

# Experience in the Use of Military Forces in Flood Protection

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*The tasks of the Hungarian Defence Forces have changed significantly due to the evolving security challenges. While the level of traditional threats has decreased, there are new challenges approaching, which influence the sense of security in society. These are terrorism, the effects of climate change (floods, snow storms) and cyber crimes. To face the risk factors defined in the National Military Strategy we are in need of changes in preparation, in the set of military assets and in the educational framework. As a result, officer and NCO training and education will be transformed too. We are looking for solutions which can raise the security level of our soldiers in domestic tasks and abroad in international missions.*

*Keywords: Hungarian defence forces, changing security environment, military officer and NCO education, disaster relief, flood protection*

## Introduction

The changing security environment has had its effect on the duties of the Hungarian Defence Forces. New challenges emerged or intensified, such as terrorism and disasters caused by climate change (primarily floods in increasing numbers and intensity). Decreasing resources make transformation more difficult, whether it is in the field of organisation, military training and education or the modernisation of military assets. By today the tasks have crystallised and transformation, although slowly, has started. The system of officer training will be completely renewed from 2013 on, the reserve officer system will be reorganised, our role in international missions will be restructured and the tasks performed domestically will get more emphasis. Most armed forces face similar challenges, although the place where the emphasis is put, differs. In the following paper we will present the challenges facing the Hungarian Defence Forces and some of the areas of the responses to these challenges with special regard to the role in flood prevention.

## International outlook

The use of military forces in preventing disasters has become an unquestionable practice in today's world. This was not always the case, as there were serious disputes whether military abilities can be used for such purposes, even at the end the 1980's. Due to the changes of political and military circumstances and to the discontinuation of traditional conflicts this dispute has quickly come to a rest. On the one hand, a few disasters demonstrated that the application of military forces is indispensable in this field – e.g. hurricane Andrew (United States, 1992) – and on the other hand the traditional enemy disappeared and soldiers suddenly found themselves in a vacuum. Cynically speaking, we could say that a new task came in handy. As a consequence this field got more emphasis in security strategies and military doctrines. Organisational and technical developments

followed, offering more and more ground to multipurpose organisations and assets. We will show a few examples below illustrating the relationship of military forces and disaster prevention.

## **Switzerland**

The Swiss Constitution summarises the duties of the Swiss armed forces in three points:

- armed protection of the country's independence and territorial integrity;
- supporting civilian authorities;
- participation in the international support of peace.<sup>1</sup>

By "supporting authorities" primarily the support of the police during international conferences and other important events is meant. Military forces may participate in the prevention of disasters when they can quickly provide assistance to the fire brigade, the healthcare and civil defence organisations.

## **Croatia**

Prevention of disasters, support provided to civilian authorities in emergencies and search and rescue operations play a decisive role among the duties of the Croatian armed forces. Because of the circumstances of the country this is mainly realised in the fight against devastating forest fires. There are 6 pcs AT-802 and 6 pcs CL-415 fire-fighting planes among the assets of the Croatian Air Force that undergo live assessment every year. This was also the case in July 2012 when they participated in extinguishing an extensive forest fire in the region of Selce.<sup>2</sup>

The Croats put a lot of emphasis on preparation, too. The organisation of the Croatian Armed Forces prepared for fire-fighting makes arrangements for the summer period with exercises. The MI-8 helicopters transport firemen and equipment to endangered points and practise abseil, communication and flying by the seashore.<sup>3</sup>

Fire-fighting planes practice extinguishing, landing on water and fuelling on the water's surface. They put a lot of emphasis on co-operation with civilian bodies as civilian and military rescue forces have to work together in a relatively small area under extreme circumstances during fire-fighting.

A peculiar task of the Croatian Air Force is ambulance service from islands, principally when flying or transport needs to be performed quickly and under difficult circumstances.

## **Czech Republic**

The major force of preventing disasters in the Czech Armed Forces is a technical brigade. A part of the subunit is expressly specialised in preventing disasters – primarily floods. Their training, assets and command structure are all subordinated to this task. They have demonstrated their skills on several occasions in recent years. Naturally other forces of the Armed Forces can be deployed in disaster situations, such as the transport capacity of the air force or the medical specialists.

Without going into further details of the principles of deployment and experiences of other countries we shall make some references to the principles of military forces' deployment:

- The Canadian government does not use military forces normally in disaster circumstances but if the protection needed is excessive it is possible to deploy further forces and assets.

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1 <http://www.vtg.admin.ch/internet/vtg/en/home/themen/auftraege.html> (17.06.2012.)

2 <http://www.focus-fen.net/index.php?id=n283787> (24.07.2012.)

3 [http://www.osrh.hr/default\\_en\\_news.asp?id=686](http://www.osrh.hr/default_en_news.asp?id=686) (24.07.2012.)

- In Belgium civilian and military players are treated with a consistent attitude in disaster circumstances, as complementary resources. In principle the necessary resources are applied at the appropriate location in the proper time.
- The starting point of the French approach is that military forces must immediately be deployed when necessary thereby reducing damages and losses.
- The British unambiguously stood up for immediately deployable military forces if that seems to be the best solution.

## Domestic situation

### *Legal background*

The *National Defence Act* clearly stipulates the duties of the Hungarian Defence Forces.<sup>4</sup> The most important duty of the Defence Forces is the armed protection of the country. Beyond that the “participation in executing tasks related to disaster management” is a decisive and – as experience has shown – very frequently occurring task. The requirements of this task also appear during the development of the army. When performing disaster management duties military organisations participate in it under a military chain of command system, under the leadership of their own commanders. When doing so the Chief of Staff decides on deploying a maximum of 200 persons for a period not exceeding 21 days; for deployment more than this number of personnel or for a longer period the minister responsible for defence is obliged to make a decision. For deployment exceeding 3000 persons the minister responsible for defence informs the committee of the Parliament dealing with national defence issues, concurrently with the related decision. It can be seen that the task is performed in a clearly defined order and way.

When formulating the duties the National Defence Act puts special stress on those expectations of the society that serve the direct support of the civilian environment. Thus the duties of bomb disposal experts, state protocol duties, taking care of the burial places of soldiers and the support of national public employment have been specified.

Act CXXVIII of 2011 on disaster management and the amendment of certain related acts also deals with this issue.<sup>5</sup>

*“Protection and elimination of the consequences should be ensured by coordinating the operation of the bodies created for this purpose and the different protection systems, and by the involvement and collaboration, respectively, of citizens as well as civil defence organisations, business entities, the Hungarian Defence Forces, law enforcement bodies, the National Tax and Customs Administration, national meteorological service, national ambulance service, water administration bodies, the healthcare administrative agency, voluntarily participating social organisations as well as societies and public bodies created for this purpose; additionally the entity at fault and causing non-natural disasters, the national organisations and municipalities (hereinafter jointly referred to as participants of disaster management).”*

Besides dealing with the changes of the security environment the *National Security Strategy* also lays down the duties of the Defence Forces:

*“Global climate and environmental changes, the effects of the more and more extreme weather, the exhaustion of raw material and natural resources, the access to healthy drinking water and the*

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4 Act CXIII of 2011 on National Defence, the Hungarian Defence Forces, and Special Measures Applicable for Special Legal Orders.

5 Act CXXVIII of 2011 on disaster management and the amendment of certain related acts.

*difficulties of provision of food, emerging in a more and more serious form around the world involve considerable security risks and may become sources of conflicts. Environmental and medical hazards and the threats of civilisation that emerge globally, in the region or in Hungary do not only endanger the security and development of the country but also the region. In addition, because of its geographical conditions the damages of the environment and civilisation, floods, water and air pollution generated in adjacent countries in the Carpathian Basin have an increased effect on Hungary. Environmental threats have a direct affect on the health status of the population.*

*Natural and industrial disasters. If processes in certain industrial, biological, chemical and in particular nuclear facilities get out of control they may endanger or damage human health, environment and the safety of life and property on a large scale. A further risk is the transportation of hazardous goods by road, rail, and air or through pipelines.*

*The Hungarian Defence Forces must possess abilities through which it can actively contribute to the elimination of the consequences of natural or industrial disasters.”<sup>6</sup>*

The *National Military Strategy* exists currently in a draft version. It breaks down the above mentioned duties to sectoral level.<sup>7</sup> The planned Strategy is an important document of the renewal of the Hungarian Defence Forces that takes into account the guidelines laid down in the National Security Strategy as a sectoral strategy. In harmony with the Constitution of the country, with the legal regulations determining the activities of the defence area, the Strategic Concept of the North Atlantic Treaty Organisation as well as with the European Security Strategy it designates the strategic level goals of the period ahead of us and serves as a compass for the task of renewing the Hungarian Defence Forces.

The document lays down that the issue of national defence cannot be interpreted and managed by separating it from other areas of security. The importance of non-military aspects of security is growing, though at the same time this does not entail the decrease of the role of the military segment. The management of security challenges extends beyond the competence of specialised ministries and requires coordinated governmental cooperation.

Among the processes working against stability - in line with the documents set forth previously - the fight against terrorism, cyber threats, energy security, climate change and the resulting disaster situations that grow in number and severity receive special attention..

The duties of the Hungarian Defence Forces are expressed accordingly. The Hungarian Defence Forces is typically deployed in crisis management operations, in many cases far away from Hungary, under extreme natural and climatic conditions, on hard to reach terrain. During crisis management the network centric warfare, precision weapons and modern technology, civil-military co-operation, psychological warfare as well as the wide ranging deployment of Special Forces should be used. Crisis management usually takes place in weak countries which are unable to fulfil their basic duties, where security should be created and maintained against irregular, paramilitary organisations, rebels, armed groups, and international mercenary and terrorist groups.

Humanitarian intervention and assistance is more and more frequently required and, respectively, the deployment of military forces in humanitarian emergency situations as a primary means of intervention is more and more frequently needed. Crisis situations cannot be handled exclusively by military force; their management requires complex civilian and military efforts and co-operation, with special respect to the interdependence of military and civilian professionals operating in the same operational field. Military and civilian efforts cannot be sharply separated from

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6 Government Decree No. 1035/2012. (II.21.) on the National Security Strategy of Hungary, Magyar Közlöny 2012 issue 19.

7 National Military Strategy (draft).

each other. Not only governmental players are present in the operational area but also numerous non-governmental players.

Within the frames provided by legal regulations the Ministry of Defence and the Hungarian Defence Forces create their internal controls and the order of deployment of available forces and assets.

## Experiences from practice

We believe it is important to emphasise that participation in disaster protection is a high priority duty of the Hungarian Defence Forces. It is an obligation and opportunity to prove its preparedness and usefulness. The participation of the Hungarian Defence Forces in eliminating the consequences of disaster situations (mainly floods in Hungary) that are growing in number as a result of climate change is a determining factor. I mention this because there are endeavours to belittle this role and to underrate the role of military forces.

Facts resulting from the data of the last few years show the importance of the military role in flood control.

Period	Number of military forces participating (persons)	Number of officially appointed technical devices (pcs)
7 April – 12 May, 2000	4 260	553
5 March – 28 March, 2001	2 399	150
13 August – 24 August, 2002	3 025	175
31 March – 10 May, 2006	10 695	643
17 May – 23 May, 2010	455	55
July – 11 July, 2010	3 071	390

**Table 1. Military role in flood control in Hungary**  
(Source: *Abilities of the Hungarian Defence Forces and the challenges of disaster relief 2000-2011, Zrínyi Media 2012*)

Flood control is not the only task for our soldiers. The forces and assets of the Hungarian Defence Forces were required to eliminate the consequences of the *red sludge disaster* that occurred in 2010. Abilities such as swiftness and uniqueness came to the fore, above all else. The army assisted rescue and restoration with 2 200 soldiers and 400 technical assets. The main duties were:

- continuous survey and transport of injured persons by helicopter;
- maintenance of airspace closure in the damage zone;
- hospitalisation of injured persons;
- radiological and chemical reconnaissance, analysis;
- ground or air decontamination of contaminated persons and assets (635 persons, 31 749 assets, 98 km roads);
- rubble clearance;
- providing the conditions for evacuation (4 000 field beds, 8 000 set of bedclothes);
- bridge construction;
- fuel transportation, provision of reefer containers.<sup>8</sup>

8 TOKOVICZ et al. (2012)

There was a bush fire in the Bugac region in 2012. The helicopters and vehicles of the army joined the fire-fighting. The Bambi Bucket, implemented in 1994 and used for aerial fire-fighting, carrying more than 1000 litres of water, was used during fire-fighting.

We have to mention here the organisational development that resulted in the establishment of the Tisza Multinational Engineer Battalion in 2002, after a long preparation period. The purpose of establishing the unit was to have an efficient, properly prepared military organisation with outstanding assets that can be deployed quickly against flood waves passing through the River Tisza; an organisation that is able and ready to help in any country concerned. Hungary, Romania, Slovakia and Ukraine provided a technical squadron each which are ready to perform their duties when needed. Thus the unit is a virtual organisation but a considerable resource and has joint exercises annually.

### ***Principles of application***

What are the advantages that favour the application of military forces?

- Military forces possess a complete logistics background, therefore when making use of it the mission leaders need not separately provide for supply, rest, topping up technical assets, their incidental transportation and medical support. An entire rescue force arrives with a complete set of assets. This is especially important when the other forces arriving to the location often cannot provide for their own supply. We have experienced, on several, occasions during the 2010 flood protection that the forces and assets arranged for protection shortly became unfit for fulfilling the mission. Their rest, supply and logistics support was not organised.<sup>9</sup>
- Military forces have their own management-control system and the set of assets is compatible with the assets of other forces.
- Military forces possess special assets that other organisations do not have. Heavy-duty all-terrain vehicles, amphibious, aircraft, mobile lighting, heavy-duty water purifying equipment, logistics assets (tents, cooking station etc.).
- Military forces possess expertise that is not available – or only to a limited extent – to other organisations. Explosive, bridge construction (floating as well as stationary), aerial transport and rescue, medical capacity (burn specialists), diver jobs, all forms of reconnaissance are a few samples taken at random of these expertise.

The principles of deploying military forces are similar here at home and abroad although the emphasis may be on different issues. The experience gained in recent decades provide application principles that can be put to good use both in flood control and in other disaster situations.

- Deployment should have more advantages than disadvantages.
- The duration, extent and scope of deployment should be proportional to the requirement.
- The required minimum criteria and circumstances suiting the situation should be provided.
- The utilisation of the forces and assets should be economical, and build up reserves.

### **Summary**

There are certain areas in the life of the transforming Hungarian Defence Forces that are not affected by any change. One of them is the defence of the mother country; another is the missions fulfilled domestically, such as participation in protection against disasters. The changing security

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9 SZABÓ-TÓTH (2010)

environment creates new areas of emphasis and our country is making efforts to react rapidly. The fact that the defence budget has never been so low does not make the life of decision makers easier either. Under these circumstances it is difficult but not impossible to preserve the abilities that ensure continued efficient participation in the protection against disasters. To achieve this it is also required that all entities concerned put emphasis on prevention because there is not any more economical and safer solution than a disaster prevented.

## References

- SZABÓ Sándor – TÓTH Rudolf (2010): A 2010. tavaszi borsod megyei árvízi védekezés logisztikai támogatásának hiányosságai, okai, javaslatok azok jövőbeni kiküszöbölésére. In: *Műszaki Katonai Közlöny*. Vol. XX. No. 1–4. p. 21–37. (Deficiencies and reasons of the logistics support of the flood protection in Borsod County in the spring of 2010, proposal to eliminate them in the future. In: Technical Military Bulletin)
- TOKOVICZ József et al. (2012): A Magyar Honvédség képességei és a katasztrófaelhárítás kihívásai, 2000–2011. Zrínyi Média, Budapest. (Abilities of the Hungarian Defence Forces and the challenges of disaster relief 2000–2011.)