



Ministry of the Interior
National Directorate General for Disaster Management

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**NATIONAL REPORT
OF THE REPUBLIC OF HUNGARY**
to the
UN/ISDR WORLD CONFERENCE ON DISASTER REDUCTION
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1.1 Are there national policy, strategy and legislation addressing disaster risk reduction?

The legal bases of the protection against disasters are the Constitution of the Republic of Hungary, the Act on Home Defense, the Act on Civil Protection and the Act on the Protection against Fire, Rescue Operations and the Fire-Service. Based on the above Acts, the Hungarian Parliament enacted *Act No. LXXIV of 1999 on the direction and organization of the protection against disasters and on the protection against major accidents involving hazardous materials* (hereinafter: Act on Disaster Management) in 1999. The Parliament enacted this Act in order to establish and operate a uniform direction system of prevention of natural and man-made disasters threatening life, safety of property, natural and built environment and to determine the fundamental tasks of reconstruction.

The role of the Government is very important and primarily operational. In case the legal conditions prevail, the Government may declare the state of emergency and may take extraordinary measures that can be extended by the Parliament after the 15-day term has expired.

The tasks of the different sectors relating to disaster management is coordinated by the *Government Coordination Committee* (hereinafter: GCC) chaired by the Minister of the Interior.

The GCC has 8 Protection Working Committees. The preparation for and the protection against the most often occurring hazards are administered by these committees. The elaboration of the National Strategy on the Protection against the Impacts of Disasters and the Annual National Plan for Prevention and Preparation are also the duty of the GCC.

The professional disaster management authority is directed by the Minister of the Interior. Based on the Act the ministers of the different sectors and the heads of the different national authorities are responsible for the planning, organizational and operational activities relating to the protection against disasters in their field.

The professional disaster management authority was established by merging the fire-service and the civil protection. It coordinates the operation of the organizations and persons taking part in the protection against industrial, natural and other disasters.

One of the Chapters of this Act regulates the protection against industrial accidents caused by hazardous materials, the rules of mitigation of disasters and authoritative tasks. This Act is based on the 96/82/EC SEVESO Directive. With this regulation, the Republic of Hungary has engaged herself to fulfill this international commitment. The details are laid down in governmental and ministerial decrees.

The protection against industrial accidents is a very serious and complex field, it includes the technical issues of prevention, mitigation of the damaging impacts of accidents, the measures relating to the protection of human beings, the tasks of the managers of the hazardous plants, the authorities, and the municipalities, relating to the prevention of industrial accidents, and it also determines the rules of public information.

The operator of a hazardous facility has to prepare an internal protection plan for the internal operation. The mayor of a settlement near to an upper tier hazardous

establishment, together with the operator of the plant, has to prepare an external protection plan.

As far as the upgrade of a hazardous establishment or its surrounding is concerned, the operator can be restricted.

A hazardous establishment may endanger the population. This is why the population has the right to be informed on the threatening impacts and the methods and possibilities of protection, and on how to handle the situation in case of an accident. The operator of a hazardous plant is obliged to give an accurate report on the establishment, the possible sources of risks and the measures of elimination and the prevention of major accidents. Meanwhile, the protection of industrial and business secrets is ensured.

The main competences of the authorities and specialized authorities:

- Authoritative licensing, affiliation, taking restrictive or prohibiting measures
- Operation of a supervisory system
- Disaster management tasks
- To elaborate and exercise internal and external protection plans
- Pre-emergency and emergency public awareness, publicity
- Activities relating to settlement arrangement plans
- Operating a reporting and investigation system relating to major accidents
- Collecting and evaluating technical, organizational and management information, and preparing national reports
- Administrative (information) tasks

The above mentioned Act declares that disaster management is a national cause; the uniform direction of protection is a State task.

Since the spring of 2004 – when the Hungarian National Security Strategy was adopted – all the Ministries have been obliged to prepare their own sectoral strategy. One of the important strategies of the Ministry of the Interior is the National Disaster Management Strategy which is under preparation at the moment. The Strategy maps all the risks that may occur in the country and determines their tendency, the aims of prevention, preparation and emergency management and lists the main assets relating to this issue. The Strategy outlines the improvement of information technology and monitoring systems, the involvement of NGOs, the protection of the population and the pre-emergency public awareness.

The National Directorate General for Disaster Management (hereinafter: NDGDM) has its own *professional disaster management strategy*, which determines the objectives of the organization in the field of regulation, technical upgrade.

Bi- and multilateral international agreements regulate the obligation of protection against trans-boundary risk effects (e.g : the order of early warning, information and operational cooperation) is regulated by bilateral and multilateral agreements.

A special field is the protection against nuclear hazards. The EU directives are used in the Hungarian legal system. Act No. CXVI of 1996 gives a basis for the peaceful use of atomic energy, and also renders attention to the disaster reduction mechanisms. The National Nuclear Emergency Prevention System was established by a governmental decree. The order of public awareness on nuclear and radiological emergencies, the authorization of the cross-border transportation of radioactive waste and the regulations

relating to early warning in case of radiological emergencies (ECURIE) are regulated by statutes.

Summary:

The Hungarian legal regulation is broad and comprehensive and there are some specialized regulations relating to different hazardous impacts. We have disaster management strategies and the Hungarian disaster management mechanism has functioned in the past 5 years as a self-developing system, the coordination between the authorities concerned is constantly improving and the operational coordination works on a high level.

1.2 Is there national body for multi-sectoral coordination and collaboration in disaster risk reduction, which includes ministries in charge of water resource management, agriculture/land use planning, health, environment, education, development planning and finance?

In Hungary, based on the Act on Disaster Management, it is the GCC; you can find more about its operation in Section 5.3.

In order to reach the goals of UN OCHA ISDR, we have established a National Forum for Disaster Prevention. The Forum is practically a national mechanism coordinating and implementing objectives, concepts and activities. It contains information for the decision-makers, establishes and applies institutionalized procedures in the field of discussions, reconciliation and consensus-building between partners.

The main documents: the already mentioned Act, Minister of the Interior Decree No.: 48/1999, Government Decree No.: 179/1999, Government Decision No.: 2266/2000, GCC Decision No.: 1/2000 and Government Decree No.: 165/2003.

1.3 Are there sectoral plans and initiatives that incorporate risk reduction concepts into each respective development area (such as water resource management, poverty alleviation, climate change adaptation, education and development planning)?

There are different, sector-related plans which are to mitigate the negative effects of disasters, e.g. plan for preventing and managing of nuclear emergencies, affecting all the ministries and national authorities belonging to them. As the prevention of disasters, the protection against them and the reconstruction are very complex, so to solve these issues the cooperation between the ministries, the Government and the society is necessary and it requires multilevel plans. These multilevel plans together are the National Strategy for Disaster Management and there are also other sectoral strategies. In the frame of the aforementioned National Strategy, there is a National Information Technology System that enables a multi-sectoral cooperation. The only problem is the financing of the different tasks and the harmonization of different interests in the implementation of the National Strategy.

1.4 Is disaster Risk reduction incorporated into your national plan for the implementation of the UN Millennium Development Goals (MDGs), Poverty Reduction Strategy Paper (PRSP), National Adaptation Plans of Action, National Environmental Action Plans and WSSD Johannesburg Plan of Implementation?

The Programs of a healthy way of life and reduction of human health risk factors contains the following:

The response to today's challenges includes the preparation of the State Public Health and Medical Officer Service (SPHMOS) for unexpected emergencies (disasters, accidents, terrorism, etc.), the establishment of the scope of tasks of rapid response, and the development and operation of an information system supporting the safety of public health.

Issues relating to the elimination of the health consequences of disasters are legally regulated at different levels. Medical institutions have detailed plans to implement the relevant tasks. SPHMOS has a leading role in local recovery efforts. During disasters, statutes provide the head of this Service with a large freedom of movement to mobilize or regroup medical resources.

The NEP II (adopted by the Parliament in 2003), envisages special actions in the priority areas of environmental awareness, climate change mitigation, human health and food safety, urban environment, biodiversity, sustainable use of waters, rural development, land-use, waste management, and environmental security.

The backbone of NEP II is represented by the thematic action programs aimed to solve complex environmental problems. The elaboration and implementation of thematic action programs provide opportunities for concentrating resources, sectoral co-operation, and a more intensive integration of environmental and special policies in the following subject areas:

Action program for increasing environmental awareness

Comprehensive objectives:

- to expand the knowledge of society as related to the environment and sustainable development;
- to improve access to information;
- to promote environment-aware decisions and more sustainable lifestyles;
- to enhance responsible social participation in environmental policy decisions.

Action program for climate change

Comprehensive objectives:

- to regulate / decrease emissions from domestic economic activities;
- to reduce greenhouse gas emissions / the contribution to global air pollution, as well as to improve local / regional air quality;
- to contribute to the promotion of environmentally friendly consumption habits and to the improvement of urban environment quality.

Action program for environmental health and food safety

Comprehensive objectives:

- to reduce health risks caused by indoor and outdoor air quality;
- to improve noise protection, chemical and nuclear safety;
- to handle environmental health problems related to potable water quality;

- to handle environmental health problems of soil pollution and waste management;
- to improve food safety;
- to develop the environmental health and food safety institutional system;
- to promote and make accept environment-aware and environmentally sound lifestyles.

Action program for urban environment quality

Comprehensive objectives:

- to promote the environmentally appropriate transformation of settlement structure, development, and rearrangement as well as to reduce environmental problems arising from earlier mistakes;
- to improve the status of residential area water management;
- to protect urban green areas, to increase their proportion, and to improve their condition;
- to alleviate settlement environment problems originating from traffic;
- to ensure the proper state of repair of built environment components, of the built and archaeological cultural heritage.

Action program for the protection of biological diversity and landscape conservation

Comprehensive objectives

- to protect natural systems and values;
- to preserve biological diversity;
- to use natural resources in a sustainable manner;
- to establish a harmonious relationship between society and the environment.

Action program for urban environment quality, area and land use

Comprehensive objectives:

- to promote the protection of the natural and cultural assets of rural areas and the sustainable use of natural resources by properly co-coordinating spatial development, agricultural policy, and environmental policy;
- to ensure adequate income levels and infrastructure facilities for rural residents.

Action program for the protection and sustainable use of Hungarian waters

Comprehensive objectives:

- to implement pro-rata the scheduled domestic tasks included in the Water Framework Directive;
- to protect operating and future water bases and high-priority water protection areas;
- to spread rational water use and pollution-reducing technologies widely;
- to develop the treatment of communal waste water taking settlement characteristics into consideration (e.g. size, possibility of economical canalization);
- to increase the proportion of the utilization of communal waste water sluice;
- to eliminate environmental damage endangering subsurface water resources.

Action program for waste management

Comprehensive objectives:

- to develop prevention and utilization of communal and production waste;
- to perform low-risk treatment of communal and production waste to be neutralized;
- to improve planning and efficiency in waste management.

Action program for environmental safety

Comprehensive objectives:

- to elevate environmental safety to a strategic level;
- to analyze the impact of past environmental damage (disasters);
- to identify environmental disasters and hazards;
- to handle environmental risks;
- to perform horizontal tasks in environmental safety.

Beside the above action programs, the NEP II puts special emphasis on the development of the following main groups of measures:

- Integration of environmental aspects into decision-making and policies;
- Direct environmental developments;
- Indirect environmental developments;
- Legal and authority measures;
- Economic measures;
- Innovation and R&D;
- Improvement of the environmental performance of municipalities and their institutions;
- Environmental certification of products, services, and companies;
- Environmental information;
 - Social participation and access to environmental information;
- Environmental education, conceptualization.

1.5 Does your country have building codes of practice and standards in place, which takes into account seismic risk?

Hungary is not really prone to earthquakes. Since 1981, there is a technical guideline including national and regional rules relating to the construction of buildings. Currently, the translation and the adaptation of the European standards relating to earthquakes are in progress. This includes altogether 60 different standards. These rules will come into force foreseeable in 2008.

1.6 Do you have an annual budget for disaster risk reduction?

The financing of disaster risk reduction in our country has several different methods and practices.

The national authorities responsible for risk reduction are supported by the national budget. The activity of these authorities (NDGDM, professional and voluntary fire brigades) is first of all related to prevention, but as a specialized authority their activity also includes education and public awareness to mitigate disaster risks. Their work is many codification and low enforcement. Each year funding is insured within the budget of the institution concerned. Some examples: the operation of the warning system at the Paks Nuclear Power Plant, the storm warning systems at Lakes Balaton and Velencei.

In case of a new task additional allocation is included in the budget, based on a statute, providing funding for the implementation of the new task. After implementation only the operational costs of the new system is included in the budget. This is a project approach high of financing. Later the task will be financed through the institution's budget, for instance the tasks relating to the implementation of the SEVESO II Directive.

A special type funding comes from fire protection fines and the 1 per cent share of insurance fees.

The amounts collected in the above way on the account of the Ministry of the Interior may only be used for the technical upgrade of professional municipal fire brigades. It may only be used at the instruction of the Minister of the Interior. The plan for this funding is compiled by NDGDM and approved by the Minister of the Interior. NDGDM procures the equipment, the remaining amount stays on the account of the Ministry of the Interior.

Fire brigades have to apply for funding through tenders. One of the basic requirements is that they have to have their own share of the costs. There is also a possibility for disadvantaged entities to obtain financing through tenders, thus people living in the area are protected in the same way.

The above allocation does not form an integral part of the institution's budget, it is only available for a one-time technical upgrade.

1.7 Are the private sector, civil society NGOs, academia and media participating in disaster risk reduction?

According to the Act on Disaster Management voluntary and charitable organization participating in the protection affords may grant assistance and cooperate if they declare their willingness. The Government Program, the Ministry of the Interior and the PR Strategy of NDGDM pay a special attention to the involvement of NGOs in state tasks, thus disaster management also regards this topic as one of its strategic goals. The draft Government Decree on the regulated involvement of voluntary rescue organizations in their protection efforts in Hungary and in international relief operations has been elaborated. We have started the foundation and implementation of a training system meeting international requirements (INSARAG).

In the period of disaster prevention public information and awareness are based on a wide social assistance, ranging from kindergartens to higher education, and reaching all workplaces. There are numerous joint research tenders between professional disaster management organizations and NGOs, universities, etc. (e.g. joint research together with the Hungarian Academy of Sciences on climate change adaptation).

2.1 Has your country carried out hazard mapping/assessment?

Hazard maps and databases for hazard assessment are available at NDGDM and its regional bodies, they are continuously updated. They use the ArcView basic software for displaying GIS, considering the following factors:

- a layer is produced by user and is loaded into the database with the help of the above software
- DTA-50 and DDM-200 basic maps are available at present
- the topic-oriented layers are independent and different in each country
- personnel well trained and drilled for using and processing data through GIS is available

Groups of map layers by topics:

- basic map layers
- vulnerable establishments

- hazard sources
- miscellaneous information

Basic map layers:

- county border
- administrative borders of settlements, borders of built-in areas
- forests, enclosed gardens, green areas, cemeteries
- contour lines
- lakes and rivers
- railway lines and stations
- roads, streets, routes
- geo-coded road network (DSM 2003)
- all addresses (DSM 2003)

Vulnerable establishments:

- residential buildings
- population
- institutions

Hazard sources:

- water wells
- gas recipient stations
- electric transformer stations
- electric and gas lines
- routes for the transportation of hazardous material
- food industry
- animal farms

Miscellaneous information:

- hazardous activities
- hazardous waste management
- disposal of radioactive materials
- carcass pits
- petrol stations
- seismic areas
- areas vulnerable to floods and inland waters
- areas covered reeds and bushes
- areas covered with peat
- zones of hazardous plants
- zones of other establishments

Information layers:

- airports
- disaster management organs, boundaries of branch offices
- fire brigades, boundaries of areas of competence and operation
- UHF radio system
- evacuation
- reception

- hospitals, Hungarian Red Cross
- long distance bus transport
- border crossing points
- meteorological stations
- forests
- Lake Balaton Storm Warning System

Operational possibilities in the database:

Searches:

- settlement
- address

Operations with coordinates:

- query of the coordinates of a given point
- inserting a GPS point on the map

Graphic-based selections:

- circle
- line buffer zone
- free-hand polygon

Evaluation of chemical situation:

Goal: to procure the ALOHA software, developed by the US Department for the Environment, modeling the spread of chemical substances.

The EU Joint Research Center started its project "Management of Natural and Technological Hazards in Accession Countries" in 2003. In this framework, the disaster vulnerability map of Hungary was prepared. The hazardous establishments, areas affected by forest fires, floods and soil pollution are included in the map.

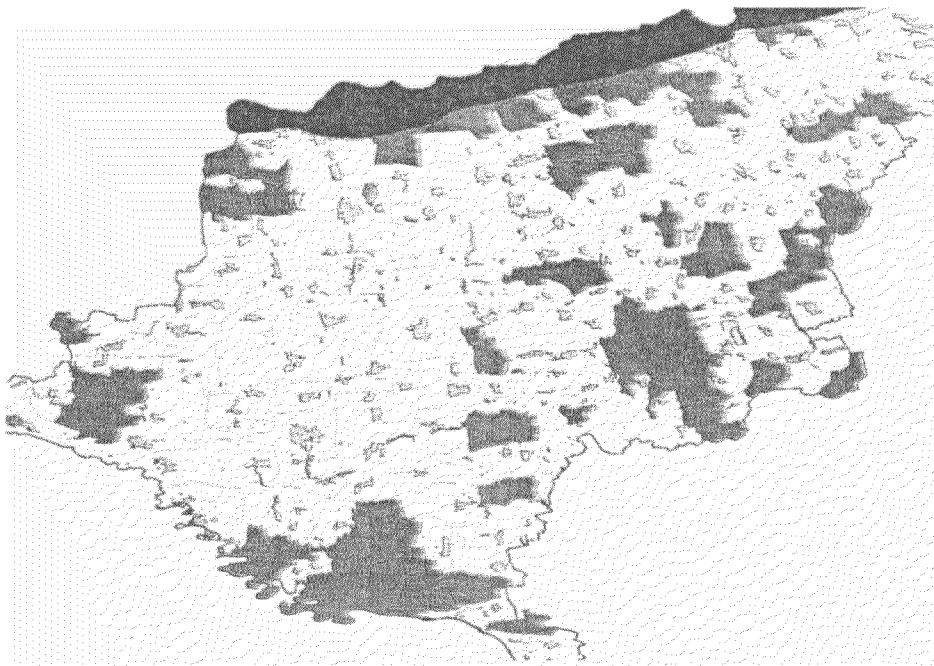
Operators of hazardous establishments evaluate the vulnerability caused by the plant, the risks and the consequences of a possible malfunction using hazard assessment. The assessment can be divided into the following phases:

- a) hazard identification (of the possibility of a major accident)
- b) identification of the risk (frequency) of occurrence of a major accident
- c) evaluation of the consequences of the identified major accident
- d) integration of the probability and the consequences of a major accident in order to identify the individual and social risk in any point of the area affected by the impact.
- e) matching of the vulnerability figures gained as a result of the previous step with the licensing criteria.

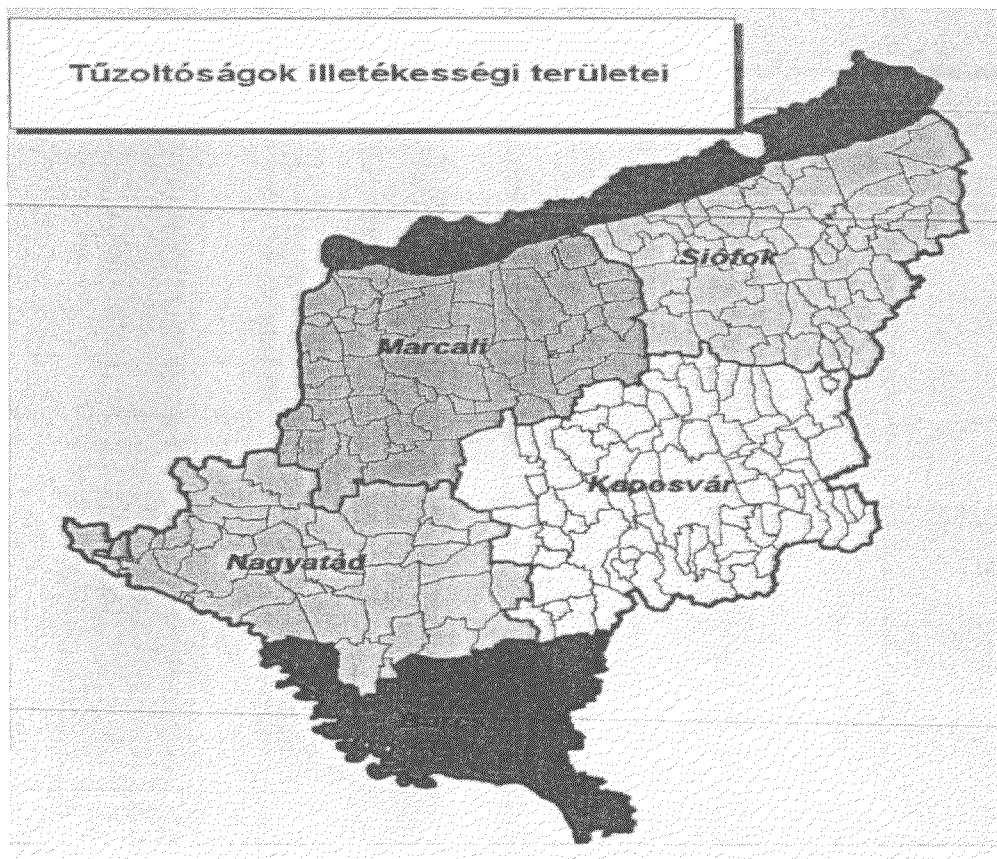
Any method can be used to identify hazards and to evaluate the risks of major accidents which are accepted and international practice.

The layers made by Somogy County as specimen and for information from the full database:

Inland water vulnerability of Somogy County
Somogy Megye Belvíz veszélyeztetettsége

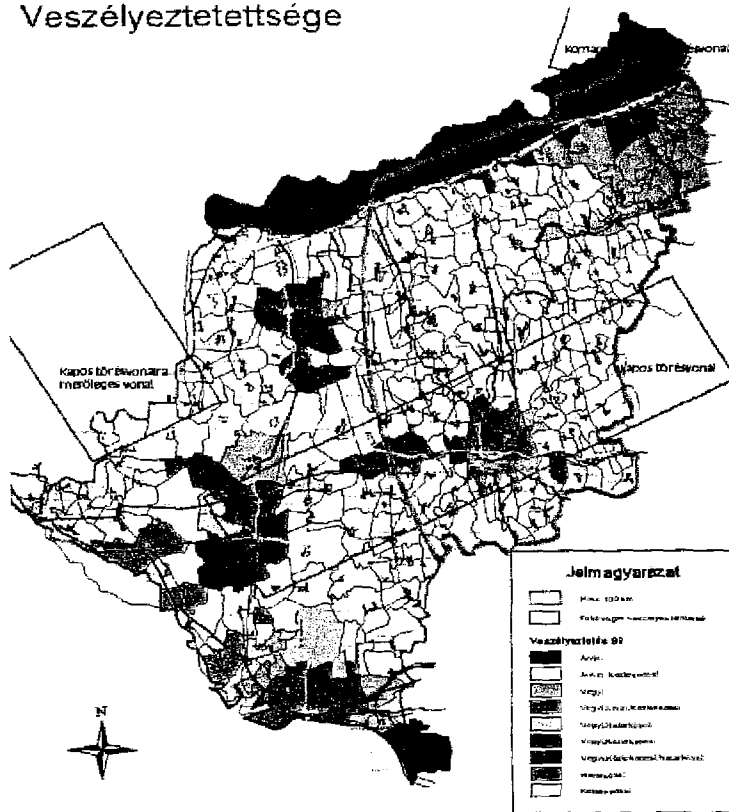


Areas of competence of Fire Brigades

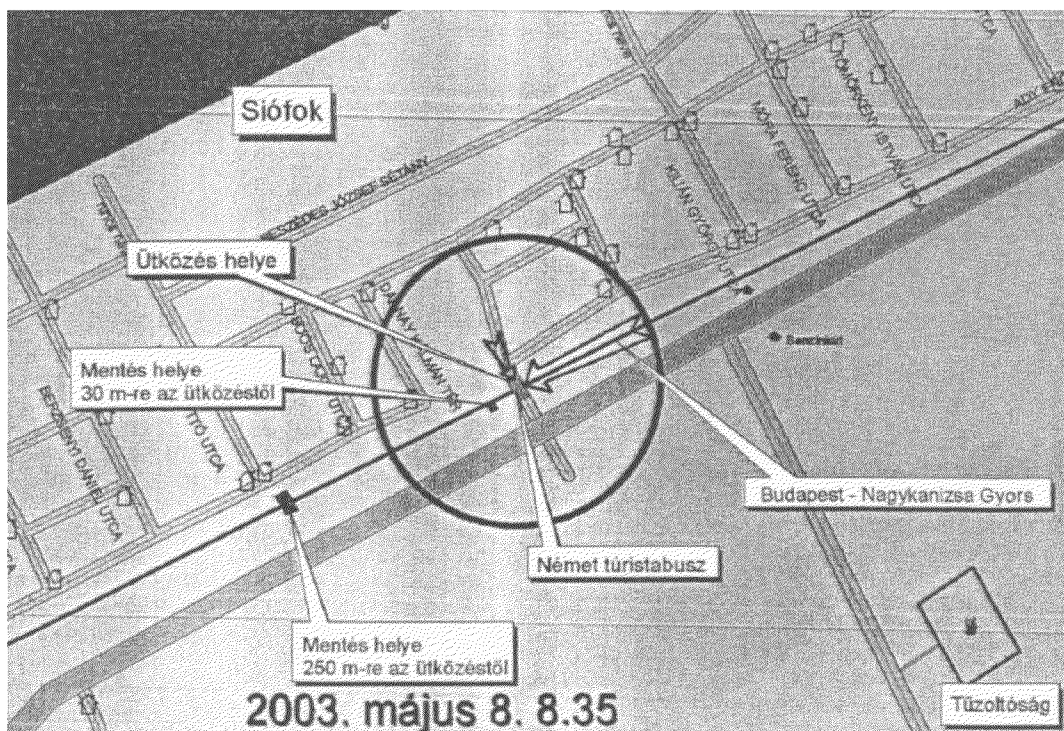


Vulnerability of Somogy County

Somogy Megye
Veszélyeztetettsége

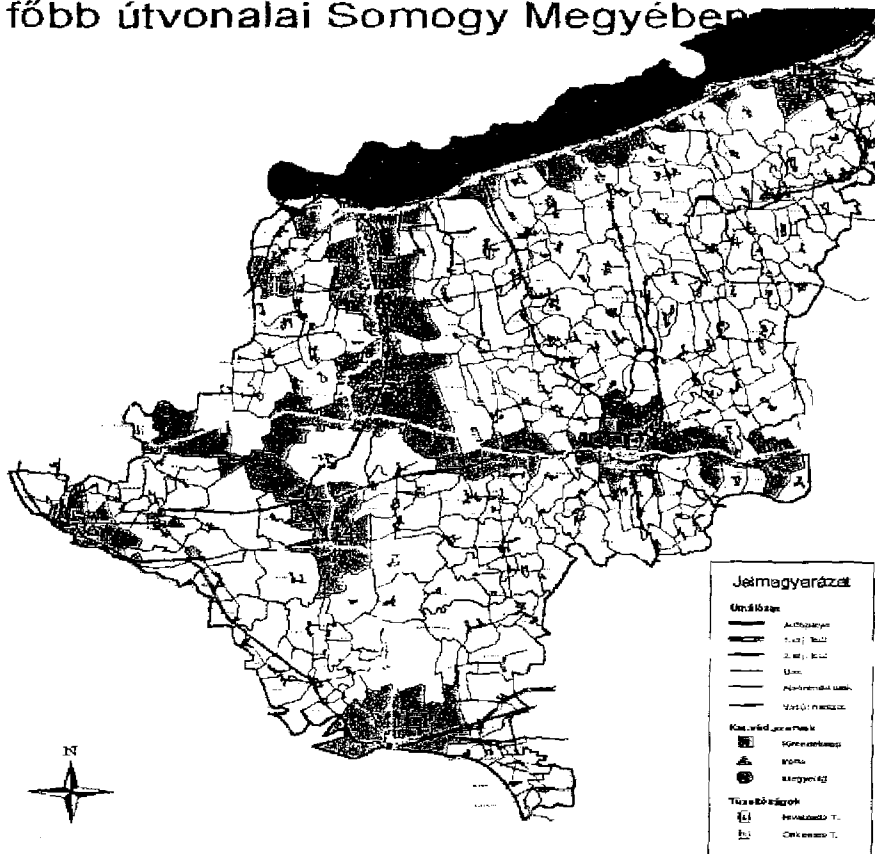


Bus Crash at Siófok in 2003



Major routes of HAZMAT transportation in Somogy County

Veszélyes áruk szállításának főbb útvonalai Somogy Megyében



2.2 Has your country carried out vulnerability and capacity assessments?

Vulnerability or capacity assessments were made neither in connection with hazardous plants, nor with the transportation of hazardous goods by road.

Nevertheless, the basis of the assessment and qualification of hazardous plants is a method which determines the vulnerability taking into consideration all the consequences of major accident and their probability. The specialized authority reviews in the safety report the hazard identification and risk assessment, carried out for all the elements and function modes of the technology, in a separate statute. The operator, based on the frequency and gravity of a major accident, identifies the measure of the individual and social risks.

Another important issue is the critical infrastructure protection (CIP). There is a close and significant connection between CIP and emergency management. The activities of CIP greatly contribute to the management of disasters. NDGDM has been assigned for implementing CIP in Hungary. The task is very complex and will last for many years.

2.3 Does your country have any mechanisms for risk monitoring and risk mapping?

We operate the Seveso Plants Information Retrieval System (SPIRS) and the Major Accident Information System (MARS) in connection with hazardous plants.

The duty services of organizations affected in disaster management participate in risk monitoring and risk mapping.

There are 3 levels of 24-hour duty services in Hungary:

- a national authority operates a main duty service, a dispatcher and on-duty driver service
- County and capital level: duty service at directorate level
- regional level: duty services in towns

The duty services assess and evaluate the emergency calls, and coordinate response efforts.

With the help of SPIRS the analysis and share of information on hazardous plants in Europe will be possible. It consists of a central database setup by the Major Accidents and Hazard Bureau (MAHB).

MARS also provide information for MAHB in forms of short and full reports.

2.4 Is there a systematic socio-economic and environmental impact and loss analysis in your country after each major disaster?

Although the various disasters in Hungary did not endanger the Hungarian macro economy, damage assessment has been carried out every time.

The Government, following major damages, often grants financial support (e.g. the flood on the Danube River in 2002) for the recovery.

The most important categories of damage mitigation:

- building homes for the people without shelter
- performance of municipal tasks
- recovery of infrastructure (public roads, ferries)
- reconstruction of damaged flood and inland water control structures
- damage mitigation in the agriculture

If the feature of damages necessitates, they cover nature protection areas.

The cyanide pollution on the Tisza River in 2000 had an extremely significant effect. The damages attended to a considerable part of the country. Several sectors (fishery tourism wild game-management, plantation, etc.) were endangered. After the events a complex socio-economic and environment impact and loss analysis was carried out.

2.5 Are there early warning systems in place?

There are early warning systems in place in Hungary.

The largest coherent system has been installed in Paks and a 30-km radius around it, due to the nuclear vulnerability, at 74 settlements with 227 and points. The loudspeakers are controlled by UHF radios. The system can supervise the functioning of the control software,

transmission routes, and point equipment and their electronic controls. In case of failure the system gives a warning signal.

With the system it is possible to broadcast information of local relevance – giving priority to nuclear hazard.

There are 210 additional electronic equipment installed in 10 counties in the vicinity of chemical plants. The only exception is in Nógrád County. It has been installed due the nuclear power plant in Slovakia.

The systems have not yet been activated due to emergency.

Public awareness training has been carried out in the region; there is no experience concerning the behavior of the population.

3.1 Does your country have disaster risk information management systems (governmental and/or non-governmental)?

Central duty information system.

It's an info-communication system comprehending all organizations affected during disasters and emergency management, facilitating electronic connection and the flow of information for all actors.

Therefore, it is necessary to develop communications means and infrastructure which helps the fast exchange of information by electronic means, it should promote group effort. It uses the Internet to create uniform visualization of the system in the form of virtual private network. Approximately 500 organizations will be mobilized through this system.

National Disaster Management Information System

The Act on Disaster Management and a Government Decree on its implementation define the scope of tasks of disaster management and responsibilities, to which it is necessary to establish and operate the uniform direction system of telecommunication and information technology systems. The installment of the IT network has already started.

3.2 Are the academic and research communities in the country linked to national or local institutions dealing with disaster reduction?

See answer at point 1.7.

3.3 Are there educational programs related to disaster risk reduction in your public school system?

Since 1 January 2000, the establishment of the Hungarian professional disaster management organization, there has been a great effort made to prepare the youth (pupils, students) for coping with disasters, emergencies and fires at educational establishments.

The majority of work carried out for the sake of disaster reduction between 2000 and 2003 was made up of publishing of pamphlets and books helping the prevention education work of teachers of children between the ages of 4-14. New publications were issued for

schoolchildren to enhance their emergency knowledge. There has also been a "Recommendations for Head Class Teachers" guide issued.

In 2003, almost 20 different educational aides were available for children and teachers. A Manual for Emergency Information was published in March 2004.

3.4 Are there any training programs available?

One of the main tasks of the professional disaster management organization is to inform the population about disaster management issues. The main tasks of the training are:

- to train the pedagogues teaching disaster management knowledge(theoretic, practical, and methodological) and to improve the competence of persons in charge of fire protection
- to provide local government employees possessing the required technical knowledge to support the mayors in performing their disaster management responsibilities

In 2003, we launched a training with the title "Disaster management elementary training for kindergartners, primary and secondary school teachers and for boarding school teachers". In 2004, four further training courses were organized. So far 210 persons, having fulfilled the requirements of the training, have received their certificates. The main topics of the training are: basic knowledge in the field of disaster management; emergencies; the role of the citizens in the field of prevention, emergency management and reconstruction; warning; information; protection of the population; fire-protection; first aid; psychological aspects of emergencies; prevention program of the different institutions; methodology of teaching emergency management knowledge.

The training of chairpersons of county, capital and local protection committees and mayors is in progress. The organization of these training courses is a task of the disaster management directorate of the counties; the curriculum has been compiled by NDGDM. Since 2002, all the mayors (3131 persons) and more than 1000 notaries have attended the elementary disaster management training.

The mayors, and the heads of county and local protection committees are continuously informed by the county directorates and the civil protection branches offices on the most important issues, the changes of legal regulations and on the most important tasks in case of vulnerability.

3.5 What kind of traditional indigenous knowledge and wisdom is used in disaster-related practices or training programs on disaster risk reduction in your country?

Hungary is not threatened by extraordinary or widespread disasters. The main types of disasters in our country are floods and emergencies relating to inland water. This is why the mission of disaster management relates to these kinds of disasters.

The development of civilization and the goals achieved in the field of safety and security of human beings and the environment, the economic development and the high-tech achievements had a negative effect on the awareness and carefulness of the youth to prevent and eliminate dangers. To improve the situation, the disaster management authorities in our country take care of the information and education of young people.

In the framework of educational programs and training it is very important to strengthen all of the knowledge and reflexes of young people, which can be useful in case of emergencies, and can help the prevention and the self-rescue and the rescue of others. A more important task is to improve the appropriate conduct patterns to skill level.

3.6 Do you have any national public awareness programs or campaigns on disaster risk reduction?

The main PR goal of NDGDM is to inform the wide range of population in a simple way on the facts and events that belong to NDGDM's competence.

In the different specialized fields, daily routine responses and activities in connection with the prevention and management of slow evolving emergencies are clearly distinguished.

Enlightening programs and campaigns, relating to disaster reduction, aim to avoid the most often occurring incidents and phenomena with a negative effect on the population, the environment, etc. The goals of the most general campaigns are different in summer – to avoid forest fires caused by the hot and dry weather –, and in winter – to avoid Christmas tree fires, and to eliminate the risk of smoke-intoxication in the heating-season.

The public information on health-protection and on other necessary measures relating to nuclear and radiological emergencies is regulated by the EURATOM Directive 89/618. In accordance with this Directive the Hungarian Government passed a Decree on the system of public information in case of nuclear, radiological emergencies. National, sectoral and regional authorities performing nuclear emergency management tasks and nuclear establishments participate in the implementation of this Decree.

In case of an accident, the media (TV, radio, newspapers, etc.) provides the fastest way of informing the population on governmental communiqués and measures. The target group is the population living in areas surrounding nuclear plants. The evaluation of the suitability of the measures takes place during practical training.

As part of the information and enlightening program on disaster prevention we organize exhibitions, programs for children (demonstrations). Leaflets and other demonstration materials are frequently issued.

4.1 Are there any good examples of linking environmental management and risk reduction practices in your country?

In the field of risk management, in case of floods we have a close cooperation with the competent authorities. Due to this cooperation, the tasks and the competences will become clear and it will also be obvious who has to and who is able to provide the necessary equipment during preparation, protection and reconstruction.

To mitigate the risk of floods and inland waters, the authorities responsible for water resources have worked out a standard preparedness system. On the basis of this system, all authorities taking parting in disaster management may define their own tasks and may issue their specific preventive measures.

In case of flood-protection and protection against inland waters 3 preparedness degrees and 1 extraordinary preparedness degree will be introduced.

Preparedness degrees I-III make the protection against floods effective. Degree I means that a 12-hour daily monitoring service has to be introduced. In degree II the above mentioned monitoring service measures the water level around the clock. In case of degree III, considering the inability of the authorities responsible for water resources to ensure the monitoring service at the dikes, citizens designated for civil protection duty will also be engaged in the protection against floods.

The introduction of extraordinary measures is needed when a dike-breach may or will occur. In this case, the authorities taking part in disaster management have to ensure the protection of the dikes intact parts, the logistics means necessary for the protection, moreover, the protection and the rescue of the population and property.

During the protection against icy floods there are additional special measures introduced.

At the introduction of the different inland water protection degrees, the possibilities of diverting inland waters have to be taken into account.

Extremely important is to ensure the gravitational diversion of the inland water and the good conditions of the canals for receiving the diverted water.

An important task is to ensure the continuous operation of the pumps in the protected reaches.

In the course of extraordinary protection against inland waters the preparation of reservoirs to be used for diverting inland waters and the appropriate use of the reservoirs are very important.

The authorities taking part in disaster management are to increase the number and availability of the means used for their work during the introduction of the different degrees of preparedness, while meeting the requirements of the different degrees.

These special tasks mentioned above are also considered in the case of other types of disasters. Nowadays, due to the possibilities given by the information technology, the RODOS system helps to shorten the time of decision-making and to do it in the optimal way.

The national, regional and local authorities of disaster management, in cooperation with the municipalities, create the logistics conditions for the evacuation and rescue of the population, they prepare the accommodation and ensure the catering of the population.

Disaster management and the municipalities together arrange for the necessary technical equipment for protection.

4.2 Are financial instruments utilized in your country as a measure to reduce the impact of disasters?

The national budget contains a so called "vis maior fund", which is for the mitigation of disaster-related impacts. This fixed value fund cannot cover the damages caused by the impacts of major disasters. The use of the "vis maior fund" is regulated by the law. The municipalities and the local settlement development boards participate in the distribution of the money from the fund.

In case of major disasters - first of all in case of an emergency declared by the Government - a separate allocation is created from the General Reserve of the National Budget.

The amount to be used for mitigating the damages of victims is also allocated from the General Reserve of the National Budget. When determining the exact amount of compensation the authorities take into account the amounts reimbursed from other sources as well.

After the experts have assessed the damages, the Government decides on the means and extent of the compensation (cash, in kind, etc.). The granting process of the compensation is administered through the local governments. Before the financial performance a specialized organization certifies the technical implementation. In other cases the compensation takes place through a mediatory body (primarily a public administration institution).

4.3 Please identify specific examples of technical measures or programs on disaster risk reduction that have been carried out in your country?

To mitigate the consequences of disasters we have established several rescue bases. The equipment of these bases are cranes, decontamination kits, and different vehicles to help manage of disasters.

In line with the tasks of disaster reduction, the following systems have been implemented:

- Storm-signal system at the Lakes Balaton and Velencei (BVR). The storm-signal stations around the Lakes Balaton (25 EA) and Velencei (3 EA) operate between 1 May and 30 September (Degree I: 45 flashes/min; degree II: 90 flashes/min). In 2004, the term of operation will be extended until 30 November. The systems are launched by wireless operation from the observatory of the Hungarian Meteorological Service in Siófok.
- The Information and Emergency Response System at Lake Balaton operates collaterally with the BVR and is a wireless system. Its task is to coordinate the work of those participating in water rescue, to inform the participants of the public water transport and to monitor the emergency call system.
- The Information and Emergency Response System at the Tisza River (TISR) and the Information and Emergency Response System at the Danube River (DISR). TISR and DISR broadcast information all throughout the year and monitor the emergency response channels 24 hours a day.

5.1 Do you have contingency plans in place? Are they prepared for both national and community levels?

Due to the Decree of the Minister of the Interior Nr. 20/1998. (IV.10) there are different plans relating to disaster management both in peacetime and in wartime.

The emergency management plans are structured in a pyramid system and these plans are unclassified and are available for the public. (The plans for the regions also contain the data relating to local level; the national plan is built on the basis of regional plans). Civil protection plans are classified and the order of decision-making is centralized (from the highest to the lowest levels). The tasks of the regional bodies are determined by the national authority and due to the local peculiarities local authorities will be provided with an extract of the regional plans.

In practice, so far only peacetime emergency prevention plans have been implemented and these plans have proved to be effective. These plans are frequently updated. The lessons learned from each deployment will be used to improve the plans.

Regional and local authorities are in the possession of so-called special population protection plans. These plans are used primarily for lodging, hiding, catering of the population and for the protection of property.

The verification of these plans and the system of plans is done centrally according to the regulations.

5.2 Has your government established emergency funds for disaster response and are there national or community storage facilities for emergency relief items – mainly food, medicine, tents/shelters?

The Institute for the Management of State Reserves manages the central state stocks. The mobilization plans for the economy provide for the necessary products with the help of classified period planning by forming reserves and by securing service and production capacities.

The Hungarian Disaster Management keeps a minimum amount of basic stocks like cots, tents, etc. The regional bodies of disaster management have agreements based on which they are able to obtain the necessary means and capacities.

5.3 Who is responsible for the coordination of disaster response preparedness and is its coordination body equipped with enough human and financial resources for the job?

Based on the Act on Disaster Management GCC is responsible for the preparation of the decision making process relating to disaster management, and for the coordination of the decisions of the Government.

Chaired by the Minister of the Interior

Deputy Chairperson: depending on the type of disaster, the deputy chairperson is the state secretary of the ministry mostly affected by the emergency, e. g. in case of a nuclear accident, the deputy chairperson is the Director General of the National Atomic Energy Authority.

Members: Ministries and national authorities are also entitled to take part in the committee meetings as advisors.

Bodies of GCC:

Permanent bodies: Secretariat
Emergency Center
Operations Staff (in case of disaster)

The Secretariat of GCC and the Operations Staff are seated in the Ministry of the Interior, the Emergency Center operates at NDGDM.

Secretariat: prepares the meetings of the GCC

Releases information for the persons and authorities concerned

Registers the whereabouts of people appointed by the chairperson of GCC during and after working hours

Is responsible for alarming the above-mentioned people

The **Emergency Management Center** operates as part of NDGDM. It provides a continuous response system which collects and analyzes information relating to different disasters abroad and in our country and submits them to the authorities concerned.

The **Operations Staff** consists of persons belonging to the personnel of NDGDM and the different Ministries. It performs its tasks - relating to decision-making of the issues of protection against the consequences of a disaster - until the formation of the working group on protection and makes proposals relating to subordinate organizations for the concerned ministries. The tasks will be carried out according to the measures taken by the chairperson of GCC.

To support the operation and the decision making processes of GCC there is a **Scientific Council on Disaster Management**. The members of the council are the heads of academic institutions, organizations, which are called upon by the Minister of the Interior. In case of a nuclear accident these experts are called upon by the National Atomic Energy Authority to help the work.

In case of a disaster, to help the work relating to the coordination of the different technical tasks of the Ministry concerned, GCC - as a professional decision-making body - establishes a working group on protection in the most concerned Ministry.

Working Committee on Protection has to be established in case of disasters listed below

- floods and inland waters;
- nuclear accidents, recovery after earthquakes, handling of mass migration;
- elimination and mitigation of human diseases;
- a damage to the nature up to the level of an emergency;
- elimination of the consequences of incidents reaching the level of an emergency at hazardous industrial plants

Tasks of GCC:

During prevention:

- to prevent disasters GCC coordinates the academic, research, evaluation efforts of the different institutions and manages national assessment relating to the disaster-prone areas of the country;
- harmonizes the different tasks relating to disaster prevention;
- Together with the Hungarian Academy of Sciences, GCC works out the disaster mitigation measures which can mitigate the damages caused by disasters.

During response:

- harmonizes the work of the organizations taking part in the rescue operations and the central administration;
- monitors - and if is needed, harmonizes - the work of the protection against the effects of disasters, and the local operations, moreover, it harmonizes the work of the working groups on protection;
- according to a separate statute, it manages nuclear emergencies and the mitigation of the consequences thereof;
- for special cases, according to legislative regulations, it manages the protection against the damage caused by water

GCC is responsible for conducting the reconstruction according to the decision of the Government.

Financial and material support relating to disaster management

The central protection costs – with the exception of maintenance and operational costs of disaster management bodies of self-defense character – are born by the state. They

have to be allocated under the budget chapter “Disaster Management” of the Ministry of the Interior, other Ministries and national authorities.

6-7. Priorities

Examples of managing disasters between 2000 and 2004:

- 2000: Cyanide pollution on the Tisza River
- 2000: Flood on the Tisza River
- 2001: Flood on the Tisza River
- 2002: Flood on the Danube River

Due to the geological features of Hungary, we have to count with the risk of major floods.

In April 2000 there was a flood in the region of the city of Szolnok at the mid-section of the Tisza River, regarded as the greatest flood of the last 100 years.

Early 2001, we had to manage a flood at the upper flow of the Tisza in the Bereg for a long period of time. Both floods caused immense financial but no human losses.

25 May 2001, the Hungarian Government took the initiative to establish a Forum for flood protection in the Tisza Valley with the participation of the ministers of water management of five countries. The aim was to establish a standard flood-protection and prevention system with the cooperation of 8 international working groups.

To increase the effectiveness of flood-protection the Government adopted the most significant regional development program since decades. To increase the flood-safety of the Tisza Valley a new conception, based on a system accomplished in the XIXth century, has been elaborated. The essence of this new system is to drain the excess water from the river into emergency reservoirs built in the flood-plain, thus enabling a new type of landscape management. In the first phase of this plan, between 2004 and 2007, six flood reduction reservoirs will be built in the upper flow of the Tisza River, totaling 240 km².

The participants of this plan aim to accomplish an ecological region along the Tisza River, which can manage flood protection, landscape development, landscape management, ecotourism, nature and environment protection.

In the summer of 2002, as a result of several days of rain and the melting of the snow in the Alps, the flood on the Danube, Oder and Elbe Rivers, based on the initiative of the Hungarian Prime Minister, a Conference was held between 30 November and 1 December 2003 in Budapest with the title “Budapest Initiative – Conference on Flood Protection”. Six of the participating countries – situated in the watershed area of the Danube River – were represented by their prime ministers.

In the spring of 2004, the Ministry of Environment and Water and the Budapest University of Technology and Economics organized a conference with the title “Further Improvement of the Budapest Initiative – Workshop in Hungary”. The main goals of the conference were: the prevention of floods in Hungary; exercise for protection against floods; the comparison of the Hungarian and European trends and directives (general directive, UNECE Directives on the sustainable flood-protection, the Document on Best Practices, etc.); and the tasks relating to the implementation of flood-protection. After the EU accession we are now obliged to meet the requirements

of the General Water Directives (enacted 22 December 2000), they are primarily the tasks related to the complexity of flood-protection, containing the tasks related to the landscape and environment protection and ecology in the course of prevention and protection. A special emphasis was laid on the role of NGOs in the field of flood protection. The participants emphasized the new perspective of flood protection: the prevention and protection against floods must be managed together with landscape, nature, environment protection, landscape development and ecotourism.

The Ministry of Water and Environment organized, in April 2004, the “Budapest Initiative – Conference on Flood Protection”. The representatives of international governmental organizations and NGOs emphasized the collective action of the countries along the Danube River to prevent floods and to fight against them. Their opinion was that the conversation among the different bodies, institutions, etc., the participation of the insurance companies in the negotiations and the cooperation on national and international level are very important. The participants reported on the situation relating to the integrated flood protection projects in their countries. The effect of the climatic changes on floods, the possibility of forecasting floods and the high standard and credible information for the public were also emphasized.