NATIONAL UNIVERSITY OF PUBLIC SERVICE

Doctoral Committee

Colonel Béla Tamási eng. An Analysis of the Disaster-relief Efficiency of the Hungarian Defence Force

A Summary of PhD Thesis

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INTRODUCTION

During the past decade increasing emphasis and attention have been paid to security challenges at international, national and regional levels as well as to the relationship between environment and security, the possible threats of natural and man-made origins as part of the environmental security and the management of the disasters originating in such threats. Hungary treats the prevention of disasters and the elimination of the harmful effects of disasters as a national case. The significant rise in the number disasters and the effects of the increasing complexity of the threat sources to protection and relief define new tasks for those contributing to disaster management.

The lessons learned from the floods of 2010 and the experiences of treating the "red sludge" revealed the shortcomings of the Disaster Management Act. Significant efforts were required for the management of the flood in Borsod County in 2010 and Kolontár the red sludge disaster. The transformation of the disaster management system is aimed at avoiding such situations.

The new Disaster Management Act – which came into force on 1st January 2012 – integrated the disaster management system and transformed the tasks and the control system of disaster management. It expanded the periods of national protection and shifted the focus of its activity to the reinforcement of the life and property security of citizens and to the improvement of the efficiency of the protection.

THE JUSTIFICATION OF THEME PICKING

In the past two years, the organization of the catastrophic system went through several changes which include new technical and financial background of the new system. The efficiency of these changes are being made through a rough period of time and makes a national priority.

Since the common foreign and security policy changed significantly, the functions of disaster management have become more vital in the area of civilian and

military cooperation and play an important role in the security policy of Hungary. Protecting human lives and properties in emergency situations close cooperation among different organizations is essential. In accordance with Prof. Dr. György Szternák¹: "Managing civil emergency situations the National Directorate General for Disaster Management, civilian and non-governmental organizations and the Defence Forces have significant role." As a matter of course the Hungarian Defence Forces participate in disaster management. "The military commitment during disaster relief operations is not only a useful tool but it calms the populace down, too. It is true that the military uniform had a psychological effect on the people. They felt strength, support, determination and that was significant while you were in trouble." —summarized² Bg. Gen. Dr. József Tokovicz the military contributions to disaster relief over the last years.

The HDF provide this with a well-prepared Defence Catastrophic System (DCS) together with manpower, equipment and voluntary reserve forces. During the last two years the organization and the function of the disaster management system have been reorganized considerably. The role of the system was reinterpreted and all the players of the structure are expected to cooperate and have solid structural and technical background. Besides, all that is in a difficult economic situation when effectiveness is the top priority.

THE MAIN RESEARCH OBJECTIVES

Relevant expert literature still lacks the efficiency analysis of disaster management – both as an institution and an activity – more specifically the disaster management activity of the Hungarian Defence Force. I have dealt with the efficiency issues of disaster management authorities in several publications.

http://www.vedelem.hu/letoltes/tanulmany/tan53.pdf

Downloaded: 17 December, 2011

¹ Prof. Dr. György Szternák: Real danger: natural disasters and its effects

² Bg. Gen.Dr. József Tokovicz: Opening

A MAGYAR HONVÉDSÉG KÉPESSÉGEI ÉS A KATASZTRÓFAELHÁRÍTÁS KIHÍVÁSAI 2000-2011

The aim of this paper is:

- 1. To point out the need for changes in the legal background of disaster management in order to improve its efficiency. For this reason, I will analyze Act LXXIV of 1999 on the management and organization of the protection from disasters and the prevention of major accidents involving dangerous substances (previous disaster management act) and those deficiencies of the disaster management system that led to the creation and passing of Act CXXVIII of 2011 on disaster management and the modification of pertaining acts (disaster management act). I will summarize the changes aimed at those participating in disaster management and at the Hungarian Defence Force including the improvement of its efficiency.
- 2. I will analyze the disaster-exposure of Hungary on the basis of the threats listed in the Disaster Management Act. I will process the structural changes initiated by the Disaster Management Act aimed at the improvement of the Hungarian disaster management system regarding both the organization of disaster management and the Hungarian Defence Force.
- 3. I will summarize the efficiency-related terminology the appearance and definition of efficiency in the field of economy and budgetary authorities including the interpretation of the efficiency of the Hungarian Defence Force. I will analyze the performance of the disaster management activity of the Hungarian Defence Force on the basis of the most significant disasters of 2010.
- 4. I will define the possibilities of the application of volunteer reservists in the Hungarian Defence Force and in disaster management tasks and its significance concerning efficiency. I will define the further possibilities and tasks of the system.

RESEARCHUHYPOTHESES

In my dissertation I wish to confirm the following hypotheses:

- 1. The Hungarian Defence Force reorganized its disaster management system in accordance with the changed legislative environment while maintaining the capabilities of its structural elements in order to enable a greater efficiency in executing its tasks of such nature.
- 2. The modification of the Disaster Management Act which is a direct response to the flaws of the disaster management system is part of an improvement process. The less ambiguous laws, tighter actions by the authorities and executed structural changes have improved the efficiency of the system.
- 3. The efficiency and its assessment differ from those of other players of economy. The economic element of the Hungarian Defence Force's disaster management tasks is best performed by the "controlling" activity, while the social element and the supervision and improvement of soldiers activity is performed by the lessons learned system of the Hungarian Defence Force.
- 4. The operation of the volunteer reservist system is the only way of increasing the number of personnel, which may be funded from further financial resources in the present economic environment. The use of volunteer reservists is a cost-effective way of increasing the personnel. The application of volunteer reservists is also an efficiency-increasing resolution from the aspects of the improvement of current capabilities and the protection from disasters.

RESEARCH METHODOLOGY

The fundamental basis of my research was analysis of the special literature available at the National University of Public Service, papers published in the relevant journals of the Hungarian Defence Force and documents published by the National Directorate General for Disaster Management of the Ministry of Interior (BM OKF)

and available at the Ministry of National Defence (HM), the General Staff, and the Command and Doctrine Centre of the Hungarian Defence Force and its legal predecessor. Private consultations with the lecturers and instructors of the National University of Public Service significantly contributed to the elaboration of the present dissertation.

Regular consultations with persons experienced in the control and execution of disaster management activities were also of great help with the preparation of my dissertation as well as the expertise gained during my visits to the BM OKF and the MoD and my personal experience in the leadership of the Defence and Administration Group (previously: Disaster Management Staff of the Hungarian Defence Force) and the Disaster Management Operative Staff of the Hungarian Defence Force (previously: Operative Committee of Disaster Management).

Following my information gathering I processed the literature, and the materials of related conferences, meetings and forums. Having extensively studied the literature and an intensive processing of the collected information I set up hypotheses which I justified in the end of the dissertation. The constant publication of the conclusions of my research was also important since this is the field where I possess sufficient experience and expertise.

Regarding my dissertation it was paramount that I had a chance to participate in the reviewing of various acts, laws, and legal regulations, and in the development of new regulatory documents, and that I could describe the results of those in workshops.

In the foundation of my conclusions it was a great help that I worked in the leadership of the Defence Crisis-management System on a daily basis, and as a leader of the Disaster Management Operative Staff I had an insight into the tasks of my own military organization and that of the BM OKF as well as the activities of the defence administration. The knowledge gained from my superiors, commanders and direct colleagues during daily work further contributed to my research.

THE STRUCTURE OF THE DISSERTATION

In the **first chapter** I processed the alterations in the Disaster Management Act. In parallel I also analysed the previous act and pointed out its deficiencies. I analysed the significance of the new Disaster Management Act regarding the improvement of efficiency. I have pointed out the effects of the new disaster management act on the Hungarian Defence Force.

In the **second chapter** I analysed the exposure of Hungary to disasters. Besides reviewing the terminology and organization I also processed the threat effects and their characteristics. I also analysed the periods of national defence in the new disaster management system. I processed the activities of those contributing to the disaster relief and the improvement of the efficiency of the defence administration system.

In the **third chapter** I carried out an analysis from the aspect of economic and disaster management efficiency. I pointed out the differences in efficiency assessment at business and public administration – more specifically disaster management – authorities. I also revealed the effect system of the disaster management activities of the Hungarian Defence Force. I analysed the economic and social elements defining the operation and efficiency of the disaster management system of national defence. I also carried out an efficiency analysis of the disaster management activities of the Hungarian Defence Force with the method of lessons-learned processing and the analysis of the contribution to the disaster management in 2010.

The **fourth chapter** presents opportunities of the involvement of the volunteer reserve system and volunteer reservists in disaster management tasks. I analysed the significance of the involvement of volunteer reservists regarding efficiency. I defined the possible tasks of the volunteer reservists and the tasks to be carried out required to complete the system.

NEW SCIENTIFIC RESULTS

- 1. I was the first through the examination and analysis of the previous and current legal regulations I revealed deficiencies and those interrelations that made development towards greater efficiency possible thus resulting in the creation of the new Disaster Management Act.
- 2. I was the first to process the effects of the changes of the new legal background to the disaster management activities of the Hungarian Defence Force, on which basis I developed the practical requirements for the efficiency improvement of disaster management applications.
- 3. Using specifically the analytical interpretation of the economic and social efficiency assessment I defined the concept of efficiency applicable for the efficiency analysis of disaster management activities and I also developed the criteria required by the efficiency analysis of disaster management.
- 4. I determined the disaster management tasks of volunteer reservists. I proved that the involvement of volunteer reservists in national defence and disaster management tasks is efficient regarding both social and economic aspects.

RECOMMENDATIONS

On the basis of my dissertation I request the acceptance of the following:

- 1. The use of the results of the efficiency analysis research for the improvement of the disaster management activity system of the Hungarian Defence Force.
- 2. The fact that although the everyday use of efficiency, the efficiency analysis of economic organizations and the efficiency analysis of disaster management are all part of the same field, they still possess unique characteristics.

3. The processing of the improvement processes defined by the lessonslearned method in order to improve the efficiency of the disaster management activities of the Hungarian Defence Force.

The findings of the dissertation can be applied

- as initial or thought-provoking assessment for the efficiency analysis of the activity of the Hungarian Defence Force or authorities contributing to disaster management and relief;
- for the mutual understanding of the participants of disaster management within the aim and task system and for the definition of the right ways of cooperation;
 - for education and training in disaster management;
- for underpinning the review of related legal and interior regulations.

The theme of the dissertation offers further possibilities for research. My findings could help the work of disaster management experts and facilitate the general improvement of disaster management activities. I hope that I managed to incorporate my expertise, professional experience and research findings in this dissertation.

In the end of my dissertation I wish to express my gratitude first of all to Colonel (retired) Zotán Grósz, PhD, as well as to the current and past leadership, lecturers, instructors and administration of the Engineering PhD School of the Faculty of Military Sciences and Officer Training of the National University of Public Service for their help and support. I also wish to express my gratitude to my present and past superiors who made my education possible and supported the preparation of the present dissertation, to my colleagues and the experts of this field who provided help in my research and contributed to my work by bestowing me their knowledge, expertise, personal experience and competence generously.

LIST OF THE AUTHOR'S PUBLICATIONS ON THE SUBJECT

In Hungarian:

1) TAMÁSI, Béla – FÖLDI, László. A TOKIÓI METRÓBAN VÉGREHAJTOTT SZARIN TÁMADÁS KATASZTRÓFAVÉDELMI ASPEKTUSAI [The Disaster Management Aspects of the Sarin Attack Executen in the Underground of Tokyo]

Hadmérnök/2011-3 pp 68-78

2) TAMÁSI, Béla. MEGOLDÓDÓ ENERGIAGONDJAINK? [Will Our Energy Problems Be Solved?]

Sereg Szemle /2009-2 pp117-122

3) TAMÁSI, Béla – FÖLDI, László. A KÖZÚTI VESZÉLYES ANYAGSZÁLLÍTÁS 2009. ÉVI TAPASZTALATAI SOMOGY MEGYÉBEN [Lessons learned from the Transportation of Hazardous Substances in Somogy County in 2009]

Hadmérnök/2010-3 pp 38-46

4) TAMÁSI, Béla. A KATASZTRÓFAVÉDELMI SZERVEK HATÓSÁGI ÉS SZAKHATÓSÁGI TEVÉKENYSÉGÉT BEFOLYÁSOLÓ VÁLTOZÁSOK, A JOGSZABÁLYOK DEREGULÁCIÓJA TÜKRÉBEN [Changes Effecting the Activities of Disaster Management Authorities and Experts in the Face of the Deregulation of Legal Regulations]

Sereg Szemle/ 2011-2 pp 126-132

5) TAMÁSI, Béla. A SZERVEZETI HATÉKONYSÁG NÖVELÉSÉNEK KÉRDÉSEI AZ ÚJ TÍPUSÚ KATASZTRÓFA KIHÍVÁSOK TÜKRÉBEN [The Problems of Improving Organizational Efficiency Regarding the New Disaster Challenges]

Honvédségi Szemle 2011/6 pp 2-4

6) TAMÁSI, Béla. A HONVÉDELMI KATASZTRÓFAVÉDELMI RENDSZER FELSŐSZINTŰ VEZETÉSI RENDSZERÉNEK VÁLTOZÁSA [Changes in the Upper-level Command System of the Disaster Management System of National Defence]

Sereg Szemle/2012-1 pp 104-108

7) TAMÁSI, Béla. A HONVÉDELMI KATASZTRÓFAVÉDELMI RENDSZER MŰKÖDÉSÉNEK ELEMZÉSE NUKLEÁRIS BALESET ESETÉN [Analysis of the Disaster Management System of National Defence in the Case of a Nuclear Accident]

Hadmérnök-online 2012. March pp 109-119

In English:

- 8) TAMÁSI, Béla, GRÓSZ, Zoltán. PREVENTION OF NATURAL DISASTERS IN BOSNIA AND HERZEGOVINA
 - AARMS/ 2010/2 pp 175-182
- 9) TAMÁSI, Béla GRÓSZ, Zoltán. NUCLEAR SECURITY THE ROLE OF THE ENGINEER AT NUCLEAR POWER PLANTS

Hadmérnök- online March 2012, pp120-127

CURRICULUM VITAE

Col. TAMÁSI, Béla engineer

Command and Doctrine Centre of the Hungarian Defence Force
Acting Commander

Personal information

Place of Birth: Jászberény Date of Birth: 18.06.1962. Marital Status: Married Number of Children: 2

Education:

2009-2012 PhD candidate at Engineering PhD School of the Faculty of Military Sciences and Officer Training of the National University of Public Service 2005-2007 Zrínyi Miklós University of National Defence, Defence Administration Manager 1982-1986 Kilián György Air Force College, engineer

Training:

2003 ECDL training course

Survive to Operate (STO) training course

1998 IMOC (International Military Observer Course)

Assignments:

2011– Chief of Staff (MH VDK, Budapest)

2007 – 2011 Chief of Staff (Deputy Commander), (MH 64. BSZJ. Logistic

Regt., Kaposvár)

2004 – 2007 Deputy Chief of Staff (MH 64. BSZJ. Logistic Regt.,

Kaposvár)

1997 - 2004	Operation Division, Head of Section (MH KBRT, Taszár)					
1995 – 1997	RMMSZ	Repair a	nd Ma	intenance	Service	, Deputy
	Commander (31. Kapos HCRE, Taszár)					
1986 – 1995	Workshop	Command	er (101	. Reconna	issance	Squadron,
Taszár)						

Foreign languages:

Advanced English C (STANAG 6001 – level: 3.3.3.3.)

Elementary Russian C

Mission experience:

1999-2000 UNOMIG Military observer in Georgia 2002-2003 MINURSO Military Observer in Western Sahara 2009. EUFOR HQ Sarajevo Director of Staff

Awards and decorations

For Service to the Defence Force – bronze level

Officer Service Medal III after 10 years of service

Peacekeeping Service Medal – Georgia

Officer Service Medal II after 20 years of service

Peacekeeping Service Medal – Western Sahara

Service Medal for Flood Protection

Service Medal – Silver

Service Medal for Flood Protection

Peacekeeping Service Medal – EUFOR

Service Medal - Gold

Service Medal for Disaster Management

Officer Service Medal I after 30 years of service