Defence Communication and Information Infrastructure (CDCII) in the frame of the Operational Preparation of State Territory (OPST). In the frame of the MoD Integrated Information Environment, the Signal Corps is involved in further development and utilisation of MoD digitalised services with the use of possibilities of eGovernment. The Signal Corps provides communication inter-Ministerial and communication with other governmental authorities and agencies, as well as with NATO and EU authorities, especially in the field of crisis management. The Signal Corps perfor-

ms the national support to the DCM<sup>10</sup> unit in support of NATO and performs the role of the national military authority for the administration of non-civilian and shared bands of the radio spectrum in the Czech Republic. The Signal Corps ensures the building of the Czech Armed Forces command posts and NATO command posts in the domain of communication and information systems. Assigned elements of the Communication and Information Systems Agency (CISA) provide communication and information support for the performance of operational requirements of standardised command posts on the strategic and operational level in all modifications (stationary, protected, unprotected, deployable).

The capabilities in the field of development and testing of C2S technologies and IT specialist training will be provided by the Deployable Systems and C2S Technologies Development Centre reporting to the Communication and Information Systems Agency.

An effective and early development and procurement of information and communication technologies is ensured. To that effect, the required level of stocks is provided, either in own depots or outsourced. The capability will be increased of own maintenance capacities of signal equipment and material to the effect of reducing dependence on outsourcing.

#### **Active Reserve**

The development of the Active Reserve Component (ARC) has a crucial importance for strengthening readiness, deployability and sustainability of the Czech Armed Forces including maintaining a close link with the civilian population. The ARC represents a pool of ready reservists, who reinforce active-duty units in peacetime and, at the same time, form the core of the Territorial Forces. ARC personnel form the basis for the build-up of the Czech Armed Forces into the wartime organisational structure in the state of national emergency and state of war.

A new career development system involving a systemic specialist and career training will be introduced for ARC personnel. The Territorial Forces will expand the ARC training so that it includes the harmonisation of components up to battalion level. All components of the Czech Armed Forces will strengthen their self-reliance in terms of developing own Active Reserve. The Czech Armed Forces will make use of the ARC to strengthen scarce specialties or capabilities.

<sup>&</sup>lt;sup>9</sup> Strategic, operational, tactical.

<sup>&</sup>lt;sup>10</sup> NATO Deployable Communication Module.

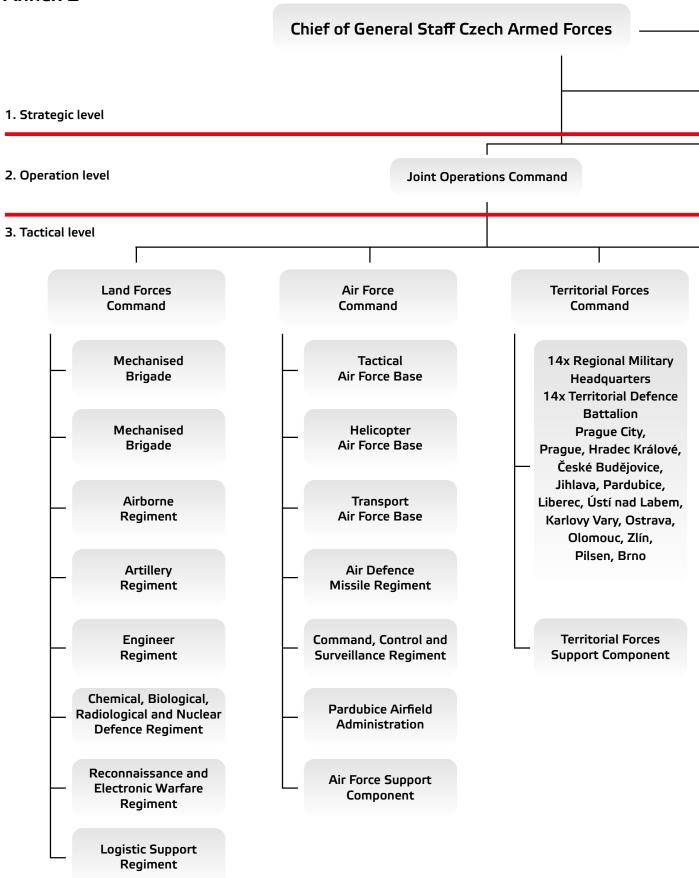
#### Immovable infrastructure

Immovable infrastructure (II) provides the preconditions for the development of the Czech Armed Forces across all capabilities. The goal is for the condition of the II to help motivate the personnel for service; provide effective working conditions, training and information security; enable the installation of the required technologies; create adequate conditions for storage and protection of property, maintenance and repairs of equipment and materiel. The Immovable Infrastructure will be developed continuously with respect to the capacity of realisation projects according to the following priorities: development of II for fifth generation aircraft; development of C2S infrastructure; provision of life cycle of strategic projects; capability targets as per defence planning; revitalisation of the Academic and Field Training System; revitalisation of garrisons with prepared development study, and the building of II of the newly built capabilities. The plan of development of the immovable infrastructure will be elaborated under the "Czech Armed Forces Immovable Infrastructure Development and Modernisation Strategy".

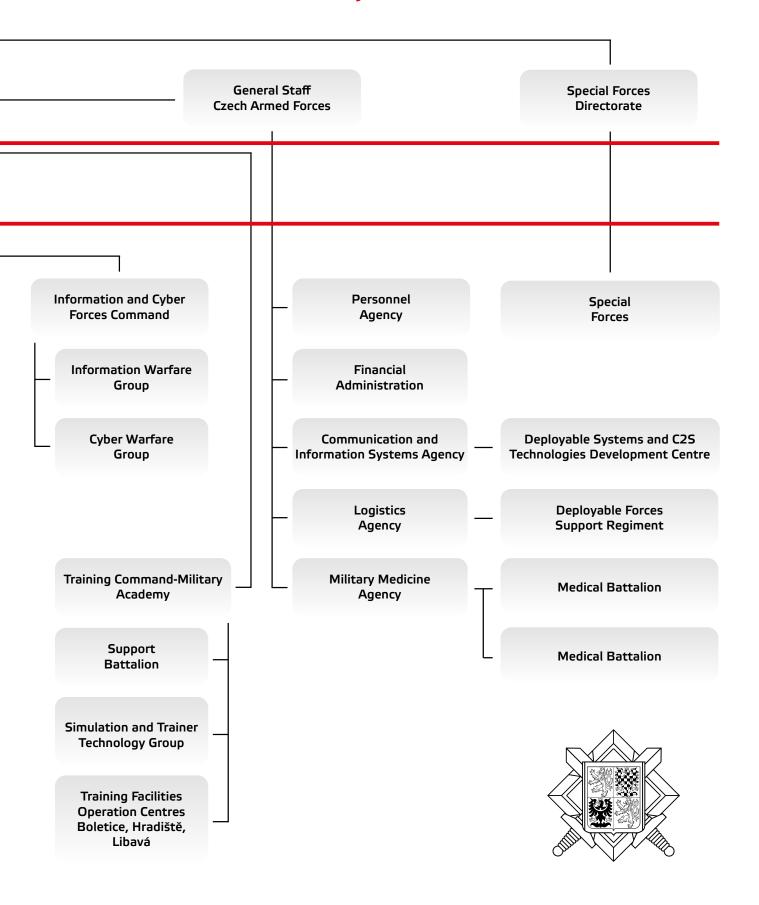
In the horizon of the year 2035, the number of the Czech Armed Forces garrisons will increase from 45 to 48, through renewing garrisons in Přerov, Kozlov and Mošnov, see Annex 4. The construction of a new ammunition depot will be started.

# Academic and Field Training System

The Academic and Field Training System (AFTS) enables individual as well as collective unit training and essentially contributes to the attainment of the objective readiness capabilities of the Czech Armed Forces. The development of the Academic and Field Training System will reflect the needs of all branches and services of the Czech Armed Forces arising especially from operational needs, from doctrinal changes and trends, from introduction of new equipment and weapon systems and from the growth of quantitative requirements for training of personnel, units and reserves. The modernisation of the AFTS infrastructure supporting the stay of NATO forces for training will be completed. The capability of simulation technologies with use of artificial intelligence elements and virtual reality will be developed to the effect of making the training more effective and realistic. Air simulation technologies will be operated both in Air Force units and on outsourced basis. For the needs of modernising the AFTS, the possibilities of defence applied research and development will be used. The AFTS will enable the performance of inter-Ministerial agreements on the preparation of citizens for assignment in the Integrated Emergency System, in war conflict zones, in hotspots and humanitarian crisis areas.



# **Objective force structure**



No.	Project name	Project objective	before 2023
1	SHORAD missile system	Replacement of four SA-6 Gainful air defence missile batteries with an advanced system.	
2	JAS-39 GRIPEN lease	Protection of Czech airspace with own supersonic capability and performance of commitments to NATO.	
3	Supersonic capability replacement	Protection of Czech airspace with own supersonic capability and performance of commitments to NATO.	
4	Combat and multirole helicopters	Development of air support capability to land and special forces. Mi-35/24V Hind replacement.	
5	Medium, heavy and transport helicopters	Development of air support capability to land and special forces.	
6	Medium transport aicraft	Increasing airlift capability for personnel, equipment and materiel over medium to longer ranges.	
7	C-RAM capability	Building of the capability to protect against rockets, artillery and mortars.	
8	Tracked Infantry Fighting Vehicles	Increase of firepower, mobility and force protection of the 7th BdeTF and deepening compatibility with NATO.	
9	Main Battle Tank	Equipping 73rd TankBn with advanced MBTs to strengthen required capabilities of 7th BdeTF.	
10	120 mm self-propelled mortar	Equipping MechBns with advanced self-propelled mortar to reinforce fire support capability.	
11	NATO gun	Increase of BdeTF fire support capability in the full spectrum of operations.	
12	Artillery fire control system	Provision of early, precise and effective fire support of BdeTF, interoperability with NATO nation's systems.	
13	TITUS Wheeled Armoured Vehicle - C2 variant, Comms variant, Fire Spt variant	Development of C2S capability, secure and non-secure communications in units of BdeTF.	
14	Pandur modernisation	Increase of ballistic protection, firepower, manouevrability, command, control and communications.	
15	New Generation Wheeled Infantry Fighting Vehicles	Rearming 44th Light Motorised Battalion into full medium mechanised battalion on wheeled platform. Building of 4th RDBde iaw NATO standards.	
16	Light Assault Vehicles	Provision of ballistic force protection and increase of movement and fire manoeuvre capability by airborne units.	
17	Multirole engineer wheeled platform	Equipping the Engineer Corps with vehicles with ballistic protection for combat engineer missions.	
18	Floating and auxiliary bridges	Development of engineer support capability for the provision of mobility. Replacement of pontoon bridge system and bridge transporter.	
19	Data center development	Provision of secure environment for processing and storing data of stationary communication and information systems.	
No.	Project name	Project objective	before 2023

Explanation: project realisation

**Project funding** 

Planned deliveries of primary weapon systems

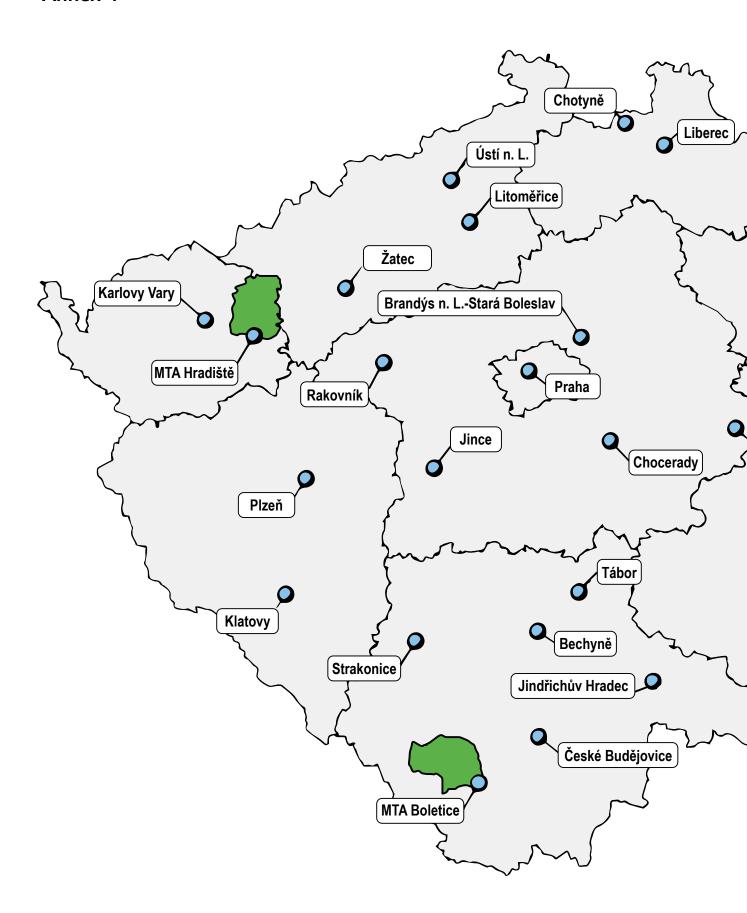
Planned procurement / lease



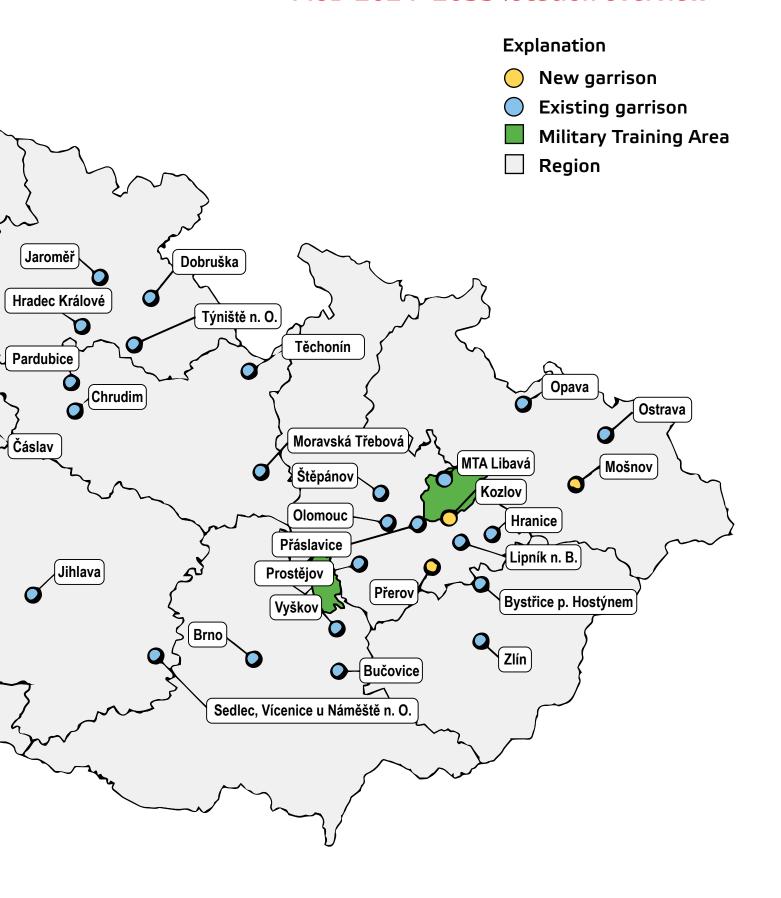
# Primary weapon systems development and replacement projects

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# MoD 2024-2035 location overview



### **Acronyms**

AFCR Armed Forces of the Czech Republic
AFTS Academic and Field Training System

ARC Active Reserve Component

ASACS Air Surveillance and Control System

BdeTF Brigade Task Force

C2S Command and Control System

CAF Czech Armed Forces

CAFDC Czech Armed Forces Development Concept

CDCIS Critical Defence Communication and Information Infrastructure

CISA Communication and Information Systems Agency

CP Command Post CR Czech Republic

C-RAM Counter Rocket, Artillery, and Mortar
C-UAS Counter Unmanned Aerial System
DCM Deployable Communication Module

EU European Union

FSCP Fire Support Coordination Post
GBAD Ground Based Air Defence
GDP Gross Domestic Product
HW/SW Hardware/Software

ICF Information and Cyber Forces
IES Integrated Emergency System
IFV Infantry Fighting Vehicle
II Immovable Infrastructure

IIE Integrated Information Environment
ISR Intelligence, Surveillance, Reconnaissance

IT Information Technology

JCBRN Joint Chemical, Biological, Radiological and Nuclear

LAV Light Assault Vehicle
LMBn Light Motorised Battalion
MDO Multi-Domain Operations
MechBn Mechanised Battalion

MLCC Multinational Logistics Coordination Centre

MoD Ministry of Defence

mSOC Modern Security Operations Center

MTA Military Training Area

NATO North Atlantic Treaty Organization

NRADS National Reinforcement Air Defence System
OPST Operational Preparation of State Territory
POKOS National civil preparedness program

RDBde Rapid Deployment Brigade RMHQ Regional Military Headquarters

RRT Rapid Reaction Team
SHORAD Short Range Air Defence

SOF Special Forces

STT Simulation and Trainer Technologies

TankBn Tank Battalion

TC-MA Training Command – Military Academy

TerF Territorial Forces
UN United Nations

WIFV NG Wheeled Infantry Fighting Vehicle New Generation
WIFV Comms Wheeled Infantry Fighting Vehicle Communications
WIFV C2 Wheeled Infantry Fighting Vehicle Command and Control

# Czech Armed Forces Development Concept 2035

Published by the Ministry of Defence of the Czech Republic – MHI Prague Address: Military History Institute in Prague, U Památníku 2, 135 00 Praha 3 www.army.cz www.vhu.cz

Translation: Jan Jindra Design: Milan Syrový

Photos: Czech Armed Forces, KNDS

Printed in February 2024 Printed by MHI Prague

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© The Ministry of Defence of the Czech Republic – MHI Prague, 2024 ISBN 978-80-7278-873-6

