

# Interoperability

## for the Hungarian Army

*“The ability to field forces with the greatest practicable interoperability and standardisation amongst Allies, and the flexibility also to cooperate with the forces of partners, including, to the extent possible, through the release of appropriate standards.”*

*Comprehensive Political Guidance, December 2005*

**T**he nature and type of crises, the characteristics of the threats, together with the need for a collective multinational response demand that future military actions will be taken under the aegis of the international community. To fulfil this requirement, **UN, NATO and EU will have to evolve and develop better capabilities to ensure peace and stability in a changing world.**

The basic goals of Hungarian foreign and security policy are to ensure welfare, stability, constitutionalism and human rights in the Euro-Atlantic region and to contribute to stability within the Central-Eastern European Region, mainly by supporting the process of democratic reforms, and human rights with special emphasis on the rights of ethnic minorities in neighbouring countries. Maintaining the cultural values, improving life standard and ensuring human and collective minority rights of ethnic Hungarians in the neighbouring countries are closely tied to the socio-economic development of the countries where they are citizens. Contributing to stabilisation of democratic processes, constitutionalism, and market economy in neighbouring countries is therefore the key interest of Hungary. Hungary tries to foster the Euro-Atlantic integration of these countries as the above mentioned fields are developing.

Improving capabilities that help Hungary to become an effective partner in international organisations like NATO and EU corresponds not only to our commitments within the Alliance, but there are vital national interests, too. Hungary needs a defence policy and defence capabilities, which enable us to effectively contribute to NATO collective defence and to strengthen Hungarian participation in crisis management operations. The Republic of Hungary must develop special skills in order to contribute to the effective NATO response to asymmetric threats, like terrorism. As an EU member country, Hungary must actively participate and contribute with special skills to Petersberg-type EU-led operations in the future. Hungary's capacity to co-operate with neighbouring countries within or outside of an alliance structure must be developed.

**The effectiveness of combined and joint operations depends on the interoperability, deployability, and sustainability of military forces.** NATO needs to retain a viable military force, we must continue to search for, and develop ways, and to improve these and other essential combat capabilities. **The interoperability is one of the most important factors of the capability of the multinational forces. It is the main element of the minimum defence requirements in the new missions in the 21<sup>st</sup> century.**

## Interoperability

### The Hungarian interpretation of the interoperability is very similar to the NATO used term and its application.

The interoperability is the ability to operate in synergy in the execution of assigned tasks. Or in other words, the ability of Alliance forces and, when appropriate, forces of Partner and other nations to train, exercise and operate effectively together in the execution of assigned missions and tasks. Interoperability has **three stages or levels**, what are the followings:

- **Compatibility:** The suitability of products, processes or services for using together under specific conditions to fulfil relevant requirements without causing unacceptable interactions.
- **Interchangeability:** The ability of one product, process or service to be used in place of another to fulfil the same requirements.
- **Commonality:** The state achieved when the same doctrine, procedures or equipment are used.

A relevant example for the necessity of the proper level of interoperability is the language skills of forces involved in a multinational operation. In order

to take part in any mission led by NATO, EU or other international organization, **one of the most important factors is conceptual compatibility**. It has two elements: first, being able to speak and understand each other -that is **competency in NATO's operational language, English**. Forces also need to possess communication and computer systems that are compatible with each other for exchanging information. Second, all participants **need to understand each other's operational doctrine, standard operating procedures (SOPs), logistic systems, and command and control systems**. This allows forces to operate together on the ground, in the sea and in the air. They also need to be able to make use of each other's service support structures.

## Linguistic interoperability

Since the end of the Cold War, **foreign language training** - especially of English, the *de facto* operational language - **has become increasingly important within armed forces**. Especially in NATO due to an ever-increasing number of peace-support operations, on one hand, and to

the Alliance's enlargement and partnership activities, on the other. Language skills - in both Allied and Partner countries - are primarily a national responsibility. However, language training must be of concern to NATO as a whole as well since linguistic interoperability is as important to ensure that countries are able to participate effectively in both NATO missions and wider Alliance activities as any other form of interoperability.

While soldiers in all Allied armed forces benefit from language training, this need has been **particularly acute in former Warsaw Pact countries** where historically people and soldiers did not have the same opportunities to learn and practise English as in Western Europe. As a result, some linguistic organisations through their Peacekeeping English Project, have been working to help improve English language skills in prospective member states and Partner countries since the mid-1990s. **Hungary** has also contributed this process by establishment the **PfP Language Training Centre**, where Eastern European (and former Soviet Union) officers have studied the English language together with Hungarian ones.

## Operational Standardization

Standardization of military forces is one of the key elements to achieve an interoperable and flexible military force. **Operational standardization includes the formulation and revision of doctrines, tactics, techniques and procedures**.

The role of standardization is to enhance interoperability in order to contribute to the ability of Alliance forces to train, exercise and operate effectively together, and when appropriate, with forces of Partner and other nations, in the execution of their assigned tasks. It undertakes this by initiating, harmonizing and coordinating standardization efforts throughout the Alliance and by providing support for standardisation activities.



In accordance with Alliance policy, national and NATO authorities are encouraged to develop, agree and implement concepts, doctrines, procedures and designs which will enable them to achieve and maintain interoperability. This requires the establishment of necessary levels of compatibility, interchangeability or commonality in operational, procedural, materiel, technical and administrative fields.

The development and implementation of concepts, doctrines, procedures and designs are vital in order to achieve and maintain the compatibility, interchangeability or commonality which are necessary to attain the required level of interoperability, or to optimise the use of resources, in the fields of operations, materiel and administration.

### **Operational interoperability directly influences the combat effectiveness of NATO forces, particularly those involving multinational formations.**

Standardisation of equipment, supplies and procedures is thus an overall force multiplier which has to be taken into account in the design and production of systems and equipment. The minimum objectives needed to obtain combat effectiveness are interoperability of the principal equipment, interchangeability of supplies and commonality of procedures. These requirements have a direct bearing on logistic support for standardised equipment. Sufficient flexibility also has to be provided in order to facilitate the participation of non-NATO nations in NATO-led operations.

### **Technical modernization as a vital issue of achievement of the full interoperability**

Technical standardisation also needs coordination in the areas of materiel, logistics, and consultation, command and control in order to achieve increased efficiencies and to eliminate duplications of effort. **Our modernization programs are**

**harmonized with our 10-year development plan.** Due to the strict budget restriction we have, it is not easy to find the right solution how to balance the available resources among different projects. The objective of the modernisation programs is to increase our level of interoperability. **The main acquisition and modernization programs between 2005 and 2015:**

- New multirole combat aircraft;
- 600 pc upgraded Armoured Personnel Carrier;
- 1000 pc new tracks and military vehicles,
- Deployable CIS for the offered land and air units;
- New transport helicopters;
- Three sets of 3D long range radars with Mark XII IFF (Mode IV);
- Personal combat equipment modernisation (NBC IPEs);
- New artillery pieces.

It has to be stressed that within a really short period of time (15 years) we are to modernize or upgrade the main technical equipments of the force structure. Hungary joined NATO only in 1999 with a strong legacy of the cold war. This cold war legacy had a huge effect on the technical park we had. This is the field where creativity, changing mindset are just not enough. Money is required - firstly and most importantly. Therefore, **it is a very challenging - sometimes overwhelming - task to modernize.**

When we are elaborating on modernization, we have to find all the possibilities in the existing technical capabilities, since there are just not enough resources for BUYING new, modern equipments for all services.

An actual example: it is the BTR we have in the force structure a vehicle that is similar to the APCs. Since there are no resources for buying new APCs, we had to find a solution for the significant problem of not having an APC which fulfils the present operational demands. Therefore, we made a decision to upgrade the existing APCs, (e.g. mounting them with new night vision devices, with new command and control devices, communication equipment).

### **Current transformation processes and Hungarian efforts**

NATO's ongoing transformation reflects cultural and institutional change on a grand scale. The increasing need for its forces to be multinational and joint by design, deployable wherever and whenever needed and coherently interoperable in thought and action drives the process ever forward. NATO's military transformation encompasses reorganisation, re-equipping, and introduces new ways of looking at challenges through the lens of capabilities. Member Nations are committed to the process of exploring and adopting new capabilities that will enhance the Alliance's ability to successfully meet the challenges of a new and uncertain strategic environment.

**During the last fifteen years Hungary had to turn her armed forces from a mass army into an expeditionary, deployable and really usable force with effective capabilities, and an ability to meet the newly emerged security challenges.**

Reshaping the structure and characteristics of the Hungarian Defence Forces does not occur at once: it is a long and hard process. For example, in early 90's the number of personnel of the military was 125,000, and this number was reduced step-by-step due to changes of the international security situation.

The Government's defence policy includes the transition to professional force, the earliest and fastest possible execution of NATO integration (with full interoperability), the identification of new requirements, the launch of technical modernization, and the development of military assets.

Harmonizing with recent changes in NATO and its transformations process, and considering the current defence policy conditions, **Hungarian forces also have to meet new requirements.** Hungarian voluntary based armed forces are in transition to a professional force. During development of our capabilities the main focus is on the expeditionary characteristics of forces, together with

retaining some other capabilities which provide defence of our country as well.

It is also very important during the process of achieving the full interoperability with the Alliance and other coalition forces that our developing and modernizing programs must be fiscally feasible, harmonizing with Hungarian budgeting conditions and limitations.

Summarizing the experiences of establishing a professional armed force, it can be deduced:

- it needs a great amount of resources (especially in short period);
- a clean plan for implementation;
- and adequate time for transition must also be provided.

During the transformation of military forces, light infantry battalions were established, an effective airforce has been established- operating within the NATINEADS, and our logistics is able to support the deployed units abroad as well. In parallel with the establishment of voluntary and professional force, a new training system has been introduced. Military education is based on NATO doctrines, procedures and techniques.

**An appropriate level of NATO interoperability was achieved by the implementation of NATO Integration Program.** The purpose of the program was to provide a co-ordination tool for the complete integration of the Hungarian Defence Forces within the NATO force structure. A consistent implementation of the Integration Program requirements provided the basis for the establishment of a capability-based force and an increased combat applicability of the Hungarian Defence Forces units. The program embraced material readiness, and the development of co-operation between HDF and NATO headquarters as well as the means and opportunities supporting that co-operation. It also prescribed the frame of interoperability requirements necessary for integration, as well as the methods, opportunities and due dates for meeting those requirements. The Integration program defined **four**



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### areas where HDF must improve its capabilities. They were education, training and preparation, exercises and defence and force planning.

The integration process - based on negotiations with AFSOUTH - has been executed in two phases. In the first phase, until 2005, an intermediate level of integration was achieved by the successful completion of exercise DEDICATED PHALANX '05. In the second phase, full military integration will be realized until 2010. In the last year, the first phase of this program was fulfilled, which was declared in November 2005 also by the relevant NATO bodies.

### Results of our efforts in order to increase level of interoperability

The main missions of the Hungarian Defence Forces are to defend independence, national sovereignty, and economic and cultural values by all means at anytime and under all circumstances. HDF will accomplish defence tasks within close cooperation with NATO and EU.

**Hungary tries to put special emphasis** - in planning the national force

### development process - on capabilities which are absolute shortfalls in the overall Alliance force structure today.

For this reason, - harmonizing with the Prague Capabilities Commitments - we established some special capabilities in the framework of the Defence Review implemented in 2002-03. These capabilities are (for example) **water purification, bridging, military police and the NBC decontamination.** With political guidance, the CIMIC structure is being improved to be able to operate effectively in the various Crisis Response Operations (CROs). Taking the current strategic situation into consideration for example in Afghanistan or in Iraq, Hungary started to establish **a special "explosive detection dog team"** to provide a good response capability for counter IED (improvised explosive devices).

However, the modernization of force structure, is a long and never-ending process. Here is an actual example, the current operational lessons learned highlighted that Hungary (and the Alliance) don't have the proper level of force protection. For this reason, we are analyzing how we can structure, train and equip **one infantry company - as a force protection sample-unit.** Of course,

later on we have to and we are going to integrate this unit into our force structure, and will use it as a catalyst for the overall transformation process.

Hungary has been fully supporting the NRF concept in line with MC 477 since it was initiated, and gave a high national importance to this Alliance effort. The overall aim is to provide contributions to NRF rotations in line with the progress of the HDF's 10-year transformation. The ceiling regarding NRF contributions set by the Government is 300 soldiers for each rotation.

Due to this priority and PCC, our commitment made in 2002, **a long range reconnaissance company** was offered for the second NRF cycle. And in line with the Alliance's effort to fill the capability gaps by the role specialization and the role sharing mechanisms, for the following cycles Hungary offers specialized capabilities (water purification, CBRN specialization including the biological laboratory).

With reference to the expansion of the operations, the leaders of the member countries agreed on

expanding NATO's role in Afghanistan through the establishment of additional Provincial Reconstruction Teams (PRTs). Hungary is also involved in this mission; we take over the current Dutch PRT mission in October of this year.

The strategic partnership between NATO and EU requires a coherent development of the military capabilities of both organisations. It is essential not only to avoid duplications, but also to avoid the arising of conceptual or doctrinal divergences that could slow down the process of interoperability of the members' armed forces.

The cooperation between the two organisations must be seen as an activity aiming at exploiting opportunities and achieving synergies whenever this will be possible. Due to our membership in the European Union, Hungary has changed its force commitment policy to the European Union. **To support the implementation of the aims of the European Security and Defence Policy, in general, all deployable Hungarians units offered to NATO are also available for EU operations.**

Based on the EU Battle Group concept and on the possible task of the units, the multinational battle group will be capable of executing the full range of EU missions, stressing that these missions are not equal with the NATO definition of 'Full Spectrum of Missions'.

The establishment of the Italian-Hungarian-Slovenian multinational battle group is an ongoing process. The Hungarian decision is to offer approximately 250 troops as a contribution in the second half of 2007. This organisation includes one light infantry company and CS, CSS capabilities necessary to the battle group.

We have already determined the particular military unit. Our primary interest is to retain experiences gained by military units, which are part of the existing MLF (Italian-Hungarian-Slovenian multinational brigade).

Future Alliance operations will require the effective integration and coordination of national units at all levels. Therefore, **a premium must be placed on the development of greater coherence and interoperability between NATO, Partner, and coalition national force contributions.**

The Hungarian Government's intention is to transform, rationalize and decrease the administration in order to reduce cost of operating. The consequence of this transformation will cause some changes related to HDF structure and its personnel strength.

We have to improve and modernize our human and technical capabilities. How to do it? The good solution could be the participation in the multinational modernization projects on the base of the regional and alliance partnership (individual equipment, multirole light tactical vehicle procurement, C-4 ISTAR, etc.).

However, there is no modification concerning to our short term plans, development of capabilities and commitments (up to 2009-2010). We are going to implement our plan without any changes in next 4-5 years, including increasing the level of interoperability of our forces.

On the basis of this plan we are going **to become a credible and really compatible nation and force in the strategic partnership in the interest of the interoperability.**