

IT 4 Sec Reports

***HUNGARY:
Capabilities, Organisations, Policies, and
Legislation in crisis management
and disaster response***

Vesselin Petkov
Todor Tagarev

***УНГАРИЯ:
Способности, организация, политики и
законодателство за управление на
кризи и реагиране при бедствия***

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HUNGARY: Capabilities, Organisations, Policies, and Legislation in crisis management and disaster response

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IT4SecReports 127 „HUNGARY: Capabilities, Organisations, Policies, and Legislation in crisis management and disaster response“ This report provides a detailed overview of the crisis management system in Hungary, placed under significant pressure in recent years, which revealed weakness and vulnerabilities to be addressed through policies and actions. Recent reforms are addressed by the authors from a number of angles. From a legislative perspective, the report looks into the new disaster management law of 2011, laying the foundations of a system in which professional disaster management service cooperates closely with professional and volunteer civil protection structures. From an operational perspective, the authors provide a description of the structure and functions of the National Directorate General for Disaster Management (NDGDM) within the Ministry of Interior, which is the national authority for disaster management. From a governance point of view, the report provides information on the respective actors involved at each of the levels of the system. Notably, the authors extract practical examples of the modus operandi of the Hungarian crisis management system before and after the reforms.

Keywords: disaster preparedness, disaster response, three-pillar disaster management system, Hungary, Kolontar, structural reform

IT4Sec Reports 127 „УНГАРИЯ: Способности, организация, политики и законодателство за управление на кризи и реагиране при бедствия“ Докладът предлага детайлен преглед на системата за управление при кризи в Унгария, която бе подложена на сериозно напрежение в последните години от редица случаи, изобличаващи нейни слабости и уязвимости и предизвикали цялостни реформи. Последните са разгледани от авторите от различни ъгли. По отношение на законодателството докладът разглежда новия закон за управление при кризи от 2011г., който поставя основите на система, в която професионалната служба за управление при кризи взаимодейства с професионални и доброволчески структури за гражданска защита. От оперативна гледна точка авторите описват структурата и функциите на Националната генерална дирекция за управление при кризи под шапката на Министерството на вътрешните работи, която изпълнява ролята на национален орган за управление при кризи. От гледна точка на управление докладът описва различните нива на системата и актьорите, ангажирани в процеса. Авторите извличат практически примери от начина на действие на унгарската система за управление при кризи преди и след реформите.

Ключови думи: подготовка, отговор при бедствия, тристълбова система за управление при бедствия, Унгария, Колонтар, структурна реформа

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Overview

- Hungary is a landlocked country in Central Europe with a territory of slightly over 93 thousand square kilometres. It has boundaries, shared with Austria to the west, Serbia, Croatia and Slovenia to the south and southwest, Romania to the southeast, Ukraine to the northeast, and Slovakia to the north. The country is crossed by rivers Danube and Tisza, which are navigable 418 and 444 kilometres, respectively.
- The crisis management system in Hungary has been under significant pressure in the last years, which revealed weakness and vulnerabilities to be addressed through policies and actions. Numerous disasters – from the notorious red sludge spill, via floods, to storms and droughts – made it evident that a profound reform of the Hungarian crisis management and disaster response architecture was needed.
- A new disaster management law was adopted in 2011 (in force since 1 January 2012), laying the foundations of a system in which professional disaster management service cooperates closely with obliged and volunteer civil protection structures. As put by the law, disaster management has been named a national cause.



Figure 1: Symbol of the NDGDM

- The National Directorate General for Disaster Management (NDGDM) within the Ministry of Interior is the national authority for disaster management. As of 1 January 2012 a new organisational structure of the NDGDM was introduced, which has been built on three pillars: civil protection, fire protection and industrial safety, with the National Inspectorate General of Fire Services, the National Inspectorate General of Civil Protection and the National Inspectorate General of Industrial Safety constructing the backbone of the NDGDM.
- The Disaster Management Governmental Coordination Committee (DMGCC) is an inter-agency coordination body ensuring consistency between sectors. At county and local level, protection committees are in place to concert disaster management.

- From an operational perspective, the central structures for disaster management at the county and local level include 20 county directorates for disaster management, their subordinated offices for disaster management, the professional dire departments and the municipal fire departments.

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List of Abbreviations

CEPC	Civil Emergency Planning Committee
CMDR	Hungarian crisis management and disaster response
CPG	Civil Protection Group
CTIF	International Association of Fire and Rescue Service
DMGCC	Disaster Management Governmental Coordination Committee
DPPI SEE	Disaster Preparedness and Prevention Initiative for South-Eastern Europe
DREF	Disaster Relief Emergency Fund
EADRCC	Euro-Atlantic Disaster Response Coordination Centre
EU ERCC	Emergency Response Coordination Centre
EU MIC	EU Monitoring and Information Centre
FEU	Federation of the European Union Fire Officer Associations
GCCR	Governmental Coordination Centre for Reconstruction (GCCR)
HFA	Hyogo Framework for Action
HUNOR	Hungarian National Organisation for Rescue Services
IDC	International Development Cooperation

INCA	Integrated Nowcasting System for the Central European Area
INSARAG	International Search and Rescue Advisory Group
JHA	Justice and Home Affairs
JRC	[EU] Joint Research Centre
MoLaRi	Monitoring and Public Alarm System
NDGDM	National Directorate General for Disaster Management
OCHA	UN Office for Coordination of Humanitarian Affairs
OMSZ	Hungarian Meteorological Service
PECO	Pays d'Europe Centrale et Orientale
PPA	Public Procurement Act
RSOE	National Association of Radio Distress-Signalling and Infocommunications
TIC	Territorial information Centre
UNECE	United Nations Economic Commission for Europe

1 Policy

The crisis management system in Hungary has been under significant pressure in the last years, which revealed weakness and vulnerabilities to be addressed through policies and actions. Numerous disasters – from the notorious red sludge spill, via floods, to storms and droughts – made it evident that a profound reform of the Hungarian crisis management and disaster response (CMDR) architecture was needed.

A new disaster management law was adopted in 2011 (in force since 1 January 2012), which put greater emphasis on “prevention and preparation, and on a more intensive cooperation with the population, on self-reliance, and on taking responsibility”¹, laying the foundations of a system in which professional disaster management service cooperates closely with obliged and volunteer civil protection structures. As put by the law, disaster management has been named a national cause.

In the period January-June 2011, when Hungary presided over the Council of the European Union, disaster management was specifically included in the Justice and Home Affairs part of its programme, stressing the need of enhanced cooperation between Member States in the field, and drawing attention to flood management and risk assessment activities, in order to improve the protection of European citizens.² The Hungarian programme (quoting the example of the Gulf of Mexico spill in 2010) also stressed the need for action in relation to the safety aspects of offshore oil and gas exploration licensing, operation, inspection and the revision of overall responsibility. The document recalled that the European Commission had presented a Communication on “Facing the challenge of the safety of offshore oil and gas operations.” In this respect, the Hungarian Presidency aimed to have the first exchange of views on the European Commission’s legislative proposal on the safety of offshore oil and gas activities.

As part of the EU Hungary is also supporting the implementation of the Hyogo Framework for Action and relevant disaster risk reduction initiatives including through the development of a national disaster risk reduction platform, involving actors from the development, humanitarian, planning, environment, agriculture and civil protection side.

1.1 Risk Assessment

In February 2009 the European Commission adopted the Communication on a Community approach to reducing the impact of natural and man-made disasters within the EU. Further, in November 2009 Council Conclusions on a Community Framework on Disaster Prevention within the EU, adopted

1 Ministry of Interior of Hungary, National Directorate General for Disaster Management, 2012, available at: http://www.katasztrofavedelem.hu/letoltes/eng/szervezet/NDGDM_intro.pdf

2 Strong Europe with a Human Touch, The Programme of the Hungarian Presidency of the Council of the European Union, http://www.eu2011.hu/files/bveu/documents/HU_PRES_STRONG_EUROPE_EN_3.pdf

during the Swedish Presidency, underlined the importance of the national and international elements of disaster prevention policies, such as hazard and risk identification and assessment, impact analysis, risk mapping and regular review.

In April 2011, during the Hungarian EU presidency, the Justice and Home Affairs configuration of the Council adopted Conclusions, issued under number 8068/11, on “Further Developing Risk Assessment for Disaster Management within the European Union.” The Conclusions invite the member states to initiate national risk assessments by the end of 2011, by structuring the process and setting the methodological framework, organising coordination between stakeholders, identifying and analysing single-risk scenarios, consider multi-risk scenarios, etc.³

In Hungary, as a first step in the process of implementing the requirements of the Council, the main risks have been identified, namely “floods and inland waters, earthquakes, forest fires, industrial accidents, extreme weather phenomena and man-made disasters.”⁴ Second, to carry risk assessment relevant actors and were involved in a national conference (divided into working groups), organised in June 2011. The final document from the conference concluded that “the availability of or the differences in the data did not allow a detailed analysis in each case” and called to “the European Commission to support a more accurate risk assessment, preferably by inviting international calls for proposals.”⁵

Although the above-mentioned document does not qualify as a comprehensive national risk assessment, there exists partial risk assessment for Hungary, as part of national or international projects.

In 2007 the Joint Research Centre's Institute for the Protection and Security of the Citizen published a report on “Risk Mapping in the New Member States,” a result of research carried within the 5th and 6th Framework Programmes, aimed, among others, at examining the existing situation in the 10 PECO (standing for Pays d'Europe Centrale et Orientale; French for Countries of Central and Eastern Europe) countries for mapping of eight priority natural (floods, forest fires, storms, earthquakes, landslides) and technological hazards (industrial installations, transport of dangerous goods and contaminated lands).⁶

3 Council conclusions on Further Developing Risk Assessment for Disaster Management within the European Union, <http://register.consilium.europa.eu/doc/srv?l=EN&f=ST%208068%202011%20INIT>

4 National Risk Assessment, Synopsis, available at: [http://www.preventionweb.net/files/29824_priorityno.2.coreind.no.1.\[1\].doc](http://www.preventionweb.net/files/29824_priorityno.2.coreind.no.1.[1].doc)

5 National Risk Assessment, Synopsis

6 Risk Mapping in the New Member States, JRC Scientific and Technical Reports, available at: http://www.preventionweb.net/files/5455_JRC38184.pdf

Countries	Floods	Indust. Install.	Transport of Dang. Goods	Forest Fires	Contaminated Lands	Storms	Earthquakes	Land-slides
Romania	High	Medium	Medium	Medium	Medium	High	High	High
Bulgaria	Medium	High	High	High	Low	Medium	High	Medium
Czech Republic	High	Medium	High	Medium	High	Medium	Low	Medium
Poland	High	Medium	High	High	Medium	Medium	Low	Low
Hungary	High	Medium	High	Medium	Medium	Low	Low	Low
Slovenia	High	Medium	Low	Medium	Low	Low	High	Medium
Slovakia	High	High	Low	Low	High	Low	Low	Medium
Latvia	Medium	High	High	Medium	Low	Low	n/a	n/a
Estonia	Low	Medium	High	Medium	Low	Medium	Low	Low
Lithuania	Medium	Medium	Medium	Medium	Low	Medium	Low	Low
Cyprus	Low	Medium	Low	Medium	Low	Low	Medium	Low

Legend

High	HIGH
Medium	MEDIUM
Low	LOW
n/a	NOT APPLICABLE

Figure 2: Risk Mapping of Hungary.

From a methodological point of view, the JRC project relates “high risk” with a hazard that is present within the vast majority of the country (more than 2/3 of it) or, alternatively, when the hazard is confined only to particular areas but in case of an accident, the effect could be significant for at least one major population centre or an important economic resource.

Table 1: Classification of Risks

Type of risk	Territory	Population/resource affected
High risk	HR>2/3	Major population centre
Medium risk	1/3<MR<2/3	Minor population centre
Low risk	LR<1/3	No population centre affected

For Hungary, qualitative analysis by national experts classified the eight hazards as follows:

- Carrying low risk relevance – storm, earthquakes, landslides
- Medium risk relevance – industrial installations, forest fires, contaminated lands
- High risk relevance – floods, transport of dangerous goods

It is also worth noting that in a related report⁷ on flood risk mapping, no less than six examples involving Hungary were quoted to show how increased number of floods in eastern and central Europe, had been affecting life of citizens on a large scale , namely:

- July 1997 in Poland, the Czech Republic, Slovakia and Hungary;
- November 1998 in Hungary and Slovenia;
- March-April, July 1999 in Hungary and Romania;
- April-May 2000 in Hungary and Romania;
- March 2001 in Hungary and Romania, June-July 2001 in Poland;
- April and August 2002 in Romania, Hungary, the Czech Republic and Slovakia

Floods

As evident from statistical data tabled below, floods have affected the largest number of people in Hungary and together with droughts have been most damaging to the country's economy.

Table 2: The most affecting (in terms of financial damage) disasters in Hungary for the period 1900 – 2014.

Disaster	Date	Damage (000 US\$)
Drought	Jun-86	500000
Flood	15/05/2010	440000
Drought	May-92	384000
Flood	21/02/1999	165000
Flood	9/7/1999	128400
Drought	Jul-03	100000
Flood	1/5/1970	85000
Flood	6/4/2000	55000
Flood	14/08/2005	48000
Flood	7/8/2002	30000

Source: "EM-DAT: The OFDA/CRED International Disaster Database www.em-dat.net - Université Catholique de Louvain - Brussels – Belgium

Table 3: The most affecting (in terms of people killed) disasters in Hungary for the period 1900 – 2014.

Disaster	Date	No Killed
Extreme temperature	Jul-07	500
Flood	1/5/1970	300
Extreme temperature	Dec-01	81

7 "Risk Mapping of Flood Hazards in the New Member States," JRC Scientific and Technical Reports, available at: http://eusoils.jrc.ec.europa.eu/Esdb_Archive/eusoils_docs/other/EUR22902EN.pdf

Extreme temperature	27/12/2005	48
Storm	Feb-99	40
Extreme temperature	Jan-08	17
Extreme temperature	Feb-12	16
Flood	9/7/1999	8
Storm	1/2/2003	7
Storm	20/08/2006	5

Table 4: Summarised table of natural disasters in Hungary between 1900 and 2014.

		# of Events	Killed	Total Affected	Damage (000 US\$)
Drought	Drought	3	-	-	984000
	ave. per event		-	-	328000
Earthquake (seismic activity)	Earthquake (ground shaking)	1	-	1800	-
	ave. per event		-	1800	-
Extreme temperature	Cold wave	3	114	500	-
	ave. per event		38	166.7	-
	Extreme winter conditions	1	48	-	-
	ave. per event		48	-	-
	Heat wave	1	500	-	-
	ave. per event		500	-	-
Flood	Unspecified	3	300	200	85000
	ave. per event		100	66.7	28333.3
	General flood	12	10	229883	881400
	ave. per event		0.8	19156.9	73450
Storm	Unspecified	2	9	300	10000
	ave. per event		4.5	150	5000
	Local storm	4	51	14000	-
	ave. per event		12.8	3500	-

In Hungary, there are two any legal instruments that mandate or guide official mapping of flood hazards, namely Act LXXIV of 1999 and Act LVII of 1995. Hungarian authorities produce national maps for floodplain inundation areas of 1/100 and 1/1000-year frequency. Most of the maps are in paper, and some are digital. National, regional and provincial maps were created in 1977 and have not yet been updated, while the municipal were produced in 1984 and were updated in 2002.

Notably, Hungary is among the PECO countries that indicated that flood hazard maps tended to contain detailed information related to flooding potential, particularly on high scale maps.

Flood hazard data collected by Hungary includes:

- Surface water hydrometry – water level, discharge, water quality;
- Ground water hydrometry – depth, discharge, quality;
- Climatology & Meteorology – precipitation, temperature, pressure, solar radiation, evapotranspiration;
- Soil – soil moisture deficit, permeability.

Earthquakes

Statistical studies show that four to five 2.5–3.5 magnitude earthquakes can be expected every year in Hungary, which can be felt near the epicentre, but cause no damage. Earthquakes causing light damages occur every 15–20 years, while stronger, more damaging 5.5–6 magnitude quakes happen about every 40–50 years.⁸ Only one earthquake in 2014 was with a magnitude of >4, thus coded orange.

The Seismological Observatory of the Hungarian Academy of Sciences produces earthquake hazard maps, as well as regular earthquake bulletins.

Risk Maps

For risk mapping purposes, Hungary maintains DTA 50 and DDM 200 maps – with topic layers with information on vulnerabilities, hazard sources, etc. The maps allow searches, operations with coordinates, graphic-based selections.

1.1.1 Policy and Governance

Before the year 2000, the two pillars of the Hungarian disaster management were the firefighting and the civil protection organisations, carrying out disaster response and crisis management tasks. The merger into a National Directorate General for Disaster Management was regulated by the provisions of Act LXXIV of 1999 on the management and organisation of disaster protection and the prevention of major accidents involving hazardous substances. The law was aimed at providing a comprehensive framework for the activities of the central and local authorities, operating at different levels, with tasks and responsibilities in the prevention and control of disasters and in eliminating the consequences thereof.

However, disasters of the past decade exposed some deficiencies of the crisis management system. Taking these into account, a new Disaster Management Law was adopted, which came into force on 1 January 2012. The Law and related amendments; the Defence Law of 2011; and the government

8 Seismological Observatory of the Hungarian Academy of Sciences, <http://www.seismology.hu/index.php/en/>

decree on the establishment, organisation and operation of the coordination committee for disaster management currently form the legal basis of Hungary's crisis management.

The acts listed define responsibilities “relatively well.”⁹ The changes of 2011-2012 concern the subordination of municipal firefighting to disaster management authorities, the improvement of the connection between local government and disaster management professionals, stricter control over volunteer firefighter organisations. In addition to that, an enlarged group of industrial plants and dangerous material transport belong under the supervision of disaster management authorities.¹⁰

1.1.2 Monitoring and analytical support to policy making; R&D

R&D support to policy making is provided within the framework of several EU-funded projects.

SEERISK

The National Directorate General for Disaster Management (NDGDM) of Hungary is the lead partner in a project, called SEERISK, together with 19 project partners (local and regional municipalities, meteorological institutions, disaster management organisations, universities) from Hungary, Austria, Bosnia and Herzegovina, Bulgaria, Croatia, Romania, Serbia, Slovakia and Slovenia. SEERISK is aimed at improving the consistency of risk assessment legislation and practices used by the project partner countries at national and local level, especially in case of disasters intensified and/or triggered by climate change in the Danube macro-region.

The project started in July 2012 and first collected and processed risk-related information from the partner countries. Then, project partners produced a Common Risk Assessment Methodology to help create risk maps taking into account various risk factors. A GIS Best Practices Questionnaire was also developed which aims to look at the geographic information systems software, hardware and human resource penetration in the countries.

DRAVIS

The National Association of Radio Distress-Signalling and Infocommunications (RSOE) as lead partner, the Somogy County Disaster Management Directorate, the Baranya County Disaster Management Directorate, the Zala County Disaster Management Directorate, Koprivničko-križevačka County and Osječko-Barajnska County are involved in a project for enhancement and geographical extension of cross-border joint planning in Hungarian-Croatian disaster management cooperation.

DRAVIS project is implemented in the frame of the „Hungarian-Croatian IPA Cross Border Cooperation Programme 2007-2013,” to improve disaster management in River Drava region. The project provides help for developing GIS and for the implementation of joint exercises for the

9 Viktoria Takacs and Piotr Matczak, “Country Study: Hungary,” Analysis of Civil Security Systems in Europe, http://anvil-project.net/wp-content/uploads/2013/12/Hungary_v1.0.pdf

10 Ministry of Interior of Hungary, National Directorate General for Disaster Management, 2012, available at: http://www.katasztrofavedelem.hu/letoltes/eng/szervezet/NDGDM_intro.pdf

involved Hungarian and Croatian disaster management organisations. Furthermore a web-interface information exchange system was developed, which can be used to request assistance from neighbouring disaster management organisations in case of emergency.

INCA

In the period 2011-2013 Hungary's meteorological service OMS and the Somogy County Disaster Management Directorate were part of the INCA-CE (INCA Central Europe - Integrated nowcasting system for the Central European area, <http://www.inca-ce.eu/index.php>) project, aimed at creating a common tool that allows more precise weather warnings; a transnational web-based dissemination system conveying the weather information and warnings to authorities and the public; a more efficient interface between warning data providers (weather services) and their applications and users. The project also evaluated strengths and weaknesses of current methods in natural disaster warning and risk prevention by making it easier for both public and private users to incorporate meteorological risk assessments into their planning. Project partners were from Austria, Czech Republic, Germany, Hungary, Slovakia, Poland, Italy and Slovenia.

1.1.3 Policy for Prevention

The NDGDM operates an Industrial Safety Information System which collects and stores detailed data on more than 730 dangerous plants. The system includes "data about license requests, safety analysis and safety reports, external emergency plans and other public information submitted by operators of dangerous plants." The system contains all the information required for carrying out regular inspections and prevention tasks.

According to their activity, the plants subject to the Disaster Management Law are divided into the following categories: gas industry (87); storage of fertilizers (56); oil industry (44); power- and heating plants (31); deposits and logistics centres (63); general chemical industry (51); manufacture of medicines (13); manufacture and storage of plant-health products (48); explosives and ammunition; pyrotechnics (15); plastics industry (35); dangerous waste (23); produce and consumption of biofuel (9), food industry (95), building industry (19), agriculture (90), heavy industry (35), waterworks, bath, swimming pool (28) and other dangerous plants (27).

The NDGDM of Hungary registers and analyses the emergency incidents involving dangerous substances and major accidents occurring in Hungary, and in accordance with the provisions of the Seveso II Directive forwards report to the MARS (Major Accident Reporting System), renamed eMARS (<https://emars.jrc.ec.europa.eu/?id=4>).

1.1.4 Policy for Preparedness

Preparedness in Hungary's crisis management system relies on early warning systems with outreach to communities, namely:

Territorial information Centre (TIC)

TIC operates a database and a GIS system in order to manage emergencies, supporting the interventions of the municipal fire brigades. In addition to that, in the Baranya County, an sms

notification system was established to alert all mayors in the county at the same time, in case of emergency. Public media have also been included in order to immediately inform the population by issuing public notices in case of emergency.

Monitoring and Public Alarm System (MoLaRi)

In order to reduce risks related to disasters, in 2006 Hungarian authorities launched the MoLaRi project as a human-centred early warning system for prevention and rapid emergency response. The project focuses on major industrial accidents in the surroundings of hazardous industrial plants, where operational accidents would endanger the inhabitants.¹¹ In the period 2006-2013, 80 chemical and meteorological, 280 chemical monitoring stations and 565 alarms have been set up around 20 hazardous industrial plants in 9 counties in order to ensure public awareness. The system carries out continuous monitoring and measuring in the surroundings of hazardous industrial plants perceiving the concentration of poisonous and explodable gases. The data is forwarded automatically via a national centre to the 24 / 7 duty services of the disaster management directorates and relevant local fire-brigades. In case a critical level is reached, the system launches electronic alarming and information mechanisms to inform the population immediately. MoLaRi was set to TETRA standard in 2010.

Early warning system for the prevention of nuclear accidents

The system is operational since 2009 and its main activities include early warning of the whole country in case of nuclear accidents, international radiological monitoring and data exchange. There is continuous contact with national and neighbouring countries' radiological data exchange centres. The system includes Radiological Telemetry Stations and their IT background.

Storm-signal systems at the lakes Balaton and Velencei (BVR) and Information and Emergency Response Systems at Lake Balaton, Tizsa River (TISR) and Danube River (DISR) are also in operation.¹²

1.1.5 Policy for Response

The national emergency number for fire-fighting (105) has been linked to the regional Operations Management Duty Services, where experienced fire fighters receive the calls and alert manpower and assets, according to the type of the incident. They direct them to the site in the shortest possible time, taking into consideration technical and economical requirements.

¹¹ Hungary: National Progress Report on the Implementation of the Hyogo Framework for Action (2009-2011) – Interim, available at http://www.preventionweb.net/files/31275_hun_NationalHFAProgress_2011-13.pdf

¹² Hungary: National Report 2009-2011 of Hungary on the Progress on the Implementation of the Hyogo Framework for Action, available at http://www.preventionweb.net/files/27580_hyogo20082011tiszta.pdf

1.2 Financing

1.2.1 Investing in consequence management

The Hungarian government operates a vis major fund (i.e. money allocated from the central budget) that is activated upon a government decision. After the red sludge spill in 2010, the Government covered the affected municipalities' extra expenditures and the cost of the reconstruction of municipal properties with money from the fund. Thus Devecser received a grant of over HUF 1,6 bln., Kolontar – of almost HUF 50 mln., Somlovasarhely – of over HUF 270 mln. and Tuskevar – of HUF 242 000. The three former municipalities also received subsidies amounting to a total of HUF 503.707 mln.¹³

In addition to that, a government decision of 04 November 2010 on the mitigation of damages of the spill, on financing the reconstruction and rehabilitation and on the mitigation of further damages to non-residential buildings was adopted, classifying the area designated for construction as an investment area with the intention to build new houses to replace the destroyed ones.


A total of 120 new houses were built in Devecser and Kolontar. Besides that, 127 used properties were purchased for over HUF 1.2 bln., while 117 victims of the disaster received cash compensations. The government also covered so-called “green damage” (livestock, gardens, unharvested crops, etc.), damage caused to clothing and food deposits, motor vehicles, furniture amounting to over HUF 320 mln.

According to experts, the private insurance option is unpopular among many people who prefer the solidarity of national compensation.

International aid

Created as a reaction to the heavy floods in Central Europe in the summer of 2002, European Union's Solidarity Fund is aimed at responding to major natural disasters and express Europe's solidarity to region suffering the consequences of disasters. Since then, it has been activated on 60 occasions, including floods, forest fires, earthquakes, storms and drought in 23 European countries. As of September 2014, the Fund has provided funding of over Euro 3.6 bln. Hungary has received a total of EUR 37.6 mln of aid for the floods in April 2006 and in May 2010.

Figure 3 . EU Solidarity Fund Activations.

	April 2006	Floods	major	519	15.1	37.6
	May 2010	Floods	major	719	22.5	

Another source of funding, supporting Hungary's efforts for disaster recovery is the Disaster Relief Emergency Fund (DREF) of the International Federation of Red Cross and Red Crescent (IFRC).

¹³ National Directorate General for Disaster Management, Red Sludge – Hungary 2010

Recently, in March 2013 CHF 178,068 was allocated from DREF to support the Hungarian Red Cross Society with the replenishment of their own emergency stocks, already distributed to some 15,000 beneficiaries after unexpected and belated severe winter weather in March paralysed almost half of Hungary for several days.¹⁴

Back in the 2001-2002 Hungary received CHF 50 000 from the DREF after an appeal related to heavy floods resulting in a record-rise of the levels of river Tisza and its tributaries rose. In addition to that, Hungary received CHF 165,752.47 (in cash) and CHF 215.859 (in kind).¹⁵

Over the last years several governments (Austria, Czech Republic, Germany, Slovakia, Switzerland) have also provided support (cash or in-kind), based on bilateral agreements with Hungary for managing the consequences of various disasters.¹⁶

1.3 Policy review, Evaluation & Organisational Learning

1.3.1 Post-Disaster Assessment

In the last years, post-disaster assessment has been high on the agenda of Hungary's Commissioner for Fundamental Rights (i.e. the Hungarian Ombudsman). After the red sludge spill in October 2010, the Commissioner launched a complex assessment of the state's tasks related to disaster management and an examination from a fundamental rights protection perspective the cooperation of state organs in the event of disasters.

The findings of the examination were included in the Annual Report of the institution of 2011. In the Report, the Commissioner recommended that the relevant legal base needed revision, pointing out that "legislation relating to the prevention and management of disasters should, as far as possible, be unified, simplified and their number should be reduced."¹⁷

Further, the report noted in disaster management regulations "one should as far as possible avoid a parallel regulation of identical subjects or regulations relating to the same subject which are different or contrary to each other." The report indicated that a very complex management mechanism was in place, regulated by a multitude of acts. Further, the report called for "regular and real training" for the mayors and their specialised staff in order to be able to perform their tasks in full.

14 DREF Operation Update, Hungary: Extreme winter conditions (2013), <http://reliefweb.int/sites/reliefweb.int/files/resources/Extreme%20winter%20conditions%20-%20DREF%20operation%20no%20MDRHU001%20Update%20no%201.pdf>

15 DREF Operation Update, Hungary, Romania, Ukraine: Floods (2003), <http://reliefweb.int/sites/reliefweb.int/files/resources/1054ED87F4BA87BD85256CAA0066E519-ifrc-hun-08jan.pdf>

16 Author's processing of information by UNOCHA (<http://fts.unocha.org/>).

¹⁷ Report on the Activities of the Parliamentary Commissioner for Civil Rights in the Year 2011, available at http://www.ajbh.hu/en/web/ajbh-en/annual-reports-archiv#_48_INSTANCE_zBJ6X6dsEcyu_&http%3A%2F%2Fwww.ajbh.hu%2Fstatic%2Fbeszamolok_en%2F%3F

The report also went back to the deaths resulting from the severe storms (case discussed in detail below, in section 4.1) in August 2006 and stressed that in case of a disaster “informing the public was and is a legal obligation of the disaster management organs, therefore such information must be given in a professional way and using such terminology which is in line with the terminology used in weather reports. Citizens can only adequately cooperate in the prevention and management of situations of danger or of disasters if they are aware of the given threat. For this purpose we need appropriate information material which gives comprehensible information to the public.”¹⁸

1.3.2 Regular policy reviews

Within the framework of or with the support of international organisations (UN, EU) studies and reports have been produced on aspects of the Hungarian disaster management policy, organisation and practice. Two examples are listed below:

The ANVIL project, funded by FP7, provided an assessment of the Hungarian crisis management capacity from the point of view of ‘civil security’, focusing on three criteria: legitimacy, effectiveness, and efficiency. The project has produced ‘key findings’ but did not draw policy recommendations.

For their part, the national progress reports on the implementation of the Hyogo Framework for Action (HFA) contain self-declared strategic goals, to be achieved over a two-year period, and a self-assessment on the progress made over the two years, preceding the moment of reporting.

1.4 Resilience

Hungary has set three strategic goals in the context of the implementation of the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters:

- The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.
- The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards.
- The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities.

¹⁸ Report on the Activities of the Parliamentary Commissioner for Civil Rights in the Year 2011, available at http://www.ajbh.hu/en/web/ajbh-en/annual-reports-archiv#_48_INSTANCE_zBJ6X6dsEcyu_=http%3A%2F%2Fwww.ajbh.hu%2Fstatic%2Fbeszamolok_en%2F%3F

2 Legislation

2.1 Crisis (emergency, disaster) management concept

The “Security threats and challenges for Hungary and their management” part of the Hungarian National Security Strategy says in art. 33 that “due to its geographical characteristics, Hungary is particularly exposed to the effects of environmental and civilisation hazards emanating from the countries bordering the Carpathian Basin, to floods and water and air pollution. The environmental sources of danger also have an indirect effect on the health of the population.”¹⁹ Art. 34 notes that “Uncontrollable processes in certain industrial, biological, chemical and especially nuclear facilities may jeopardise or cause damage to the health of masses of people, as well as to the environment, the security of life or property. Further risks are posed by the transportation of hazardous goods by land and rail, on waterways, in the air or through pipelines.”

As regards the ways and means to implement the strategy in its part concerning crisis management, art. 50 says: “Hungary must increase capabilities at its disposal with a view to allowing the operation of a complex prevention system ensuring a quick, effective and well-organised response to natural or industrial disasters in order to protect the life and essential property of the population, and to minimise consequences. Special attention must be paid so that such a response interferes as little as possible in the life of the population and the activities of the productive units in the course of reacting to events. To this end, organisations concerned need to be in possession of tools required for command, control and implementation, both domestically and internationally. In line with international processes and requirements, special attention must be paid also to the usability of internal crisis management capabilities abroad, and to the optimisation of capability development on site.”

2.2 General crisis (emergency, disaster) management law

The general act regulating the field of disaster management was adopted by the Hungarian Parliament in September 2011, entering into force on January 1st, 2012. The disaster management law stipulates the tasks of various ministries and the composition of the Disaster Management Governmental Coordination Committee (DMGCC), i.e. the state level of Hungary's disaster management system. The Act further defines the role of the county and local protection committees, operating at the regional and local level, respectively. The professional disaster management authorities operate under the supervision of the Minister of Interior. These include the National Directorate General for Disaster Management, county directorates for disaster management, local branches and disaster management posts.

In practice, the Act and Hungary's Fundamental Law (relevant provisions are discussed below) updated the rules pertaining to prevention and preparedness, enabling “effective extraordinary

19 Hungary's National Security Strategy, available at <http://2010-2014.kormany.hu/download/4/32/b0000/National%20Security%20Strategy.pdf>

measures in case of disasters and emergencies and establishing a uniform disaster management system.”

2.3 Emergency rule

In terms of emergency rule, the Hungarian Fundamental Law²⁰ of 2011 distinguishes between four extraordinary states of legal order – of national crisis, of emergency, of preventive defence, and of danger.

According to the Fundamental Law, the Parliament declares a state of national crisis and establishes the National Defence Council in the event of a state of war or an imminent danger of armed attack by a foreign power. The state of emergency is declared “in the event of armed acts aimed at the overturning of the constitutional order or at the exclusive acquisition of power, and of serious mass acts of violence threatening life and property, committed with arms or in an armed manner.” State of preventive defence is activated “in the event of a danger of external armed attack or in order to meet an obligation arising from an alliance.” The state of danger is declared by the Government in the event of “any natural disaster or industrial accident endangering life or property, or to mitigate the consequences.”

2.4 Specific, department/agency-level legal arrangements and regulations on emergency and disaster management

A list of legal acts that pertain to the roles of agencies and departments in disaster management:

- Act XXXI of 1996 on the protection against fire and technical rescue work and the fire service
- Act CXVI. of 1996 on the peaceful use of nuclear energy
- Act CV of 2004 on the Hungarian Defence Forces and National Defence²¹

2.5 Legal regulations for international engagements of first responders and crisis managers

Hungary (through NDGDM) maintains bilateral relations with 17 countries (Austria, Azerbaijan, the Czech Republic, Greece, Croatia, Poland, Latvia, Lithuania, Macedonia, Germany, Russia, Romania, Serbia, Slovakia, Slovenia, Turkey, Ukraine and Mongolia) based on government agreements for disaster management.

²⁰ The Fundamental Law of Hungary, available at <http://www.kormany.hu/download/e/02/00000/The%20New%20Fundamental%20Law%20of%20Hungary.pdf>

²¹ A comprehensive list in Hungarian is available at: http://www.katasztrofavedelem.hu/index2.php?pageid=hatosagi_kozerdeku

The organisation puts special emphasis on enhancing cooperation with neighbouring countries and on the development of operational work. A framework agreement with each of Hungary's seven neighbouring countries for cooperation in disaster management is in place. Close cooperation is based on the fact that there are cross-border disasters, eradication of these joint efforts of the countries concerned in that we need. This is true for prevention activities, as well as disaster relief.

Within the framework of the Central European Initiative, in 1996 Hungary was among the parties signed Cooperation Agreement²² on the Forecast, Prevention and Mitigation of Natural and Technological Disasters, together with five more countries, aimed at:

- exchange of scientific and technical information and relevant data on a regular basis;
- implementation of common research programmes;
- training of experts in the field of forecast, prevention and relief, in order to set up common programmes on Civil Protection and Disaster Management

Several EU documents and pieces of legislation apply to crisis management at EU and member state level.

- Treaty establishing a Constitution for Europe;
- COM (2010) 673: Objective 5: Increase Europe's resilience to crises and disasters - Action 2: An allhazards approach to threat and risk assessment
- Directive 2007/60/WE of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risk;
- Council Directive 2008/114/EC of 8 December 2008 on the identification and designation of European critical infrastructures and the assessment of the need to improve their protection;
- Council Directive 82/501/EEC of 24 June 1982 on the major-accident hazards of certain industrial activities (Seveso);
- Council Directive 96/82/EC of 9 December 1996 on the control of major accident hazards (Seveso II);
- Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy

It is also a signatory of the Convention on the Transboundary Effects of Industrial Accidents.

22 Available at http://www.biiicl.org/files/4299_cei_cooperation_agreement.pdf

3 Organisation

3.1 Organisational chart

The National Directorate General for Disaster Management (NDGDM) within the Ministry of Interior is the national authority for disaster management.

As of 1 January 2012 a new organisational structure of the NDGDM was introduced,²³ which has been built on three pillars: civil protection, fire protection and industrial safety, with the National Inspectorate General of Fire Services, the National Inspectorate General of Civil Protection and the National Inspectorate General of Industrial Safety constructing the backbone of the NDGDM.

The main tasks of the National Inspectorate General of Fire Services include prevention activities, firefighting, coordination of tasks related to firefighting and technical rescue activities during emergencies and disasters; providing guidance for unified implementation of activities related to fire protection; etc.

The National Inspectorate General of Fire Services carries out the tasks pertaining to the field of fire protection in cooperation with the citizens, partner organizations, business and voluntary organisations and, last but not least, with industrial and local governmental fire brigades and fire associations.

The activities of the National Inspectorate General for Industrial Safety, which is responsible for tasks related to industrial safety, include four main functions: the supervision of hazardous plants, the control of the transportation of dangerous goods, the protection of critical infrastructures, and averting nuclear accidents.

The NDGDM has 20 county directorates (for the 19 counties and for the capital, Budapest), namely:

1. Baranya County Directorate for Disaster Management
2. Bács Kiskun County Directorate for Disaster Management
3. Békés County Directorate for Disaster Management
4. Borsod Abaúj Zemplén County Directorate for Disaster Management
5. Csongrád County Directorate for Disaster Management
6. Fejér County Directorate for Disaster Management
7. Győr Moson Sopron County Directorate for Disaster Management
8. Hajdú Bihar County Directorate for Disaster Management
9. Heves County Directorate for Disaster Management

23 Ministry of Interior of Hungary, National Directorate General for Disaster Management, 2012, available at: http://www.katasztrofavedelem.hu/letoltes/eng/szervezet/NDGDM_intro.pdf

10. Jász-Nagykun-Szolnok County Directorate for Disaster Management
11. Directorate for Disaster Management of the Capital
12. Komárom–Esztergom County Directorate for Disaster Management
13. Nógrád County Directorate for Disaster Management
14. Pest County Directorate for Disaster Management
15. Somogy County Directorate for Disaster Management
16. Szabolcs-Szatmár-Bereg County Directorate for Disaster Management
17. Tolna County Directorate for Disaster Management
18. Vas County Directorate for Disaster Management
19. Veszprém County Directorate for Disaster Management
20. Zala County Directorate for Disaster Management

The operational disaster management structures at the county level include²⁴:

- 65 Branch Offices for Disaster Management;
 - 46 Disaster Management Offices;
 - 65 Disaster Management Guards;
- 105 Professional Fire Departments;
 - 60 Local Government Fire Brigades;
 - 72 Industrial Fire Brigades;
 - 564 Volunteer Fire Associations.

As regards civil protection units, there are 47 central civil protection organisations with 452 of personnel subordinated to the NDGDM. According to information as of 2012, the non-professional, volunteer and obliged civil protection organisations include civil protection organisations of settlements (20609) and civil protection organisations at the workplace (1011).²⁵

An important part of the Hungarian crisis management system is the professional rescue team with specialised equipment that has been established under the auspices of the NDGDM, called HUNOR (Hungarian National Organisation for Rescue Services), which can also operate abroad, when needed. HUNOR is tasked with the search for and rescue of victims trapped under ruins, and with the provision of first aid, if necessary. In areas affected by earthquakes its tasks include technical rescue, removing victims and ensuring their chances for survival. All of the professional firefighters who have applied for the rescue service have several years' experience in technical rescue and four or five special qualifications.

²⁴ Website of the National Directorate General for Disaster Management, in Hungarian, http://www.katasztrofavedelem.hu/index2.php?pageid=szervezet_szervezeti_abra

²⁵ Ministry of Interior of Hungary, National Directorate General for Disaster Management, http://www.katasztrofavedelem.hu/letoltes/eng/szervezet/NDGDM_intro.pdf

In addition, the HUSZOR medium urban search and rescue team has been created with the involvement of voluntary rescue services with national qualifications and of the local organisations of civil protection.

The two teams were certified as meeting the respective UN INSARAG Guidelines in 2012 on the basis of a 36-hrs field exercise.

Disaster Management Governmental Coordination Committee

The Disaster Management Governmental Coordination Committee (DMGCC) is an inter-agency coordination body ensuring consistency between sectors. Its chair is the Prime Minister of Hungary, while its members are the relevant ministers. The meetings are attended by the directors of the law enforcement agencies, the Chief of the Defence Staff and the heads of relevant national authorities. DMGCC is the Government’s decision support organisation. The DMGCC operates the National Emergency Management Centre, which coordinates operational tasks, collects the necessary information, evaluates and analyses them together with leadership of the professional disaster management body, involving experts from the ministries.

Protection committees

At county and local level, protection committees are in charge of decision making for crisis preparedness and response. Protection committees are under central coordination; the members are stakeholders (local authorities, representatives of disaster management bodies, etc). As of 1 January 2012, the county protection committees are chaired by the county government commissioner, while one of their vice-chairs is the county disaster management director, while the other is a representative of the Ministry of Defence. The chairs of the local (municipal) protection committees are the heads of the government’s district offices.

Table 5: Levels of Hungarian Crisis Management System

	State Level	County Level	Local Level
Coordination	Disaster Management Governmental Coordination Committee	County Protection Committee	Municipal Protection Committee
Management	DGDM	County Directorate of NDGDM	
Operational element		Professional Fire Departments	Municipal Fire Departments

Disaster Response Platform

Another consequence of the reorgansiation of the Hungarian crisis management system was the establishment of Hungarian National Platform for Disaster Reduction in 2001. The Hungarian platform is now working under the NDGDM and is presided by the Director General of NDGDM. The members of the platform include:

1. Government organisations: ministries
2. Non-governmental organizations
2. Scientific institutions
3. Media
4. Private sector organisations
5. Private companies

The aim of the platform, comprising over 30 members who meet once a year, is to discuss their contribution and efforts taken in the field and to come up with new ideas to reduce disaster risks. NDGDM updates the platform members' on the current international DRR themes and upcoming events. Additionally, certain members of the platform also belong to the governmental coordination committee described above and the Humanitarian Assistance Coordination working group of the Ministry of Foreign Affairs.

3.2 Organisational cooperation

NDGDM is actively engaged in international activities within EU, NATO and UN.

NDGDM represents Hungary in the Civil Protection Workgroup of the Council (PROCIV) and other relevant task forces, and acts as the official national contact point for the Emergency Response Coordination Centre (previously EU Monitoring and Information Centre (MIC) – the body responsible for tasks related to providing and requesting international assistance.

In Hungary NDGDM also coordinates civil emergency planning (CEP) activities, and participates in the meetings of the NATO Civil Emergency Planning Committee (CEPC) and in the work of the Civil Protection Group (CPG). Furthermore, the NDGDM is the national contact point for NATO's Euro-Atlantic Disaster Response Coordination Centre (EADRCC).

NDGDM serves as the national contact point for the UN OCHA.

Last but not least, the NDGDM is involved in formats such as the Disaster Preparedness and Prevention Initiative for South-Eastern Europe (DPPI SEE); the disaster management cooperation in V4; the International Association of Fire and Rescue Services (CTIF); and the Federation of the European Union Fire Officer Associations (FEU).

4 Procedures

4.1 Standing Operating Procedures (SOPs) and Guidelines

The Red Sludge Accident

Hungary's most severe test to disaster response procedures was an industrial accident that occurred on 4 October 2010, when a corner of the dam of one of the reservoirs collapsed on site at the Ajka Alumina plant (operated by Hungary's MAL). As a result, almost one million cubic meters of red sludge and alkaline water were freed and flooded the lower parts of the settlements of Kolontar, Devecser and Somlovasarhely. Ten people were killed during and after the sludge flow, almost 300 persons were hospitalised. The total number of people affected by the accident was over 700. More than a thousand hectares of arable land were contaminated.

A waste product of alumina (form of aluminium oxide) production, the red sludge was measured to have a very high pH (11-14), which was responsible for severe chemical burns to humans and animals and killing specimens in the rivers and in the contaminated soils.

After several alerts by the local population the police alarmed the Ajka Professional Fire Brigade. Two trucks and nine fire fighters were sent on site. After due reconnaissance was carried, the chief fire officer alerted the rest of the personnel. In the first phase of the reconnaissance, the fire-fighters had no information on the composition of the red material, which resulted in 17 rescuers, fire-fighters, policemen, soldiers receiving burns and respiratory damages. As the regular fire-fighting equipment was not suitable to cope with such an incident, the rescuers had to use civilian earthmoving machines, bulldozers. At a later stage, all fire and rescue forces available in the county, including volunteer fire brigades, fire-fighting associations, special rescuers, joined their efforts to rescue the population in Kolontar (60 persons) and Devecser (over 700 persons).

Acting on basis of the Constitution and the Act on Civil Protection of 1996, the Hungarian Government declared emergency for three counties – Veszprem, Gyor-Moson-Sopron and Vas, effective as of 1500 hrs, 06 October 2010. An Onsite Operational Staff was established to manage the process of mitigating the consequences of the accident, involving civil protection, fire fighting, police, and military units, and volunteers.

Onsite tasks focused on the cleanup of built-in areas, decontamination of outer areas, and on the elimination of damage to living waters.

The Police organised checkpoints to regulate the traffic. On 9 October partial evacuation was ordered for the Kolontar (40 people) and Devecser (500 people). Lodging was provided to affected people, staying at the settlements, by the municipalities and charity organizations provided lodging.

On 6 October the following services and equipment were on site at Kolontar and Devecser.

Service	Staff	Equipment
Fire Service	84	12 vehicles
4 Emergency Detection Teams (EDT)	12 persons	
Police	103	22 vehicles
Military	174	39 vehicles
Civil Protection	29	20 vehicles
Civilians	149	43 machines
National Medical Service	5	2 vehicles
MAL	50	
Total	606 persons	142 units of equipment.

By 20 October the number of people and equipment involved in mitigation activities reached 1,125 and 292, respectively. In November, a total of 8,535 persons and 4,881 units of equipment took part in the relief and recovery efforts, with an average of 400 to 500 persons and 70 units of equipment involved on a daily basis.

In the meantime, NDGDM issued daily reports to EU Member States through the EU Monitoring and Information Centre. Additionally, the NDGDM requested, through EU MIC, experts with relevant experience to consult the process of mitigating the environmental damage. On 9 October the EU MIC sent a liaison officer to Hungary and on 11 October, a five-member team consisting of Belgian, German, Swedish, French and Austrian expert arrived onsite. A Swiss environmental expert from the UN Environment Program, exchanging information with the team, and experts from UN World Health Organisation, making assessments in Devecser, concerning the health status of the population, were also involved in the recovery phase.

After the end of its mission, the EU team issued both short- and long-term recommendations. On 18 October European Commissioner for International Cooperation, Humanitarian Aid and Crisis Response, Kristalina Georgieva also visited the site.

On 4 November a Governmental Coordination Centre for Reconstruction (GCCR) was established from the professional disaster management personnel. The GCCR managed the decontamination, rehabilitation and reconstruction tasks. The state of emergency was lifted and the GCCR disbanded on 1 July 2011.

Storms in Budapest

A severe hit Budapest on 20 August 2006, causing havoc during the celebrations of the National Holiday. Around 1.2 million citizens attending fireworks display were hit by storm and hail shortly after the display started at 21:00 local time. Torrential rain and winds of over 120 km/h tore down trees, smashed cars and windows and ripped tiles off rooftops. Five people died and hundreds were injured as a result of the storm.

The Hungarian Meteorological Service (OMSZ) had issued the forecast about the storm on its publicly available web-based warning system, with a red code. Additionally, on the day of the tragical event the service had sent several warnings to the disaster management authorities²⁶. The main reasons for the tragic event to happen, as concluded by an inquiry of the Commissioner for Fundamental Rights, were serious legal deficiencies pertaining to the communication among the responsible parties and the responsibility for taking preventive measures.²⁷

In its report, the Commissioner asked “asked the Minister heading the Office of the Prime Minister, the Minister of Local Government and Regional Development and the Minister of Justice and Law Enforcement to make the necessary arrangements to redress the disclosed improprieties” and issued several recommendations:

- for a legal regulation of the OMSZ,
- for reconsideration by the Assembly of Budapest Capital of the rules defining the tasks and operation of the Budapest protection committee
- for issuing by the Minister of Local Government and Regional Development of a ministerial decree on detailed rules of the national disaster management regulations.²⁸

In practical terms, the following changes have been made in the Hungarian crisis management system:

- As of October 2006, the OMSZ has been a member of the operational staff, responsible for organising national celebrations, so the staff receive first-hand meteorological information. Since 20 August 2006 the meteorological support is a compulsory part of the management plan for every state-organised event;
- For its part, the OMSZ refined the criteria for issuing warnings, in order to avoid confusion. Code “red” is now only issued in the case of the most dangerous, rarely occurring weather events. The web-based system of the service was updated, and an alarm page has been established, accessible to everyone from the front page of met.hu (<http://www.met.hu/idojaras/veszelyjelzes/riaszτας/index.php>).²⁹

As a result from the improvements, on 20 August 2007, albeit in different weather conditions, a storm of similar intensity hit Budapest during the National Day celebrations. OMSZ had already forecasted the storm in the morning hours. The hundreds of thousands of people who took part in the events (air parade, cultural programs, religious procession etc.) were informed of the weather

26 Marta Sallai, “The Tragical Story of the August 20,2006,” Website of the World Meteorological Organization, <https://www.wmo.int/pages/prog/drr/events/Pula/Presentations/MHEWSHungary.pdf>

27 Annual Report on the Activities of the Parliamentary Commissioner and the Deputy Commissioner for Civil Rights in 2006, http://www.ajbh.hu/en/web/ajbh-en/annual-reports-archiv#_48_INSTANCE_zBJ6X6dsEcyu=http%3A%2F%2Fwww.ajbh.hu%2Fstatic%2Fbeszamolok_en%2F%3F

28 Annual Report on the Activities of the Parliamentary Commissioner and the Deputy Commissioner for Civil Rights in 2006, http://www.ajbh.hu/en/web/ajbh-en/annual-reports-archiv#_48_INSTANCE_zBJ6X6dsEcyu=http%3A%2F%2Fwww.ajbh.hu%2Fstatic%2Fbeszamolok_en%2F%3F

29 Marta Sallai, “The Tragical Story of the August 20,2006,” Website of the World Meteorological Organization”

conditions through screens and loud speakers. As a result of the concerted efforts of the authorities, nobody was hurt during the 2007 storm.

4.2 Crisis communication to general public; Alert system; Public Information and Warnings

The “Red Sludge” accident represents an example of how crisis communication is carried out in Hungary.

Before and during the evacuation, the communication with the people from affected settlements was carried through public information materials, including rules of conduct, the contents of the emergency package, notification of disabled persons, rules of self-evacuation, route of evacuation and reception points. A total of five evacuation zones were designated, comprising about 200 residential buildings and one or two streets per zone, between 25 and 65 residential buildings per zone.

In the meantime, due to movement restrictions in the affected areas and the state of emergency, communication was centralised. Furthermore, spokespersons were appointed to help the work of media and guide media representatives to the reservoir, the evacuation sites, etc. in a controlled manner. The Hungarian authorities were extremely cautious when providing information about the disaster for fear of loss of credibility, economic paralysis and potential diplomacy issues with neighbouring countries.

5 Capabilities

5.1 Human resources

Volunteer associations

The Hungarian volunteer law, Act LXXXVIII of 2005³⁰ on voluntary activities in the public interest, defines "volunteer activities with a public aim" as work carried out within a host organisation without compensation. In article 4, the law also specifies that any person with legal capacity above the age of ten can become a volunteer.

According to data by the Hungarian Statistical Office, in 2010 there were nearly 65,000 registered non-profit organisations. Among those, 1.4% declared to have civil protection and fire protection related activity, 3.75% - public safety related activity, while 5,749 were charity organisations.

Since 2012 the involvement of volunteer rescue services in crisis management operations is only possible if the organisations meet certain requirements, which is verified by means of certification exercises. If the volunteer services passed the "exam," they could take part in different type of rescue activities in cooperation with the NDGDM for 5 years.

Private business

Private business is involved in crisis management activities in a number of ways. For example, the training for the fire protection exam is done by private companies. The registration of training organisers and examinations is coordinated by the disaster management directorates at the county level. Also, under the SEVESO directive the industrial plants have an obligation to prepare internal security plans, risk assessments and special reports in case of accidents. Similarly, critical infrastructure security analysis is required. Those activities could be performed by registered experts / companies. Among the members of accredited rescue teams can be private companies with specific expertise.

5.2 Materiel (non-financial) resources

An example for outsourcing some of the logistic activities is the agreement with the association of transportation companies. The Association of Hungarian Forwarding and Logistic Services signed an agreement with NDGDM on outsourcing some logistic tasks for private logistic companies. The agreement contains certain tasks like transportation preparedness, storage of sand bags, and provision of rescue staff for flood protection. As a result, the overall costs of preparedness will be smaller, and the capacity of NDGDM can be used more efficiently.

³⁰ Act LXXXVIII of 2005 on voluntary activities in the public interest http://www.civil.info.hu/uploaded/documents/onkentes/1212746798vol_act_pub_int_2005_hu.pdf

5.3 Training

Disaster Management Education Centre

Since year 2000, a Disaster Management Education Centre has been operational in Hungary, which focuses on professional training for disaster management, fire and civil protection, and industrial safety outside the school system as defined in the laws on vocational and adult education. This institution is also a national examination centre. The training is supported by taking advantages of opportunities provided by tenders, international relations, professional events and exercises. The staff and the students may be involved in operations in case of major disasters as it happened in case of floods and the red sludge disaster 2010. The Centre provides methodological support for on-site training and for the operation of the newly formed district educational centres.

In addition to that, the Hungarian authorities organise trainings for (high-level) officials, such as: protection committee chairmen, mayors, regional administrative staff, notaries, etc. According to the NDGDM, as of 2012 a total of 3,629 people had undergone training. The regular disaster management trainings for mayors are often linked with civil protection exercises. The trainings for notaries are organised in the framework of the county notary meetings.

Teachers in Hungary are also involved in relevant trainings, aimed at enhancing their awareness of disaster management and at equipping them with adequate information for preparing effectively their students. The programme has two levels – awareness training courses, organised twice a year, where teachers may receive disaster management knowledge, teaching methodology guidelines, and knowledge in related areas such as environment protection, consumer protection, energy security, first aid and panic treatment.; and one-day long trainings in local schools. They latter are carried out by the heads of the local civil protection branches once a year. Between 2003 and 2010, 559 teachers took part in disaster management trainings (305 persons from the capital and 254 persons from the counties). Several educational materials for teachers are available on the homepage of NDGDM.

In addition to that, each year the NDGDM announces the national disaster management youth team-competition for the 10-18- year old members of associations, organizations, clubs. The competitions are organised on local, on regional and national level with the aim to reach out to children and young people.

Institute of Disaster Management of the National University of Public Service

The Institute of Disaster Management of the National University of Public Service, which comprises the Department of Disaster Management Operations, the Department of Fire Protection and Rescue Control, and the Department of Industrial Safety, was established on 1 January 2012. In 2013 the Institute planned to launch an independent BSc programme in disaster management with three specialties - in disaster management operations, fire protection and rescue control, and industrial safety.

EU-funded trainings

Crisis management structures are also involved in EU-funded trainings, such as EU-HUROMEX 2008. The project (from 1 January 2008 to 30 June 2009) included the preparation, implementation and evaluation of a full-scale simulation exercise of civil protection interventions in case of serious flooding and the recovery of damages to the critical infrastructure.

5.4 Procurement

5.4.1 Procurement regulation

In Hungary, new provisions are applicable regarding public procurement as of 1 January 2012, i.e. the Public Procurement Act (PPA).

The law is criticised for reasons related to transparency as art. 9 lists no less than 13 cases in which the procedures laid down in the Act shall not apply, including when the fundamental security and national security interests of the country are concerned, and in the field of defence public supplies, services and works specifically designed for military and public order purposes.

According to art. 4, p. 4 of the Act, “procurement related to fundamental security interests of the country” is any procurement the subject-matter of which is directly linked to public works, public supply and services, which may exercise an influence on the physical, environmental, health, economic, national defence security of the population, including procurement in the benefit of preventing immediate flood damage in times of flooding emergency.

The PPA distinguishes among public procurement reaching EU thresholds (Part II of the Act) and national procedures (Part III of the Act). The latter are applied when public procurement contracts do not exceed EU thresholds and at the same time are equal or above national thresholds.

The “national thresholds” are determined annually by the Budget Act of Hungary and for the current year they are, exclusive of value added tax, as follows:

For the purposes of Part III – except for Chapter XIV (defining special rules for the contract award procedures in the public utility sector) – of the PPA:

- for public supplies and services: HUF 8 million
- for public works: HUF 15 million
- for public works concessions: HUF 100 million
- for service concessions: HUF 25 million

For the purposes of Part III, when applied together with Chapter XIV of the PPA:

- for public supplies: HUF 50 million
- for public works: HUF 100 million

- for public services: HUF 50 million

Also importantly, art. 122, p. 7 of the Act stipulates that the “contracting authority may launch a negotiated procedure without prior publication of a contract notice in the following cases as well: (a) If the estimated value of public supply or services does not reach HUF 25 million (app. EUR 81000, current currency rates on 21 October 2014) or the estimated value of public works does not reach HUF 150 million (app. EUR 488 000).”

Part III, art. 120(h) (h) stipulates an exception of the provisions of Act when the procurement is below EU threshold – “to Article 3(e)(f)(i)(k) of the Act LXXIV of 1999 on the management and organisation for the prevention of disasters and prevention of major accidents involving dangerous substances; as well as, in case of a crisis, emergency or serious situation, to public procurements carried out with the aim of preventing epidemic diseases in animals, directly preventing or avoiding damage caused by serious industrial or traffic accidents or by water, preventing adverse impacts on water quality, as well as for the purposes of protective preparedness or the subsequent reconstruction.”

5.4.2 Procurement procedures

The National Directorate General for Disaster Management is responsible for organising procurement in the field. For example, since 2012 the NDGDM has published at TED contract notices for services, work or supply, including but not limited to:

- digital cadastral maps
- disinfecting and exterminating services in urban or rural areas
- fire engines
- firefighting vehicles
- natural gas
- security services
- security, fire-fighting, police and defence equipment
- site-safety equipment
- software package utilities

Resources

Legislative acts

Act CLXXXIX of 2011 on self-government

Act CXCI of 2013 on amending certain laws to increase the effectiveness of disaster management

Act CXI of 2011 on the Commissioner for Fundamental Rights

Act CXIII of 2011 – the National Defence Act

Act CXXVIII of 2011 on disaster management

Act XXXI of 1996 on fire control and technical rescue and fire

Other normative acts

Government Regulation 290/2011 on the implementation of certain provisions of Act CXIII

Government decree on the establishment, organisation and operation of the Disaster Management Governmental Coordination Committee (1150/2012)

NDGDM Regulation 49/2011 on professional disaster management bodies

NDGDM Regulation 61/2012 on the classification of local disaster management bodies

NDGDM Regulation 62/2011 on the rules for protection against disasters

The Fundamental Law of Hungary

Official documents (white papers, strategies, etc.)

Hungarian National Security Strategy

Online resources (e.g. websites of key CM organizations)

National Directorate General for Disaster Management, Ministry of Interior of Hungary, www.katasztrofavedelem.hu

Ministry of Interior, <http://www.kormany.hu/en/ministry-of-interior/contacts>

Hungarian Civil Protection Association, <http://www.mpvsz.hu/impressum>

Hungarian Red Cross, <http://www.voroskereszt.hu/>

Hungarian Atomic Energy Authority, <http://www.oah.hu>

Hungarian Scout Association, <http://cserkesz.hu/en/contact>

Hungarian Central Statistical Office, <https://www.ksh.hu/>

Seismological Observatory of the Hungarian Academy of Sciences,
<http://www.seismology.hu/index.php/en/>
Commissioner for Fundamental Rights, www.ajbh.hu

Publications

“Strong Europe with a Human Touch.” The Programme of the Hungarian Presidency of the Council of the European Union. Accessed September 23. Available at http://www.eu2011.hu/files/bveu/documents/HU_PRES_STRONG_EUROPE_EN_3.pdf

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Hungary: National Progress Report on the Implementation of the Hyogo Framework for Action (2009-2011) – Interim. Accessed September 25. Available at http://www.preventionweb.net/files/31275_hun_NationalHFAprogres_2011-13.pdf

Hungary: National Report 2009-2011 of Hungary on the Progress on the Implementation of the Hyogo Framework for Action. Accessed September 25. Available http://www.preventionweb.net/files/27580_hyogo20082011tiszta.pdf

National Risk Assessment. Synopsis. Accessed September 23. Available at [http://www.preventionweb.net/files/29824_priorityno.2.coreind.no.1.\[1\].doc](http://www.preventionweb.net/files/29824_priorityno.2.coreind.no.1.[1].doc)

Sallai, Marta Sallai, “The Tragical Story of the August 20,2006.” *Website of the World Meteorological Organization*, <https://www.wmo.int/pages/prog/drr/events/Pula/Presentations/MHEWSHungary.pdf>

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Expert interviews

Freelance journalist, 03 November 2014