Major routes of HAZMAT transportation in Somogy County



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 witch 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 socioeconomic 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 major 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 major 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 heip 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 Dou 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 plans

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, UN/ECE 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.