

ZRÍNYI MIKLOS  
NATIONAL DEFENSE UNIVERSITY  
SCHOOL OF DOCTORANDI

THESIS BOOKLET

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FINANCING OF THE NATIONAL DIRECTORATE GENERAL FOR  
DISASTER MANAGEMENT AND ITS COOPERATION WITH THE  
HUNGARIAN DEFENSE FORCES

Ph.D. Dissertation  
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A disaster, should it occur anywhere, is always a tragedy, both in a closer and a wider environment. Human lives and valuables, estimable but irreplaceable for the individual, are lost in moments. Ever since the existence of humanity, we have been protecting ourselves against it, sometimes with little but recently with more and more success.

The protection against disasters has several thousands of years of history. This process reflects the struggle of humanity against natural and, later, man-made disasters. For a long time, the most characteristic protection method was to abandon the threatened area. In ancient times and in the Middle Ages, no preventive or preliminary arrangements existed. People were exposed to the physical effects of natural disasters, and to the bacterial ones that followed them almost every time, as passive sufferers. Later, during the period of industrialization, when society and the state became more organized, dwelling places were established in a more concentrated and conscious way - in townships. Based on all this, the protection against disasters started to develop.

In the course of history, vulnerability threatening various ethnic groups and countries was also dependent from the level of organization of the given society, in interaction with the forces, assets, systems and methods available or mobilizable for protection. With the development of societies, with conscious organization of protection, the demand for institutionalization against the deleterious effects of war and man-made harms and natural disasters continuously evolved. Thus, since the 19th century, the recognition of the need for a state-directed disaster management system has become increasingly evident.

The Government of the Republic of Hungary, in its 1998 Program "On the Threshold of a New Millennium", has set out a goal of establishing an efficient disaster relief system by modernizing disaster management. Based on this, Act No. LXXIV of 1999 on the Direction and Organization of Protection Against Disasters, and on the Protection Against Major Accidents Involving Hazardous Materials (hereinafter: Act) was drafted and later passed by the Parliament with a 96 per cent consensus.

Thus the legal background of a uniform disaster management had been created; and organizationally, on 1 January 2000, the new national and regional local law enforcement bodies, the professional organizations of disaster management, performing also state administration tasks, were established, with the integration of the state fire service and civil protection.

## Relevance and justification of selecting the present topic

The significance of today's environmental safety has become utmost important, it has come to the fore both in the civil and military spheres, and now forms part of overall security policy. From the perspective of the research of the topic, it is of extreme significance that the security policy status of the Republic of Hungary has considerably changed over the past decade. In the "external" safety environment, decisive changes have occurred:

- As a consequence of the end of the bipolar global system, new political, social and economic processes have started in our region, the ethnic balance has broken up;
- Risk factors threatening security have increased and become more complex, new challenges have emerged;
- The role of local governments has increased and strengthened;
- Revolutionary changes have taken place in the economy;
- The Hungarian Defense Forces are facing a reform.

## **The reform of the Hungarian Defense Forces**

Security nowadays should be evaluated as a complex concept, whose essential elements are, amongst others, environmental safety and disaster management. The Act and the Governmental and Minister of the Interior Decrees on its implementation, responding to the new challenges, have brought significant changes that resulted in a disaster management qualitatively different in its nature and structure in Hungary. The start of reorganizing the state administration on a regional basis, due to our accession to the European Union, is on the agenda. Being a NATO member also sets new requirements for disaster management in Hungary. The reform, the significant reduction of personnel and the change of tasks of the Armed Forces in the defense of the country, also give grounds for modifying the disaster management model.

In recent years, several natural and man-made disasters have occurred in Hungary, which had not stricken for many years (for instance: tornado, gas eruption, extreme weather and snow conditions, cyanide pollution, floods, etc.). During disasters, the coordinated activity between the participating and cooperating organizations had not always been concentual. Between professional organizations, and within them, between the Hungarian Defense Forces, subordinated to the Ministry of Defense and the National Directorate General for Disaster Management (hereinafter NDGDM), in recent times, there have been extremely many transgressions of competence. At present, in the territory of the Republic of Hungary, the Hungarian Defense Forces possess the largest available resources (personnel and assets). Therefore, during the management of crises, this has caused serious burdens to overcome the problems and to reinstate issues.

During the three-year functioning of the integrated disaster management system, such important documents have been elaborated, besides the regulations enacted, as the National Disaster Management Strategy, providing a guideline for further perspectives.

In Hungary, the possibility of major accidents involving hazardous materials transported by road should be regarded as potential sources of risk as well (SEVESO II Directive).

International terrorism polarizes the world in a way never seen before, many times “camouflaged” as religious fanaticism.

Hungary is on the threshold of the accession to the European Union, together with all the tasks of legal approximation and environment protection. Based on my own experiences gained during the collection of materials for this work, a significant amount of knowledge on the criteria of response capabilities of fire and civil protection organizations has accumulated in the field of organizing national and close-border disaster management.

During my research activities, I have ascertained that the planning system of disaster management is obsolete, does not meet the European Union’s requirements, therefore needs to be updated. The present budgetary planning method does not make it possible to allocate additional sources originating from the scope of tasks of disaster management, which have not yet been elaborated, and neither have the financing methods, relating to their implementation, been clarified. Later, I have recommended a budgetary method functioning on a task-oriented financing basis, the size of resources necessary for upgrading disaster management and the means of financing needed therefor.

I have striven to provide means for ascertaining and analyzing common rules and the possible versions of solutions for current issues originating in the above-mentioned factors mentioned for justification, and also to elaborate recommendations for implementing a uniform disaster management system, beneficial for disaster management organizations.

The researches relating to my dissertation, which I have ended on 31 December 2002, primarily comprise the examination of the directional model of disaster management, the

correlations between security policy and disaster management, the organizational system, the scope of tasks, the expected reform of the Hungarian Defense Forces, the municipality system, the cooperation with charitable organizations, and the possibilities of material and financial planning in close relation, and the planning system and financing.

### **Major research objectives:**

- To ascertain the major fields of cooperation between NDGDM and the Hungarian Defense Forces, with special regard to the use of assets of disaster management, population protection, education, communications and information technology, scientific research and logistics support;
- To elaborate the integrated rescue system based on efficient civil protection and fire service organizations, and the regulatory and application concepts of other participating organizations;
- From the aspect of disaster management and for the sake of cooperation, to ascertain the tasks which may be planned in connection with the Hungarian Defense Forces, and which may serve as a basis for future scientific research;
- To recommend, based on my research achievements, a change in the budgetary planning of disaster management to a target-oriented planning method, using the version of the Defense Planning System of the Ministry of Defense, providing a realistic basis for the financial support of implementation;
- To elaborate the budgetary resource requirements for the efficient performance of tasks of disaster management, which makes it no longer necessary to use the obsolete basis-type of budgetary planning system;
- To recommend new financing possibilities for the more efficient prevention and management of disasters, the more effective use of funds available in order to relieve the state budget.

During my research activities, I did not intend to deal with the order of performance of tasks originating in the internal functioning of the Hungarian Defense Forces or with their problems or tensions in their budgetary system. I think and believe I am not authorized to do so, and so much the more, I am not part of this organization, therefore I cannot have objective information on it, thus it would not meet the requirements I set before myself if I expressed my views about it.

### **Research methods**

The main source for my researches were the archives of NDGDM and its legal predecessor, the National Headquarters of Civil Protection; the Defense Staff of the Hungarian Defense Forces, the Disaster Management Training Center of the Ministry of the Interior, the library of the “Zrínyi Miklós” National Defense University, the archives of the County Disaster Management Directorates and the Educational and Scientific Center of the Administration for Civil Protection and Disaster Relief of the Ministry of Defense of the Republic of Slovenia.

### **My research methods were as follows:**

In the framework of studying the literature, I have scrutinized the relevant Hungarian, international and Internet-based literature.

I have studied statutes and documents relating to Hungarian entities, NATO and partner countries and EU member countries.

I have participated in Hungarian and international conferences, lectures and study tours in relation to my topic. I have had consultations with acknowledged Hungarian and international experts of the topic studied.

I have made interviews with senior, highly acknowledged leaders of disaster management and cooperating partners.

I have also acquired significant theoretical and practical experiences from Hungarian and international exercises and in my personal practice as a leader.

During the research, I have regarded as a basic aspect the intention to work in a scientifically based environment, to use a systems approach, to draw conclusions based on analyses and syntheses, and to adapt, to the necessary extent, the experiences gained by foreign partner organizations.

My dissertation has been primarily compiled based on objective facts and approaches, however, using my “author’s license”, I have made personal ascertainments, recommendations for solutions and approaches.

#### **The following factors have encumbered my research:**

The complex correlations between environmental safety, security policy and disaster management have been previously examined by only few experts and only partially in the period of division of direction and organization of response forces (civil protection and the fire service).

#### **The following factors have facilitated my research:**

The functioning of the Departments of the “Zrínyi Miklós” National Defense University as scientific workshops has given me opportunities to have consultations with senior lecturers and visiting researchers.

The professional debates during the sessions of the Scientific Council on Disaster Management of NDGDM have enhanced the growth of my knowledge and the progress in my research activities.

NDGDM’s cooperation activities within the scope of international tasks, meeting both NATO’s and European Union’s expectations, have also provided me a practical basis for my researches.

In the period of my research activities, the Government Decree No. 2144/2002. (6 May) on the National Security Strategy of the Republic of Hungary has been adopted. The major elements of the National Disaster Management Strategy have been integrated into this Government Decree. Unfortunately, the new Government, after the general elections of April 2002, has not accepted these stipulations and is intending to modify them.

At the beginning of my research, Chapter IV of the Act (on Disaster Management) on the rules of protection against major accidents involving hazardous materials has not yet been in force.

The period after its enactment has proved that the stipulations of Chapter IV and the Government Decree on its implementation decisively accentuate both the national and regional scope of tasks of disaster management.

## **CHAPTER I**

### **THE DIRECTIONAL SYSTEM, ORGANIZATION AND TASKS OF NDGDM, AND THE COOPERATION WITH THE PARTICIPATING LOCAL GOVERNMENT, STATE AND CHARITABLE ORGANIZATIONS**

*My assessed experiences, recommendations and conclusions in connection with the command and control system, organization and tasks of NDGDM and the cooperation of participating local government, state and charitable organizations*

- During my research activities, I have reviewed and ascertained that the cooperation between the Hungarian Defense Forces and the legal predecessors of NDGDM had been encumbered with several difficulties. I have explored its reasons and correlations.
- During my research activities, I have made the conclusion that the establishment of NDGDM had aimed at the creation of a uniform disaster management system, the most important element of which had been the establishment of a uniform command and control system.

However, despite the results achieved, there is still a need for further planning in order to separate the civilian and military tasks, taking into consideration the principles originating in NATO's interoperability and the circumstances of the accession to the European Union.

- I have ascertained that the principle of interdependency ensues from the command and control system based on responsibility, as a result of which governmental and non-governmental organs, persons and offices participating in the management of various crises, during their performance of peace- and wartime activities, the emphasis has been put on the implementation of tasks in their own areas of responsibility at the required level and according to their best possible capabilities.

In other words, this makes it possible that, with proper coordination, the goals set be achieved only with the highest possible level of performance of tasks, expected from all participating organs, with the consideration of interdependency resulting therefrom.

- I have elaborated and am recommending the integrated rescue system based on the efficient organizations of civil protection and the fire service, and to determine and regulate the use of other organizations participating in disaster management.
- A special attention should be rendered to the establishment of national disaster management capabilities and the development of its system.
- The coordination of activities of Hungarian organizations participating in international disaster relief operations should also be improved.
- By analyzing the experiences gained during the flood control efforts in 2000 and 2002, I have ascertained practical recommendations for the fields of cooperation with state and charitable organizations participating in disaster management tasks and for organizing them.

## **CHAPTER II**

### **Civil-military cooperation**

#### **Cooperation between the Hungarian Defense Forces and disaster management organs**

*My assessed experiences and recommendations in connection with the principles of cooperation between civil and military entities, disaster management organs and the Hungarian Defense Forces' command and control system, organization and tasks of NDGDM*

*and the cooperation of local government, state and charitable organizations participating in disaster management*

- During my researches, I have ascertained that, in the field of implementing civil-military cooperation, the following principle is to be followed: in the case of peacetime disaster management, military capabilities should provide adequate assistance to civil authorities and civil protection organizations participating in disaster management, while in the case of armed conflicts, civil entities should fully support the Hungarian Defense Forces.
- The Hungarian defense concept regards civil protection as part of national defense, and in this framework, it determines the participation obligations of the Hungarian Defense Forces and law enforcement organizations in disaster management.
- Disaster management and, within this, prevention of and response to disasters is an overall social responsibility.
- During disasters, the use of assets and forces of the Hungarian Defense Forces is inevitable in transportation, security guarding, securing areas, operating emergency hospitals, air rescue and air lift, manual labor, chemical and radiological protection, using the database of the nuclear emergency management monitoring system and in the field of joint education, training and drills.
- I have ascertained that the uniform crisis management system in Hungary had been established at a national level. Its legislation is available and in force, but due to financial problems, can only be partially implemented.
- An extremely important factor during the execution of tasks, even nowadays, is personal acquaintance. It can favorably or negatively influence the time factor of implementation.
- I have recommended to clarify and update the above fields of assistance to be granted by the Hungarian Defense Forces.
- It is necessary to coordinate the upgrade and procurement of individual protection equipment and chemical and radiation detection instruments.
- I have put down the possible ways of using military equipment in the framework of civil-military cooperation during the management of disasters and major accidents.
- I have summarized the non-military type of crises threatening Hungary and our region.
- I have ascertained that civil-military cooperation is basically a two-way system: civil support of military operations in crisis and war, and military support of civil operations in peacetime.
- I regard it as necessary to establish order in the national level of crisis management, to formulate a uniform rescue system, furthermore, to finance crisis management organizations and services to a much higher extent than at present.
- During my researches, I have ascertained the eventual tasks of the Hungarian Defense Forces during the management of non-military types of crises. The most essential tasks in the near future seen by me are as follows:
  - o To clarify the interpretation of crisis management;
  - o To fully explore the circumstances of participation in a given disaster;
  - o To interpret humanitarian activities in the fields indicated by me;
  - o To participate in NATO's disaster management system by offering personnel and equipment;
  - o To initiate the modification of statutes in order to meet the European Union's requirements.

## **CHAPTER III**

### **Planning of defense and disaster management expenditures in Hungary, the budget of NDGDM and its points of tension, the possibilities of establishing the economic background for disaster preparedness and protection**

My assessed experiences, recommendations and conclusions in connection with the planning of defense and disaster management expenditures in Hungary, and the budget of NDGDM and its points of tension, the possibilities of establishing the economic background for disaster preparedness and protection

During my studies, I have ascertained that the disaster management planning system is out of date, does not meet the European Union's requirements, therefore it needs to be updated. The present budgetary planning method does not make it possible to allocate additional sources originating from the scope of tasks of disaster management, which have not yet been elaborated, and neither have the financing methods relating to their implementation been clarified. Later, I have recommended a budgetary method functioning on a task-oriented financing basis, the size of resources necessary for upgrading disaster management and the means of financing needed therefor.

- During my researches, I have reviewed and ascertained that a capability- and target-based planning method, and its modules and principles, should be used at the organizations of the Ministry of the Interior.
- I have ascertained that NDGDM, as an organization of a NATO member country, should change the present basic planning period (1+2 years) to the required five-year budgetary planning, for which I have elaborated some recommendations.
- During my research activities, I have ascertained that the wartime material planning system of the Ministry of the Interior should be improved and harmonized with NATO and the European Union's directives.
- I have elaborated and recommended to change the budgetary system of disaster management to a target-oriented budgetary planning method, providing a realistic basis for the financial support of implementation.
- During my studies, I have reviewed and elaborated the budgetary source requirements for the efficient implementation of tasks of disaster management, that is civil protection and the fire service. These requirements may serve as an argument for the coordination talks with the Ministry of Finance.
- I have elaborated and am recommending to implement new financing possibilities for a more efficient prevention and management of disasters, the possibilities of using funds available in a more effective way in order to relieve the state budget.

## **FINAL CONCLUSIONS**

The implementation of the order of economic planning described above will result in the following: target-oriented planning will dominate, based on which I have underpinned, with accurate calculation, what kind of mission can and is intending the ministry to perform using the funds available, in a simple way to indicate to the public. Based on this, it will be easy to make it unambiguous what kind of goals can be set before the Hungarian Defense Forces and what cannot. This can very distinctly clarify the field, level and content of expectations by the Ministry of Defense for the civil control of the army.



The planning system will have a new important capability: the economic management plans of the ministry will be accepted without reservation by every state body, will be justifiable and defensible professionally since all their items will have relation to realistic processes and will be provable immediately and without any conversion. As a consequence, the plans will become free of any unfounded improvisation.

In this system of economic management planning, the company management approach will gain firm ground again at the top-level decision-preparing and decision-making level of economic management. As an impact, it might be an issue of professionally founded reconsideration in the planning process whether it will be worthwhile to implement the given task with the planned expenditures and with the content originally conceived. It will be possible to examine whether the result of activities is proportionate to the resources used to achieve it; whether the necessary and sufficient resources have only been planned to implement the task.

This planning system, with multilateral harmonization and coordination of interests, is able to ensure that the resources available are used in a priority order suitable for the tasks and determined by the overall interest of the ministry and, in absolute value, in a division that they not be used for tasks standing behind in the priority order as long as the necessary and sufficient demand level of the prioritized tasks are satisfied. It means in practice that, in the division of resources, the determining character of particular interests will be terminated or significantly kept back.

Based on the facts unfolded above, it can be clearly seen that the essence of implementing capability- and target-based planning can be summarized in the following main processes to be implemented:

5. The concept of planning as a uniform and integrated system, which is a unity of military and economic planning processes different in their functions, but equal in their results, and equally firm in their organized state and preparedness.
6. The implementation of the ministry-level integration of resources and budgetary planning processes, meaning a ministry-level and ministry-interest coordination of partial plans made in a differentiated way as far their content and organization.
7. The supplementation of the organizational integration of planning with its functional integration, within this, with a special regard to the implementation of the harmony of normative operational and development tasks.
8. The termination of the absolute dominance of money circulation approach in planning, the introduction of a company-type economic management planning approach to an increasing extent in order to underpin money circulation processes. Within this, the deduction of plans, especially financial ones, from the tasks and resources necessary therefor, the underpinning of financial plans with task-oriented, resource and expenditure planning; through this, the continuous and systematic monitoring and analysis of the purposes and results of use of funds. In connection with all this, the emphasized implementation of a capability-based and target-oriented division of resources.

The implementation of the above planning objectives will probably not be possible from one day to another, it cannot be arranged by issuing an order or an instruction. This, beside that it requires another level of professionalism and expertise, also presumes, at the same time, a change in approach. The basis for this is that financial sources are not the baseline for planning, although they play a central role in this planning system as well. In this planning approach, primarily tasks and the resources necessary therefor should be planned, and here money plays a role of an index showing which of the tasks planned can be financed and which

cannot. It is the opposite of the present approach in which the tasks are intended to be inserted forcefully into the existing financial framework, without the needed underplanning, and during the actual implementation, the financial requirements of tasks prove to be, one after the other, incorrectly estimated due to the absence of underplanning.

During my study, my research methods have made it possible to be thoroughly acquainted with the researched areas, to explore the correlations existing between them, to achieve my goals. During the scrutiny of the research topic, I have tried to express my recommendations serving the more efficient implementation of disaster management, drawing conclusions from general principles and experiences in relation to the state, local government and charitable organizations affected in participation. I have made recommendations for the budgetary requirements and financing methods of efficient disaster management.

In my dissertation, I have examined the following, based on the goals set by me:

- I have studied, in the field of civil-military cooperation, in the case of both peace- and wartime disaster management, the possibilities of providing military capabilities as required.
- I have studied the history of disaster management in Hungary, the changes in its system of objectives and tasks.
- I have studied the legal background, the organizational and directional system of protection against disasters.
- I have demonstrated that the uniform crisis management system in Hungary had been established. Its legal bases are available and in force, but due to its financial problems, can only be partially implemented.
- I have put down the possible ways of using military equipment in the framework of civil-military cooperation during the management of disasters and major accidents.
- I have summarized the non-military type of crises threatening Hungary and our region.
- I have demonstrated that civil-military cooperation is basically a two-way system: civil support of military operations in crisis and war; military support of civil operations in peacetime.
- I regard it as necessary to establish order in the national level of crisis management, to formulate a uniform rescue system, furthermore, to finance the crisis management organizations and services to a much higher extent than at present.
- During my research activities, I have reviewed and ascertained that the cooperation between the Hungarian Defense Forces and the legal predecessors of NDGDM had been encumbered with difficulties. I have explored its reasons and correlations.
- I have ascertained that the principle of interdependency ensues from the command and control system based on responsibility, as a result of which governmental and non-governmental organs, persons and offices participating in the management of various crises, during their performance of peace- and wartime activities, the emphasis has been put on the implementation of tasks in their own areas of responsibility according to their best possible capabilities at the required level.
- I have analyzed the integrated rescue system based on the efficient organizations of civil protection and the fire service, and ascertained that the use of other organizations participating in disaster management should be determined and regulated.
- The most important organizations of international security institutions, the United Nations Organization, NATO and the European Union pay special attention to humanitarian affairs during disaster management.

- I have studied the modules and principles of JSPS, JOPES and PPBS planning systems in light of NATO requirements.
- I have demonstrated and recommended to change the budgetary planning of disaster management to a task-oriented budgetary planning method, providing a realistic basis for financing the implementation of tasks.
- During my studies, I have reviewed the budgetary source requirements for the efficient implementation of tasks of disaster management, that is civil protection and the fire service.
- I have examined new financing possibilities for a more efficient prevention and management of disasters, the possibilities of using funds available in a more effective way in order to relieve the state budget.

### **Scientific achievements**

I ask the following to be recognized as new scientific achievements:

1. Based on my researches, I have ascertained the major fields of cooperation between NDGDM and the Hungarian Defense Forces, with special regard to the use of assets of disaster management and population protection, education, communications and information technology, scientific research and logistics support;
2. I have elaborated the integrated rescue system based on efficient civil protection and fire service organizations, and the regulatory and application concepts of other participating organizations;
3. By analyzing the experiences gained during the flood control efforts in 2000 and 2002, I have ascertained practical recommendations for the fields of cooperation with state and charitable organizations participating in disaster management tasks and for organizing them;
4. From the aspect of disaster management and for the sake of cooperation, I have ascertained the tasks which may be planned in connection with the Hungarian Defense Forces, and which may serve as a basis for future scientific research;
5. I have recommended, based on my research achievements, to change the budgetary planning of disaster management to a target-oriented planning method, providing a realistic basis for the financial support of implementation;
6. I have elaborated the budgetary resource requirements for the efficient performance of tasks of disaster management, which makes it no longer necessary to use the obsolete basis-type of budgetary planning system;
7. Based on my research achievements, I have recommended new financing possibilities for the more efficient prevention and management of disasters, the more effective use of funds available in order to relieve the state budget.

### **The practical adaptability of my research achievements**

- The ideas ascertained in my dissertation may be used for elaborating the development strategy of disaster management, for founding long-term programs and for clarifying the National Disaster Management Strategy.
- They may help in determining the correct development proportions and in technical upgrade, within the system of objectives and tasks.
- They may be used as training aids.
- They may serve as a basis for modifying regulations.

My dissertation may provide a basis for further researches. My recommendations may help the work of decision-makers, may serve as a guideline for the operation of an up-to-date disaster management system meeting the requirements of the present era, may enhance the implementation of a new budgetary system and its technical upgrade possibilities. In my opinion, I have been able to integrate my expertise, my experiences gained as a leader, and my research achievements into my dissertation.

### **LIST OF PUBLICATIONS AND SCIENTIFIC WORKS**

#### *Specialized articles:*

10. Article in the periodical “Magyar Polgári Védelem” (Hungarian Civil Protection), On the financial and economic activities of the National Headquarters of Civil Protection, Ministry of the Interior, 1998.
11. Article in the periodical “Polgári Védelmi Szemle” (Civil Protection Review), No. 3, Evaluation of the financial and economic activities of the National Headquarters of Civil Protection between 1994 and 1998, 1998.
12. Article in the periodical “Polgári Védelmi Szemle”, No. 3, The status of salary of the personnel, 1998.
13. Article in the periodical “Polgári Védelmi Szemle”, No. 2, The defense system of the country, principles of direction, its documents and institutions, 1999.
14. Article in the periodical “Magyar Polgári Védelem”, The economic management of the National Headquarters of Civil Protection, the activities of the Directorate General for Economic Management, 2000.
15. Article in the periodical “Katasztrófavédelmi Szemle” (Disaster Management Review), No. 4, Disaster Management with the cooperation of charitable and voluntary organizations, 2000.
16. Study in the periodical “Katasztrófavédelmi Szemle”, No. 1, The expected defense expenditures of the Republic of Hungary in the context of tasks relating to NATO membership, their economic impacts in Hungary, the possible directions of upgrading civil protection, the expected costs of the upgrade in light of NATO requirements, 2000.
17. In volume No. I of the “Katasztrófavédelmi magiszter” (Disaster Management Magister), Doctorandi serving science, The role of NDGDM in the protection system of the country, with special regard to its activities during the flood on the Tisza River in March 2001, 2001.
18. In the periodical “Hadtudomány” (Military Science), The information system of disaster management, 2002.

*Studies and notes:*

9. Submission to the Senior Cabinet of the National Headquarters of Civil Protection
10. The annual development and upgrading possibilities of the National Headquarters of Civil Protection and the expected level of technical upgrade to be achieved by it, 1997.
11. Submission to the Senior Cabinet of the National Headquarters of Civil Protection
12. The economic management opportunities of the National Headquarters of Civil Protection in 1998, with a special regard to the improvement of the salary and investments, 1998.
13. Study: The plan of expanding the Tisza GIS in light of the European Union and NATO requirements, 2002.
14. Study: On the network and other information technology development necessary for the support of NDGDM's operation, 2002.
15. Study: The information technology and telecommunications strategy of NDGDM in light of the European Union's and NATO requirements, 2002.

*Lectures:*

12. Lecture at the extended specialized conference of the National Headquarters of Civil Protection
13. Possibilities of the economic management and the lessons learnt from the organizational changes of the National Headquarters of Civil Protection, 1997
14. Submission to the Senior Cabinet of the National Headquarters of Civil Protection
15. Experiences of the improvement of salary of the personnel of the National Headquarters of Civil Protection in 1997, 1997
16. Lecture at the extended specialized conference of the National Headquarters of Civil Protection
17. The achievements of economic management in 1997 and the assessment of the property status and lessons learnt therefrom, 1998
18. Lecture at the extended conference of senior officials of NDGDM
19. The evaluation of the professional activities of the legal predecessors of NDGDM in 1999 and the changes in the economic management and organization of NDGDM in 2000, 2000
20. Lecture at the conference "Alliance for Security", 2002
21. English language lecture at the session of the 11 Directorate General of the European Union: Coordination of the logistics support during the protection against disasters in relation to partner and cooperating organizations participating in the protection, 2002
22. Lecture at a refresher course on disaster management organized by the European Union: On the command and control and logistics tasks of organizations stipulated in the Act (on disaster management), 2002

*Scientific activities:*

3. Since the autumn of 2001, I have been participating in the project "Problems Caused by the Proliferation of Weapons of Mass Destruction and the possible emergency thereby in Hungary. The expectations of NATO", approved by the Hungarian Academy of Sciences
4. In February 2002, the Board of Doctorandi was established and I have been its vice-chairman since then.