

Peer review

The Republic of North Macedonia 2018

2018-2019 Programme for peer reviews in the framework of EU cooperation on civil protection and disaster risk management.







Disclaime

The information and views set out in this publication are those of the authors and do not necessarily reflect the official opinion of the European Commission or the authors' organisations. Neither the European Commission nor any person acting on its behalf may be held responsible for the use which may be made of the information contained herein.

Reproduction is authorised provided the source is acknowledged.

Contents

List of abbreviations	p7
1. Introduction	p9
1.1 Scope of the review	p10
1.2 Review process	p11
1.3 Country profile	
1.3.1 Overview	
1.3.2 Disaster risk profile	
1.3.3 Vulnerability	
1.3.4 Lack of coping capacity	
1.3.5 National disaster management system	
1.3.6 Disaster management entities	
1.3.7 DRR: relevant sectors	p22
2. Comprehensive Disaster Risk Management (DRM) approach	p25
2.1 Policy and Legal Framework (at national, regional and local level).	
2.1.1 The role of the National Coordinator for Disaster Risk Reducti	•
2.1.2 Measurability and evaluation of plans	
2.1.3 Integration of lessons learned	
2.2 International, regional and local collaboration	
2.2.1 International collaboration	p31
2.2.2 European collaboration	p32
2.2.3 Regional and local collaboration	p32
2.3 Integration of DRR with climate change adaptation	p32
2.4 Good practices and recommendations	p34
7 Drayantian	n7F
3. Prevention	
3.1 Risk assessment	
3.1.1 Risk assessment process	
3.1.1.1 Collection and use of data	
3. I. I.Z KISK IUEHUHCAUUH	D3/

3.1.2 Stakeholder consultation
3.1.3 Public awareness strategy
3.1.4 Administrative, financial and technical aspects
3.2.1 Risk management planning process
3.2.2 Administrative, financial and technical aspects
3.3 Good practices and recommendationsp41
4. Preparednessp42
4.1 Disaster preparedness and contingency plansp42
4.2 Collaboration with stakeholdersp43
4.3 Capability analysis and planning
4.4 Training and exercises
4.5 International and regional collaborationp45
4.6 Risk communicationp47
4.7 Good practices and recommendations
5. Key findings and recommendationsp49
5.1 Good practices
5.1 Good practices p49 5.2 Challenges and recommendations p50 5.3 Proposals for development p52 5.4 Principal recommendation on national arrangements for civil protection p54 5.5 Justification p56 5.6 Other recommendations to improve the existing system p56 5.7 Short term (<12 months) p57 5.8 Medium term (6-24 months) p58 5.9 Longer term (12-36 months) p59
5.1 Good practices

Acknowledgements

The time and expertise dedicated by the peers was essential for the completion of this report. The peer review team was composed of four peers:

- ▶ **Dirk Kamm**, Former Head of Disaster Management, German Red Cross and Former Acting Head of International Affairs, Federal Office of Civil Protection and Disaster Assistance, Germany;
- ▶ **Owen Jackson**, Assistant Director for International Resilience and Head of Science and Engineering, UK Cabinet Office (Civil Contingencies Secretariat), United Kingdom;
- ► **Salem Yousfi**, Head of the Regional Directorate of Civil Protection of Zaghouan (Colonel), Tunisian National Office of Civil Protection, Tunisia;
- ► **Samir Agić**, Assistant Minister of Security and Head of Sector for Protection and Rescue, Bosnia and Herzegovina.

Biljana Zuber supported and took part in the mission on behalf of the European Commission's Directorate-General for European Civil Protection and Humanitarian Aid Operations (ECHO). A consortium led by Ecorys Nederland B.V. assisted the Commission in carrying out the peer review. Gerald Walther from Fraunhofer INT was project manager for the Republic of North Macedonia and provided technical and administrative support to the peers throughout the review process. The team was further supported by Hugo van Manen, who travelled to the Republic of North Macedonia to participate in the mission on behalf of Ecorys Nederland B.V.

The peer review would not have been possible without the significant contributions of all consulted stakeholders in the Republic of North Macedonia, some of which went so far as to make themselves available to be interviewed on the Day of the Macedonian Revolution on 23 October 2018 and provided the review team with invaluable inputs throughout their stay in the country. The Protection and Rescue Directorate (PRD) volunteered to undergo the peer review on behalf of the Republic of North Macedonia and provided on-site support throughout the mission. Particular thanks are due for the full commitment of the Directorate's staff, and for the full-time logistical support provided by Valentina Atanasovska on the Directorate's behalf.

The peer review was financed by the European Union.

List of abbreviations

Abbreviation	Definition
CBRN	Chemical, Biological, Radiological and Nuclear
CISE	Common Information Sharing Environment
СМС	Crisis Management Center
СМЕР	Civil-Military Emergency Planning
DEMA	Danish Emergency Management Agency
DG ECHO	Directorate General for European Civil Protection and Humanitarian Aid Operations
DPPI SEE	Disaster Preparedness and Prevention Initiative for South Eastern Europe
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EFFIS	European Forest Fire Information System
EU	European Union
EUR	Euro (€)
GIZ	German Corporation for International Cooperation
HNS	Host Nation Support
HQ	Headquarters
ІТ	Information Technology
JICA	Japan International Cooperation Agency
MITA	Ministry of Information Society and Administration
MKD	Macedonia Denar
MKFFIS	Macedonia Forest Fire Information System

MoD	Ministry of Defence
МоЕРР	Ministry of Environment and Physical Planning
Mol	Ministry of Internal Affairs
NATO	The North Atlantic Treaty Organisation
NGOs	Non-governmental Organisations
OSCE	Organization for Security and Co-operation in Europe
PEMF	Public Enterprise for Macedonian Forests
PRD	Protection and Rescue Directorate
TESTA	Trans European Services for Telematics between Administrations
UСРМ	Union Civil Protection Mechanism
UK	United Kingdom
UN	United Nations
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
ZELS	Association of the Units of Local Self Government (of the Republic of North Macedonia)

1. Introduction

Peer review is a governance tool whereby the performance of the disaster risk management (DRM) and civil protection of one country (the 'reviewed country') is examined on an equal basis by experts ('reviewing peers') from other countries. The process is based on exchange of experience, resulting in non-binding recommendations in this case aimed at improving policy in the areas of DRM and civil protection. The peer review process provides an effective way to i) facilitate exchange of good practices, ii) strengthen mutual learning and common understanding, and iii) deliver credible and trusted recommendations.

Under the EU civil protection legislation, peer reviews can contribute to policy on both prevention and preparedness. The scope of the peer review is defined by the reviewed country, which can opt for either a 'thematic' or 'comprehensive' peer review. Peer reviews strengthen cooperation between participating states and contribute to an integrated approach to DRM by linking risk prevention, preparedness and response actions. The peer review process consequently has the potential to foster wider policy dialogue in Europe, improve consistency and steer progress in critical areas for EU cooperation on civil protection and DRM. After two pilots (in the UK and Finland), a first round of peer reviews took place between 2015 and 2016, covering Bulgaria, Estonia, Georgia, Malta, Poland and Turkey. The peer review of the Republic of North Macedonia is part of the second round, which also covers Algeria, Cyprus, Portugal, Serbia and Tunisia. The concrete objectives of the peer review programme are as follows:

- ► contribute to improved policy-making on national DRM and civil protection through mutual learning and external assessment by reviewing experts from other countries acting as peers;
- ► contribute to the development and implementation of relevant EU policies and steer progress in priority actions for EU cooperation on DRM and civil protection, including where relevant a contribution to the implementation at national level of the international framework for disaster risk reduction (DRR) (the Hyogo Framework for Action and the Sendai Framework for Disaster Risk Reduction);
- ▶ increase the consistency between the different national DRM and civil protection policies and stimulate transferability of good and innovative practices;
- ► foster policy dialogue in Europe and enhance regional cooperation between countries exposed to common or similar hazards and risks;
- encourage awareness raising through involvement of all stakeholders in the review process and wide dissemination of the results;
- ensure visibility and political commitment at a high level to promote the DRM agenda.

1.1 Scope of the review

The Republic of North Macedonia opted to undergo a 'comprehensive' review as part of its participation in the 2018-2019 peer review programme. The comprehensive 2018-2019 review framework incorporates principles developed at both the global (namely the Hyogo Framework for Action and the Sendai Framework for Disaster Risk Reduction) and European (namely the UCPM) levels. The comprehensive review framework covers several high-level thematic processes, each of which incorporates a range of relevant subprocesses. Guiding questions were developed for each of the subprocesses to streamline the peer review process across participating countries. The processes covered by the comprehensive review of the Republic of North Macedonia are as follows:

- ▶ risk assessment and risk management planning (prevention);
- preparedness; and the
- ► comprehensive DRM approach.

An overview of the processes explored during the peer review is presented in Figure 1 below.

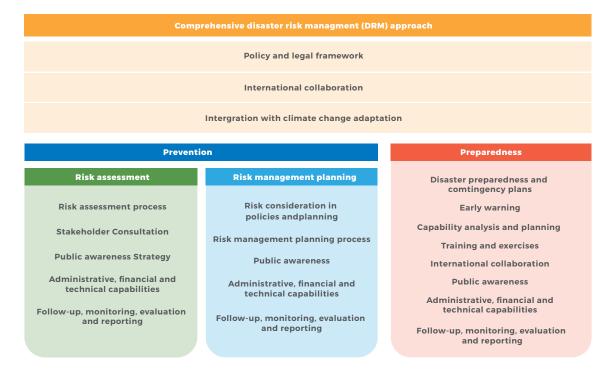


Figure 1: Overview of comprehensive review framework

This report identifies good practices and areas for improvement and proposes a series of recommendations. It is for the government of the Republic of North Macedonia to consider and determine whether and how the recommendations should be implemented to contribute to their policy goals.

1.2 Review process

Once the Republic of North Macedonia's participation in a comprehensive DRM review was confirmed, a call for nominations of experts was sent to countries participating in the UCPM and eligible neighbouring countries. Two peers from EU Member States — Germany and the UK — were chosen to participate, in addition to a peer from Bosnia and Herzegovina and a peer from Tunisia. The peers were supported in their tasks by the European Commission and a project team contracted by the Commission.

The peer review mission was conducted over a 10-day period that spanned from 15 October until 25 October 2018. The review opened with a meeting with representatives of several ministries and agencies of the Republic of North Macedonia, including the Protection and Rescue Directorate (PRD), the Crisis Management Center (CMC), and the Ministry of Defence (MoD). The European Commission representative addressing the meeting expressed her appreciation to the Republic of North Macedonia for its willingness to participate in the process and introduced the peer review team.

During the 10-day mission in the country, the peer review team met with and interviewed stakeholders from many different organisations, government agencies and authorities, NGOs and academia. They were also given access to a number of documents concerning risk assessments and disaster management in the Republic of North Macedonia, including previously concluded reviews of the country's DRM system. A full list of these documents is annexed (see Annex II).

Interviews took place at the following locations:

- ▶ the PRD HQ in Skopje,
- ▶ the PRD training centre in Skopje,
- ► the municipality of Shtip,
- ▶ the regional firefighters' HQ in Shtip,
- ► the municipality of Sveti Nikole,
- ▶ the regional firefighters' HQ in Sveti Nikole,
- ▶ the volunteer firefighters' HQ in Sveti Nikole,
- ▶ the CMC in Skopje,
- ▶ various 'local' PRD outposts,
- ▶ in the building of the regional firefighters at the HQ of the Fire Protection Union of Macedonia in Skopje, and
- ▶ the UNDP HQ in Skopje.

The peer review team presented the findings outlined in the draft report during a stakeholder meeting in Skopje on 12 April 2019.

This report represents an analysis of the situation in the Republic of North Macedonia as of October 2018. Later developments are not taken into account.

1.3 Country profile

1.3.1 Overview

The Republic of North Macedonia is a landlocked country, located on the Balkan Peninsula in Southern Europe, which borders Kosovo, Serbia, Albania, Bulgaria, and Greece. The country's population was estimated at just over 2.1 million in 2017. The Republic of North Macedonia falls within the Central European Time Zone (UTC+1).

Figure 2: Map of North Macedonia



The capital – Skopje (Cκοπje) – is home to approximately a quarter of the country's total population. Ethnic Macedonians make up the majority of the country's population (64.2 %), with Albanians (25.2 %), Turks (3.9 %), Romani (2.7 %) and Serbs (1.8 %) making up the remainder. The country's geography is defined primarily by mountains, valleys and rivers.

The Republic of North Macedonia's climate ranges from Mediterranean to continental. Summers are hot and dry while winters are moderately cold. Average annual precipitation varies from 1 700 mm in the western mountainous area to 500 mm in the eastern area. There are three main climatic zones in the country: temperate Mediterranean, mountainous and mildly continental. The warmest regions are Demir Kapija and Gevgelija, where the temperature in July and August can exceed 40°C.¹

¹ Source: <u>CIA World Factbook</u> (https://www.cia.gov/library/publications/the-world-factbook/geos/mk.html), <u>IPA Civil Protection Programme II</u> (http://ipacivilprotection.eu/macedonia.html#l6).

1.3.2 Disaster risk profile

Between 1990 and 2018, a number of natural disasters occurred in North Macedonia. The tables below show these, sorted by number of people killed, number of people affected, and economic damage incurred.

Table 1: Disasters caused by natural hazards²

Disaster	Year	People killed
Flood	2016	22
Extreme temperature	2001	15
Extreme temperature	2004	15
Flood	2015	7
Extreme temperature	2017	3

Disaster	Year	Affected people
Wildfire	2007	1 000 000
Flood	2004	100 000
Flood	2015	100 000
Flood	2016	33 582
Extreme temperature	2014	8 800

Disaster	Year	Damage (US\$)
Flood	2015	87 000
Flood	2016	50 000
Wildfire	2000	13 563
Earthquake	2016	10 000
Flood	2004	3 600

² Source: <u>EM-DAT</u> (http://www.emdat.be/country_profile), accessed 10 July 2018.

Between 1990 and 2018, a number of man-made disasters also occurred in North Macedonia. The tables below show these, sorted by number of people killed, number of people affected, and economic damage incurred.

Table 2: Disasters caused by technological hazards³

Disaster	Domain	Year	No killed
Transport accident (air)	Air	1993	115
Transport accident (air)	Air	1993	83
Transport accident	Road	2001	10
Transport accident	Water	2009	15
Transport accident	Rail	2015	14

The country's geography and climate render it highly vulnerable to wildfires during the summer months, but also to river and urban flooding events. There is also a moderate risk of an earthquake occurring.

Regions differ in their hazard exposure in terms of the types of hazards and risk levels. An overview of the main hazards, risk levels and regions affected is provided in the table below.

Table 3: Hazard exposure⁴

Hazard	Risk level	Region(s)
River flood	High	North, south, northeast, southeast, and central
Urban flood	High	Whole country
Wildfire	High	Whole country
Earthquake	Medium	Whole country
Water scarcity	Medium	Whole country (medium in the north, low in the rest)
Extreme heat	Medium	Whole country (hazard level is lower in the west)
Landslide	Low	West and southeast
Coastal flood	Very low	Whole country

³ Source: <u>EM-DAT</u> (http://www.emdat.be/country_profile), accessed 10 July 2018.

⁴ Source: <u>ThinkHazard</u> (http://thinkhazard.org/en/report/241-the-former-yugoslav-republic-of-macedonia), accessed 10 July 2018.

1.3.3 Vulnerability

Vulnerability relates to the set of characteristics and circumstances of a community or system that make it susceptible to the damaging effects of a disaster. It can also be understood as the 'human dimension of disasters'. For the purpose of this country briefing, vulnerability is measured through reference to the vulnerability variable included in the **INFORM index**.

Table 4: Vulnerability⁶

Vulnerability	Score*
Socio-economic vulnerability	2.5
Vulnerable groups	1.5
Overall vulnerability	2.0

^{*} Scale: 0 (best) - 10 (worst)

As captured through the indicators included in the INFORM index, neither the community nor the infrastructure of North Macedonia are particularly vulnerable to the effects of a disaster. North Macedonia had received a total of USD 479 million in public aid (humanitarian, development, etc.) by mid-2017, and displays low to moderate aid dependency. Within the socio-economic vulnerability indicator featured in the INFORM index, North Macedonia's score of 2.5 derives largely from societal inequality (as captured by its receiving a score of 4.8 on the GINI index). North Macedonia performs equally well within the vulnerable groups dimension of the INFORM index.

Indicators relating to health and/or child mortality indicate that the country's population can generally expect to (barring natural disasters) live a life of a quality similar to the quality enjoyed in (among other countries) the Netherlands. All indicators pertaining to the availability, pricing and market volatility of food also perform positively. The country's score within the vulnerable groups dimension is mainly dragged down by the fact that 54.7 % of the population have been affected by natural disasters in the last three years, although the high share is largely a result of the country's relatively small size.

⁵ See https://www.preventionweb.net/risk/vulnerability.

⁶ See INFORM Index (http://www.inform-index.org).

1.3.4 Lack of coping capacity

Lack of coping capacity derives from structural shortcomings (whether institutional or infrastructural) which limit a country's ability to effectively respond to, and prepare for, disasters. For the purpose of this country briefing, this is measured through the lack of coping capacity variable included in the INFORM index.

Table 5: Coping capacity⁷

Lack of coping capacity	Score*
Institutional	4.7
Infrastructure	2.5
Overall lack of coping capacity	3.7

^{*} Scale: 0 (best) – 10 (worst)

The institutional dimension of the INFORM index's lack of coping capacity variable is indicative of North Macedonia's success in implementing the Hyogo Framework for Action (3.8 out of 5). The country performs well with regard to infrastructure, with the only notable exception presenting in its (relative) lack of road density.

1.3.5 National disaster management system

At national level, protection and rescue in North Macedonia is organised as a single system for tracking the progression, preventing the onset, and mitigating the consequences of natural disasters or other emergencies that endanger the country's population, critical infrastructure, flora and fauna, and items or facilities that are of special cultural and/or historic importance. According to the Protection and Rescue Law (TPRL), the protection and rescue system is realised through:

- ▶ monitoring, tracking, observation and analysis of possible risks of natural disasters or other disasters;
- prevention and mitigation of possible dangers;
- reporting and warning on possible dangers and issuing of directions for protection, rescue and aid;
- education and training for protection, rescue and aid;
- organisation of protection and rescue forces and establishment and maintenance of other forms of preparedness for protection, rescue and aid;
- ▶ self-protection, self-aid and mutual assistance;

⁷ See INFORM Index (http://www.inform-index.org).

- ▶ mobilisation and activation of protection and rescue forces and assets;
- ▶ determination and realisation of protection measures;
- rescue and aid;
- elimination of consequences from natural disasters or other emergencies up to the point of enabling basic living conditions;
- oversight of the realisation of protection and rescue;
- ▶ provision of assistance to areas significantly damaged by natural disasters or other emergencies;
- ▶ provision of assistance to other countries significantly damaged by natural disasters or other emergencies which have appealed for help;
- ▶ receipt of assistance from other countries.

At ministerial level, protection and rescue from natural disasters and other disasters is managed by the state authorities in accordance with laws and other regulations that define their responsibilities. The state authority institutions are responsible for the realisation of measures for prevention and mitigation of consequences caused by natural disasters and other disasters (i.e. man made) that fall within their area of responsibility. The measures for prevention and mitigation that are to be taken by the state authorities are developed in more detail within the National Plan for Protection and Rescue. At ministerial level, the central state administration authorities – within the framework of their scope of activity and competency that is stipulated by law – ensure the efficient functioning of protection and rescue systems, and especially:

- ▶ for their own needs, plan and secure resources and equipment for protection and rescue needs;
- ► draft and forward a threat assessment to the PRD in the segment applying to the region of their competency;
- ▶ are obliged to secure an appropriate competence level of workers and must undertake measures and activities necessary for efficiently carrying out the services of a central state government authority in disaster and major accident situations; and also
- ► carry out other duties stipulated by law.

The heads of central state administration authorities are responsible for implementing the provisions, which apply to the obligations of state government authorities, and especially for:

- ▶ timely preparation and giving information to the PRD about the importance of protection and rescue;
- ▶ timely and expertly carrying out duties which are within their competency and are directly related to protection and rescue;
- ▶ determining legal persons in the region of competency of the Central State Administration Authority participating in protection and rescue;
- ▶ timely and expertly conducting other protection and rescue duties determined by the law and other legislation.

As part of its national preparedness strategy, North Macedonia also maintains a national Early Warning System

(EWS). The manner of engaging the EWS in the state is regulated in more detail by law. All the reports related to protection and rescue in the EWS in the state, in its regular work, are forwarded to the PRD. The elements of the EWS form part of national protection and rescue capacities, while local authorities mainly have executive obligations for implementing measures of preparedness for operational forces, notifying the population and implementing necessary measures in order to reduce the risk and consequences of an imminent emergency. Communication with the public is carried out by the spokesperson of the PRD, the Protection and Rescue HQ and the media representative at national level, as well as of the local self-government protection and rescue HQ for accidents of local importance, and also by authorised representatives of operational forces and media, in accordance with their professional responsibilities.⁸

1.3.6 Disaster management entities

The hierarchy of North Macedonia's DRM entities can be visualised as follows:

Figure 3: Overview of North Macedonian DRM governance



⁸ Source: <u>IPA Civil Protection Programme II</u> (http://ipacivilprotection.eu/macedonia.html#I6).

The PRD and the CMC form the backbone of North Macedonia's DRM system. They are responsible for coordinating the activities of North Macedonia's various entities at the national level by (among others) communicating with the country's eight main regional centres (located in Skopje, Tetovo, Ohrid, Bitola, Veles, Kumanovo, Stip and Strumica). This mandate is clearly outlined in North Macedonia's Law on Protection and Rescue, which outlines how responsibilities are divided between the participants in protection and rescue activities, including the State, local authorities, private companies, and public enterprises, institutions and services. These organisations' roles are outlined in brief below.

Table 6: Main DRM organisations and legislation

Organisation	Relevant legislation
PRD	 Developing plans for protection and rescue; Training protection and rescue forces based on predefined curricula and programmes; Developing risk assessments in cooperation with the responsible state authorities; and Organising and preparing the protection and rescue system.
СМС	 Performing activities that relate to providing continuity of the inter-departmental and international cooperation, consultations and coordination of crisis management; Preparing and updating a unified assessment of the risks and dangers to the security of the nation; Proposing measures and activities for resolving a crisis situation; and Executing any other activities laid down by law.

The PRD is part of the Assessment Group, and the CMC is part of the government's Steering and Assessment Groups. These represent the central state authorities and are comprised of members of relevant national entities.

The makeup, along with the function, of these groups is outlined in brief below.

Table 7: Steering and Assessment Groups

Group	Membership	Function
Steering	 Ministers of Internal Affairs, Health, Transport and Communication, Defence, Foreign affairs, Director of the CMC; Representative from Security and Defence Commission of the Parliament; Representative from the Cabinet of the President; Other officials and experts may be invited (if necessary). The President of the Government shall appoint a person from the Steering Committee that will lead the Steering Committee in conjunction with the crisis situation. 	Coordinates and manages the country's crisis management system. The CMC and PRD do not coordinate in a crisis. The Steering Group coordinates and manages the crisis. The CMC gives administration support to the Steering Group and the Assessment Group. The PRD coordinates and manages on an operational, tactical and strategic level in all other emergencies.
Assessment	 Directors of the Public Security Bureau and Security and Counter Intelligence Department in the Ministry of Internal Affairs (MoI); Directors of the Intelligence Agency; Director and Deputy Director of the CMC; Director and Deputy Director of the PRD; Head of Security and Intelligence Department in MoD; Other officials and experts may be invited (if necessary). 	Governmental body that performs constant assessment of the risks and dangers to the security of the Republic and proposes measures and activities for their prevention and early warning. The Assessment Group does not handle a crisis. It assesses the situation and advises the Steering Group if it is necessary to declare a crisis or not. The Steering Group, based on the advice of the Assessment Group, proposes to the government to declare crisis or not.

North Macedonia also cedes considerable responsibility to municipalities at local level. At this entity level, responsibilities differ between councils and mayors. In the implementation of protection and rescue, the council of the local self-government unit executes the following activities:

Table 8: Division of responsibilities at municipal level

Party	Membership
Council	 Determines the obligations of local public enterprises, institutions and services in the:
	 Extinguishing of fires and rescuing of people and property in the event of car accidents, technical-technological and other disasters;
	b. Clearance of local roads, streets and other infrastructural facilities from snow, frost and soil caused by heavy snowfall, rockslides, landslides etc.;
	c. Giving of first aid in the event of increased numbers of diseased and injured citizens, and prevention of the spread of contagious diseases;
	 Protection of animals and plants in the event of occurrence of diseases, pests and natural disasters;
	Monitors the preparedness of local self-government protection and rescue unit;
	3. Decides on the amount of financial assets in the local self-government unit budget necessary for protection and rescue;
	4. Decides on the amount of financial assets from the local self- government unit necessary for paying damages for harm caused by natural disasters and other disasters;
	5. Decides on the distribution of humanitarian aid intended for the stricken population in the local self-government units.
Mayor	1. Proposes the Plan for Protection and Rescue;
	 Monitors the status of implementation of decisions passed by the local self-government unit council related to prevention and mitigation of consequences caused by natural disasters and other disasters;
	3. Is responsible for the preparedness of protection and rescue forces established by the local self-government unit;
	4. Decides on engagement of protection and rescue forces established by the local self-government unit;
	5. Monitors the implementation of activities for the clearance of local roads, streets and other infrastructural facilities in the event of natural disasters and other disasters in the local self-government unit area;
	 Requests assistance for engagement of protection and rescue forces established by the legal entities in the area of the local self- government unit;
	7. In cases when the protection and rescue forces cannot eliminate the consequences caused by natural disasters and other disasters, requests engagement of the protection and rescue forces of the Republic.

For the purpose of executing expert tasks related to the authorities of the local self-government unit in the protection and rescue area, the mayor can appoint a person or establish a division for protection and rescue. The City of Skopje coordinates the protection and rescue activities in its area. The municipalities in the City of Skopje are obliged to cooperate and react in accordance with the directions on protection and rescue received from the City of Skopje. For the purpose of implementing this activity, the City of Skopje is establishing a Protection and Rescue HQ.

1.3.7 DRR: Relevant sectors

The following entities are of relevance within the field of DRM in North Macedonia and were interviewed during the peer review:

Government

PRD

▶ Department of common affairs

- > Office of the director
- ▷ Section of legal affairs
- ▷ Section of international cooperation
- ▷ Section of public relations

► Section of human resources

► Department for general inspection

- ▷ Section for inspection control
- > Section for administration and analytics

▶ Department for financial affairs

- ▷ Section of internal revision
- ▷ Section for budget coordination
- ▷ Section of budget control
- > Section for accounting and payment

▶ Department for equipping and maintenance

- > Section for real estate, construction, and technical maintenance of buildings
- > Section for technical affairs and equipment maintenance
- ▷ Section for IT

▶ Department for prevention, planning, and development

> Section for prevention and planning during natural and other disasters

- > Section for prevention and planning of technological and complex accidents
- > Section for issuing urban & technical approvals
- ▷ Section for research and analysis
- > Training section

► Department of operations and logistics

- > Section for organisational and mobilisation affairs
- > Section for planning, organising and conducting operations and logistics support
- > Section for specialised service with airplanes visit of this section at the airport is included
- ∨ Various local PRD offices, including the PRD Municipal HQ in Skopje

CMC

- **▶** Director of the CMC
- ► Deputy Director of the CMC
- ► Operational centre of the CMC

National Coordinator for the implementation of the national platform for DRR in North Macedonia

Ministry of Internal Affairs

Ministry of Defence

Ministry of Agriculture

Fire Brigade of Skopje

Military Academy of Skopje

Municipality of Shtip

- ► Office of the Mayor of Shtip
- ► Fire Brigade of Shtip

Municipality of Sveti Nicole

- **▶** Office of the Mayor of Sveti Nicole
- **▶** Volunteer firefighting society of Sveti Nicole
- ► Fire Brigade of Sveti Nicole
- ► Macedonian Hydrometeorological service

Public organisations

- **▶** University of Skopje
 - > Faculty of Security-Skopje, St. Kliment Ohridski University
- ► Institute of Peace Studies
- ► Public Enterprise for Macedonian Forests (PEMF)
- ► Adzibadem Sistina

Industry

- ► Macedonian electric power company
- **▶** Makpetrol
- ► OKTA (oil refinery and distributor)
 - ▷ Safety and security department
 - > Security and environmental protection department

NGO

- ► Fire Protection Union of Macedonia
- **▶ LEGIS Skopje**
- **▶** Representatives of Operation Florian
- **▶** Macedonian Red Cross

International organisations

- **▶** OSCE Skopje
- **▶** UNDP Skopje

2. Comprehensive Disaster Risk Management (DRM) Approach

The PRD and the CMC have organisational roles in aspects of DRM and risk reduction policy. Both describe a role in **risk assessment**, although they do not agree on the extent of each other's responsibilities. The PRD considers itself as having the leading role in **assessing capability needs and gaps** to manage risks, but claims information is not provided by the CMC to allow them to fulfil this function effectively. Both organisations have roles in **crisis management**, with the PRD being responsible for coordination and leadership for natural hazards and other disasters, and the CMC taking a leading role in coordination and leadership for national security threats or for natural hazards where the response is greater than can be led by the PRD. In practice, these crisis management roles are unclear and quickly become blurred. On **early warning**, the CMC runs a national monitoring system and has responsibility for alerting the public, but both the CMC and the PRD appear to have uncoordinated media engagement, which includes the issuing of warnings to the public. The peer review team did not see significant evidence of either the PRD or the CMC playing a role in influencing wider public policy decision-making to deliver **risk reduction measures**.

Laws on both crisis management and protection and rescue refer to aspects of DRM. As an example, the Law on Crisis Management establishes a requirement for regional risk assessment (although the CMC report variation in how municipalities meet this legal requirement) and national risk assessment (the CMC has completed an assessment but is awaiting revised scenarios on regional flooding before finalising this). The Law on Civil Protection, and the associated Methodology for the Content and Method of Hazard Assessment and Planning of Protection and Rescue, requires the PRD to develop a national assessment of threats and a Plan for Protection and Rescue, which itself relies on risk assessment. This is also an obligation for local municipalities and all other stakeholders, especially those who work with hazardous substances. Overlaps also appear to exist in other areas of DRM. The effectiveness of relevant laws and plans does not appear to be routinely assessed.

2.1 Policy and legal framework (at national, regional and local level)

A closer inspection of the legislation of North Macedonia shows that the legal framework for disaster management consists of two groups of laws and regulations. First, laws and regulations that directly regulate this area, and second, laws and regulations that indirectly locate responsibilities and describe appropriate actions. The Law on Crisis Management⁹ and the Law on Protection and Rescue¹⁰ contain provisions that directly regulate disaster management.

The Law on Crisis Management introduces the term "crisis", defined as an occurrence that endangers the fundamental values, long-term and vital interests and goals of the country, jeopardising the constitutional order and security of North Macedonia. The law covers:

- organisation and functioning of the crisis management system;
- ▶ decision-making and resource utilisation;
- ▶ communication, coordination and cooperation;
- planning and financing; and
- ▶ an assessment of the security risk to North Macedonia.

The Law on Crisis Management's comprehensive approach derives from the fact that it shares responsibilities for crisis management among different stakeholders. The crisis management system includes state administrative bodies and authorities (the Assembly, President and government), armed forces, protection and rescue forces, municipalities and the city of Skopje. The Law on Crisis Management also assumes that public enterprises and institutions, as well as private companies, can take part in the prevention, early warning and handling of crises.

The Law on Protection and Rescue establishes the system for protection and rescue of people and material goods against natural and technological disasters in peacetime, state of emergency or war. The law describes an interlinked system of planning, financing, coordination, mitigation of consequences, preparedness and response to natural and technological disasters. The PRD is the leading governmental body with authority to organise and implement this system. The Law on Protection and Rescue indicates how responsibilities are divided between the participants in protection and rescue activities, including the state, local authorities, private companies, and public enterprises, facilities and services. The law regulates the division of responsibilities in accordance with the provisions in the Local Self-government Law, which further gives responsibilities and obligations for protection and rescue to the municipalities.

⁹ The Official Gazette of R.M No. 29/05.

¹⁰ The Official Gazette of R.M No. 36/04,49/04,86/08,18/11.

The Law on Protection and Rescue operates with several strategic documents:

- 1. The National Strategy for Rescue and Protection adopted by the Parliament every five years;
- 2. The National Threat Assessment adopted by the government; and
- **3.** The National Plan for Rescue and Protection from Natural and Other Accidents adopted by the government.

The indirect regulation of responsibilities and duties for an effective crisis management system in North Macedonia are split among:

- ▶ the Mol,¹¹
- ▶ the MoD,¹²
- ▶ the Ministry of Transport and Communication,¹³
- ▶ the Directorate for Protection of Classified Information,¹⁴ and
- ▶ the Ministry of Environment and Spatial Planning (MoEPP).

All of these documents include acts that define the responsibilities of the government authorities in case of emergency, as well as legislation dealing with specific issues (such as technical IT security). Legislation in the area of DRR includes a large number of laws and bylaws that describe the activities and/or competencies of the institutions and other subjects in the DRR field at national and local level.

Table 9: Competences as defined in legislation

National level	 Constitution of North Macedonia; Law on Protection and Rescue; Law on Fire-Protection; Law on Spatial and Urban Planning; Law for Construction; and Law for the Transportation of Hazardous Materials in Road and Railway Traffic.
Ministerial level	All relevant legislation is published in the official gazette and is considered to be national-level legislation, while ministerial level consists of internal regulations that are numerous in every government body.
Inter-ministerial cross cutting coordination	 National Protection and Rescue Strategy; Strategy of National Security; and National Security and Defence Concept.

¹¹ The Official Gazette of R.M No. 92/09.

¹² The Official Gazette of R.M No. 8/92, and No. 5/03, 06 and 08.

¹³ The Official Gazette of R.M., No. 40/07, and No. 92/07, No.114/09, No. 83/10, No. 140/10, No. 55/07, No.26/09, No. 22/10, No.14/07, No.55/07, No.98/08, No.83/10 No.48/10, No.24/07, No.103/08, No.67/10.

¹⁴ The Official Gazette of R.M., No.9/04.

Local level	Law on Local Self-government.	
Private sector	 ▶ The Law on Protection and Rescue and related supporting legislation, which define in detail the rights and obligations of individual protection and rescue participants; ▶ The North Macedonia Threat Assessment; and ▶ The Plan for Protection and Rescue of the Republic of Macedonia. 	
Volunteers	 The Law on Protection and Rescue, supporting legislation governing the rights and obligations of volunteers in the area of protection and rescue; and Agreements on protection and rescue cooperation between PRD and volunteer associations. 	
NGOs	► Law on the Macedonian Red Cross; ► Law on Macedonian Mountain Rescue Service.	
International level	International intervention is governed by political agreements.	
Bilateral agreements	Laws on ratification of agreements on cooperation in protection and rescue between North Macedonia and: ▶ Bosnia and Herzegovina (signed 2008); ▶ Montenegro (signed 2008); ▶ Hungary (signed 2009); ▶ Slovenia (signed 2010); ▶ Croatia (signed 2010); ▶ Memoranda of understanding and cooperation in the area of protection and rescue of people and material goods against natural and other disasters between the PRD and Danish Emergency Management Agency (DEMA), signed 2010 in Skopje; and ▶ Serbia (in progress).	
Regional agreements	 Memorandum of understanding of the institutional framework of the DPPI SEE, signed 2007 in Zagreb; Agreement on the establishment of the Civil-Military Emergency Planning (CMEP) Council for South Eastern Europe, signed 2001 in Sofia; and EUR-OPA Major Hazards Agreement, set up by the Committee of Ministers of the Council of Europe in 1987. 	

To some extent, risk reduction appears to be integrated into wider policies and practices and shared among many different organisations. For example, the organisation responsible for forest management also considers fire prevention activity. However, there is no overall DRR strategy in place and discrepancies exist in policies and implementation between the National Coordinator, PRD and CMC, with the potential to result in actions that could increase overall risk, instead of reducing it. For example, Japanese experts cooperating with the authorities of North Macedonia identified the logging of trees on slopes as contributing to an increase in landslide risk, and therefore advised planting new trees mitigating this risk, but in turn increasing the risk of wildfires.

2.1.1 The role of the National Coordinator for Disaster Risk Reduction

The National Coordinator for Disaster Risk Reduction is directly attached to the Prime Minister's office and has a role in monitoring North Macedonia's system for DRR, suggesting changes, and conducting analysis of DRR activities ongoing across the involved institutions. The Coordinator has published various analyses and works with academics to develop best practices. In February 2018, North Macedonia adopted the Coordinator's findings. While the Coordinator has not hosted any academic conference, he or his office have engaged with such conferences hosted by others. The Coordinator references international risk reduction guidelines in his work and is the national focal point for the Sendai Framework, but his domestic role in this regard appears limited to sharing requests for information with other organisations, rather than developing responses directly.

► The Coordinator does not appear to have the institutional authority to develop or direct a national DRR strategy. His office has coordinated meetings between the state organisations involved in DRR activity, but does not appear to have the authority to mandate the execution of particular activities. It is not clear which governmental authority is responsible for implementing or acting on the findings of the Coordinator, adopted in February 2018.

In accordance with the constitution and other laws that regulate DRM, the peer review team were informed that there is a political framework for developing DRR-related policies in accordance with the guidelines outlined by the EU and the UN. Nevertheless, several obstacles are evident within the policy development framework. These include a lack of communication between stakeholder groups, the existence of three institutions – the National Coordinator, the CMC and the PRD – with direct competencies, and the presence of a large number of autonomous organisations at the national and/or regional levels.

The National Coordinator for Disaster Risk Reduction has engaged with all of the major national stakeholders in developing his work. This has been primarily at the head of organisational level, and does not appear to be on a regular or routine basis. Major NGOs have had no contact with the Coordinator or his work and do not feel engaged in a collaborative process to improve North Macedonia's risk management system or establish a national platform on DRR.

The integration of more outside actors could help to improve the system. This interaction needs to be on a regular basis to ensure a systematic approach rather than any piecemeal activities.

The PRD and the CMC, as independent directorates within the government, describe various processes by which they coordinate or feed into processes across the government, where relevant. The Assessment Group and Steering Group represent such processes.

However, the peer review team have made a general observation that collaboration between national entities, both within government and outside (e.g. municipal government structures), appears very problematic. Decision-making processes of ministries, the PRD and CMC often do not include a consultative process with civil society, for example with the Macedonian Red Cross.

A culture of cooperation and collaboration was only observed in a few small pockets, while a number of key institutions, such as ministries, the PRD, the CMC and the National Coordinator do not appear to collaborate effectively.

2.1.2 Measurability and evaluation of plans

In accordance with existing legislation, institutions are obliged to evaluate all types of plans that are developed. But since the most relevant institutions for DRR (PRD, CMC and the National Coordinator) are each governed by individual laws and bylaws, it is very difficult to assess plans in a comprehensive manner. All levels of planning are obliged to conduct DRR planning (horizontally and vertically). There are no instruments in place to measure plans in such a way that tangible evidence can be presented along the way.

Institutions are obliged to evaluate all types of plans that are produced in accordance with existing legislation. DRR Institutions did not provide the peer review team with concrete data regarding the degree to which the evaluation of plans is conducted. It is also unclear what types of plans are in place and what (if any) results are derived from them.

In addition, evaluators generally work in institutions that are in charge of planning. This lack of independent evaluation ensures that even if the process works as intended, the results are unlikely to provide sufficient inputs when it comes to strengthening DRR.

2.1.3 Integration of lessons learned

Each organisation in the risk and crisis management system appears to carry out post-incident assessments, which identify areas where the response could be improved. However, several stakeholders report that the lessons learned through these exercises rarely result in changes in behaviour. This is reflected in the fact that relevant organisations in North Macedonia (and the DRR system as a whole) have generally failed to enact improvements, despite repeated failings of the same type.

The National Coordinator for Disaster Risk Reduction does not have a specific role in carrying out post-incident assessments or integrating lessons learned from previous emergencies.

The fact that most important institutions in North Macedonia's DRR field (the PRD, the CMC and the National Coordinator) are governed by individual laws and bylaws makes assessing plans difficult. All levels of planning are obliged to conduct DRR planning (horizontally and vertically).

There are no instruments in place to measure plans in such a way that tangible evidence can be presented along the way.

In addition, evaluators generally work in institutions in charge of planning.

The consequence of this is that, even if the evaluation process were to work as intended, the results are unlikely to provide sufficient inputs when it comes to strengthening DRR in North Macedonia.

In the framework of the Peer Review, DRR institutions did not provide the peer review team with concrete data regarding the degree to which the evaluation of plans is conducted. It is also unclear what types of plans are in place and what (if any) results are derived from them.

2.2 International, regional and local collaboration

2.2.1 International collaboration

Many countries have sought to assist the country following its declaration of independence. This assistance has often been uncoordinated, largely because the government did not have a clear overview of its own requirements. The result has been a disconnected set of collaboration programmes. While many of these programmes are delivering real benefits to citizens, it is likely that overlaps and inefficiencies exist which could be easily resolved if the flow of information were more effective.

All of the stakeholders the peer review team met were open and welcoming of international collaboration. Effective international collaboration exists and includes the PRD and local municipalities. A few examples of good collaboration include:

- ▶ **Bilateral collaboration**: Operation Florian, a UK charity set up by British firefighters to save lives overseas by donating reconditioned fire engines and emergency equipment to the world's poorest regions;¹⁵
- ► Collaboration with the Union Civil Protection Mechanism: the PRD is the main contact point for the UCPM;¹⁶
- ► Collaboration with international organisations: the CMC collaborates with NATO, GIZ (who have a member of staff embedded in their structure), the UNDP (who have provided software to deliver regional risk assessments) and the Japan International Cooperation Agency (JICA), which has helped to develop the Macedonia Forest Fire Information System (MKFFIS).

The OSCE additionally informed the peer review team of a number of projects they have in relation to police training. For example, they conducted a crisis management project for police, which was based on how the country reacted to the migration crisis. The project recommended improving coordination, streamlining state institutions, and boosting operational capacity.

¹⁵ www.operationflorian.com.

¹⁶ Decision (EU) 2019/420 of the European Parliament and of the Council of 13 March 2019 amending Decision No 1313/2013/EU on a Union Civil Protection Mechanism. 1) ACHELEOUS project [Action of Contrast to Hydraulic Emergency in Local Urban Site] for the City of Skopje, ECHO Financial instrument/Preparedness and prevention projects, Grant agreement no. ECHO/SUB/2013/661051. Website: http://www.achelous.eu/; 2) EPICURO project [European Partnership for Innovative Cities within an Urban Resilience Outlook] for the City of Skopje, funded within ECHO Financial instrument/Preparedness and prevention projects, Grant agreement no. ECHO/SUB/742509/PREV20. Website: http://www.epicurocp.eu.

2.2.2 European collaboration

North Macedonia is a signatory to most international agreements and conventions, which bind it as a state included in EU integration processes, to integrate and harmonise relevant provisions in the area of protection and rescue to its own legislation, in the process of developing its own institutions.

North Macedonia became a member of the European Union's UCPM in February 2012.

Institutions of North Macedonia that have the right and obligation to develop DRR systems actively participate in the work of international organisations and institutions, have an important place in the system of regional cooperation and demonstrate positive results in bilateral and multilateral cooperation. North Macedonia has achieved a significant role in the field of international cooperation by becoming a member of the UCPM.

2.2.3 Regional and local collaboration

A number of charities and international donors are involved in collaboration with North Macedonia's regions and municipalities. These include:

- ► Operation Florian, which supports regional firefighters (both professional and volunteers) in a number of locations across the country; and
- ▶ the UNDP, which has invested in flood prevention and preparedness activities in Tetovo and other locations, including improving water management.

Cooperation between municipalities does not appear to be formalised, although several interviewees referred to memoranda of understanding existing between some municipalities. The national organisation that represents the municipal governments (Association of the Units of Local Self Government, ZELS) has a committee that considers fire service issues, but the review could not establish whether this organisation facilitates concrete examples of collaboration at the municipal level.

2.3 Integration of DRR with climate change adaptation

Climate change and the security of citizens are directly connected to increasing disaster trends, which result in major economic impacts and human casualties. North Macedonia is expected to experience an overall increase in temperature, more frequent and more intense heatwaves, and more droughts and flood events as a result of a changing climate.

North Macedonia ratified the UNFCCC on 4 December 1997 and the Kyoto Protocol in July 2004. The MoEPP coordinated all activities related to the ratification of both the Convention and Protocol, including activities on raising public awareness. The MoEPP has been designated as the National Focal Point to the UNFCCC and as Designated National Authority for implementing the Kyoto Protocol. The government has published a number of strategic documents on sustainable development and environment, including:

- ▶ the National Strategy for Sustainable Development (adopted in 2010);
- ► the Water Management Strategy;
- ▶ the National Environmental Investments Strategy;
- ▶ the National Environmental Approximation Strategy (2008);
- ▶ the Waste Management Strategy (2008);
- ▶ the National Waste Management Plan (2008);
- ▶ the National Environmental Action Plan; and
- ▶ the National Environmental Health Plan.

The Climate Change Communications Strategy and Action Plan ('Strategy and Action Plan', the Third National Communication on Climate Change, 2014)¹⁷ aims to enhance the outreach, research and awareness-raising agenda in order to raise awareness among and engage key stakeholders at the national and local level on issues pertaining to climate change.

While emergencies in recent years suggest that North Macedonia is experiencing the effects of a changing climate, and that therefore this area will require greater focus, the peers observed a limited amount of work done to date to reflect climate change in national strategies and plans. Presumably, while it has been identified by the national authorities as a significant future issue, there is limited capacity to address this as a current priority. During the review, the team did not have an opportunity to meet with actors (e.g. the MoEPP) who may have been able to provide evidence of how climate change is considered in policy development. As far as pollution in Skopje is concerned, interview data indicate that discussions are only held when there is a noticeable effect, and that they tend to die down shortly afterwards (i.e. do not result in concrete actions and/or changes in policy or behaviour).

¹⁷ http://www.unfccc.org.mk/Default.aspx?LCID=297. Since October 2018, an inter-ministerial working group has been working on the fourth Action Plan.

2.4 Good practices and recommendations

Good practices:

- ▶ Insurance premium to fund capabilities: The PRD receives 12 % of insurance premium tax (IPT) receipts on fire insurance policies to fund capabilities. This use of IPT constitutes a good mechanism to supplement tax receipts to fund the state's activities. We recommend that North Macedonia's government look to extend this good practice to cover all risk areas covered by insurance products, with the PRD or other responsible agencies using this funding to develop the capacities it needs to drive risk reduction.
- ▶ Passionate and driven individuals: There are passionate and driven individuals throughout North Macedonia's civil protection system who work collaboratively and effectively before, during and after crises occur. We recommend these individuals, whether professionals or volunteers, should be identified at local, regional or national level and their passion and vision harnessed to train and enthuse others, and to develop the system as a whole.

Recommendations:

- ▶ Simplify the complex legislative basis for the system for crisis management and system for protection and rescue. 'Who does what?' should be clearly articulated.
- ► Address the need for direct and clear accountability for the development of risk management capabilities at the national political level. Who is responsible for making sure the people, equipment and facilities work properly?
- ► Address the need for direct and clear accountability for crisis management at the political level, both within municipal and national government structures and/or agencies. Who is in charge in an emergency, and accountable afterwards for the conduct of the crisis response?

3. Prevention

3.1 Risk assessment

Legislation provides both the PRD and the CMC with roles in assessing risk, without clearly establishing which organisation is responsible for publishing a national assessment. This lack of clarity results in no overall view of the risks facing North Macedonia, and no clear process to develop capacities to deal with those risks on an evidential basis. Thus, a national risk assessment has not yet been published. However, the CMC has mentioned that it has all the necessary information and systems in place to produce one.

3.1.1 Risk assessment process

According to the Law on Crisis Management, risk assessments are mandated at the municipal level. These assessments must identify 'risks and dangers at local level, to recognise the needs and plan the resources, for the purpose of efficient prevention and early warning from a potential crisis situation'. As required by the Law on Protection and Rescue, a methodology for hazard assessment has been adopted by the government. This methodology appears to be used by municipalities to assess hazards at municipal level. This process appears to combine risk identification, assessment of likelihood and impact, identification of capability gaps, and capability planning. The risk assessment process involves relevant institutions from all segments of state institutions, as well as from the non-governmental sector.

The CMC is tasked with conducting North Macedonia's national risk assessment, building on the municipal risk assessments, and identifying national risks that fall outside the remit of one municipality (e.g. external national security threats). Currently, this process is managed using UNDP-provided software, which is licenced by the CMC, and integrated within the MKFFIS. The MKFFIS is a project that involves the CMC and the JICA. Regional CMC offices have access to the system and other organisations can access it through licences. The CMC reports that there are over 500 users of the system.¹⁹

The PRD is tasked with developing an 'Assessment of endangerment by natural disasters, epidemics, epizootics or other disasters' and a Protection and Rescue Plan at the national level.²⁰ The PRD must also 'provide an opinion' on protection and rescue plans developed by all stakeholders (governmental bodies, local municipalities and private stakeholders).

Methodology for risk assessment and assessment itself include details connected with cross-border effects of industrial and other disasters. Industrial underdevelopment reduces the possibility of major industrial accidents with cross-border effects, and the greatest risks that could have transboundary effects are related to the occurrence of large-scale fires, as well as pandemics and epizootics. The relevant institutions cooperate on these issues.

¹⁸ Art. 5, Law on Crisis Management.

¹⁹ It was not clear to the review team how many of these users are CMC staff and how many represent other agencies or organisations within North Macedonia's risk management system.

²⁰ Art. 18, Law on Protection and Rescue.

With regard to the evaluation of disaster losses, relevant institutions take steps separately to compile adequate analyses and recommendations. Peer review team representatives have not been presented with a single framework that addresses the subject matter.

► The methodology for risk prevention and preparedness planning is addressed in the methodologies for the preparation of risk assessment and plans. The CMC has a methodology for risk assessment, while the PRD has a methodology for developing plans. It was unclear to the peers how these two approaches are used in synergy.

Through their regular work, state employees whose main activity includes working on DRR issues, have the right and obligation to participate in the development of policy objectives. Unfortunately, the complexity of the executive and legislative process of determining policy objectives often leads to a situation in which the proposals of documents that are the result of expert opinions change under the influence of political or economic reasons during the adoption process. There is no defined expert position and they are not identified through the current system framework.

► There seem to be no strategies in place to build capacity, targeting specific sectors of public servants, communities and volunteers to ensure consistent use of risk assessments and implementation of disaster risk-related policies and plans.

3.1.1.1 Collection and use of data

Both the PRD and the CMC collect data on national risks. Data collation and analysis systems operated by the CMC are not effectively integrated into other organisations in North Macedonia's risk management system. Several stakeholders collect data but these data are not shared with the different stakeholders. This lack of common understanding leads to different assessments of risks.

The PRD publishes information on forest fires (linking with the EFFIS) and on numbers of unexploded ordinances on a regular basis. This reporting on forest fires is separate from the MKFFIS system operated by the CMC, which generates real-time information on fires, and appears to be used in directing operational responses.

The peer review team was made aware of a number of inconsistencies in the way the collection of data is defined and shared (or not). The PRD reported that the CMC collects data on additional risks, without sharing this with the PRD. Simultaneously, the CMC reported that the PRD are consulted as part of the risk assessment process, both at municipal and national level.

This leads to duplication and discrepancies in assessments and in identifying appropriate capability developments.

3.1.1.2 Risk identification

There is no single nationally mandated, evidence-based risk identification process. The PRD and the CMC undertake independent analysis but sharing of information between the two organisations does not appear to take place.

Through their own programmes, other institutions, from local to state level, have the obligation to develop a risk assessment for their own level based on the risk assessments made by the CMC; nevertheless, no evidence of this was shared with the peer review team.

In the period 2012-2016, the PRD, in cooperation with the DEMA, conducted training activities on risk analysis issues using the risk and vulnerability analysis model. On the other side, the CMC works in all segments necessary for quality risk analysis, including all scenarios. The lack of coordination between the PRD and the CMC likely resulted in a method of risk analysis that, although recognised in EU standards, did not result in a coherent assessment of national risks.

- ► The lack of coordination between the CMC and the PRD has resulted in the fact that there is no single risk analysis methodology for all institutions, and that this is one of the major issues observed during the peer review team visit.
- ▶ Given the fact that the approach to risk analysis is not unique and that there is no satisfactory level of coordination between institutions dealing with risk analysis, it can be empirically determined that risk assessment cannot be performed in accordance with the standards and norms prescribed by internationally recognised analytical forms.

Policymakers, in accordance with the decentralised and uncoordinated functioning of the system and in accordance with their own internal acts, determine the magnitude of tolerance that defines acceptability as part of the risk assessment. Unique criteria do not exist, either in the legislative or in the operational form, and this issue is one of the challenges for the next period.

- ▶ The PRD and the CMC are currently unable to effectively operate a coherent national risk assessment and associated capability development programme, meaning that there is unlikely to be effective integration of a clear understanding of risks into the overall system of risk management.
- ► The aforementioned lack of coordination between the competent institutions has led to a situation in which the involved authorities do not use the results of the risk assessment for the subsequent processes of risk management, e.g. capacity analysis and capability planning, monitoring and review.

3.1.2 Stakeholder consultation

The need for additional communication and/or cooperation between stakeholders involved in North Macedonia's DRR system was identified as a point of attention in the early phases of this peer review. The fact that analytical, planning and implementation documents are incompatible, unconnected and do not share a common basis constitutes a major challenge for the coming period. The existing minimum level of communication can temporarily meet current needs in implementing DRR measures, but cannot serve as a permanent solution.

There are no standard operating procedures that oblige institutions to exchange information between different stakeholders. Internally, each institution determines a way of exchanging information. In cases of emergency work in the field, inter-institutional teams of relevant authorities, in accordance with their needs, exchange information. It appears that there is no mandatory or standardised process for this exchange, and no common IT or communications platform for this purpose.

3.1.3 Public awareness strategy

Different institutions dealing with DRR issues, each within their own jurisdiction, have certain programmes and projects of a mostly temporary nature that are used to raise public awareness. There is no permanent systematic approach to public awareness building.

North Macedonia does not maintain an overarching document in which a system-wide public awareness strategy is formulated. It is therefore not surprising that there is no planned action in terms of risk communication. North Macedonia does not subscribe to a centralised education and awareness strategy. The PRD mainly informs the population through electronic and social media.

The CMC communicates through the media and only informs the public and the media on the basis of the conclusions of the HQ (standard operational procedures for communication, coordination and cooperation between the entities in the crisis management system in the event that a state of emergency is declared). In addition, the CMC regulates the manner of informing the public through the procedure for 'Communicating with the public through the public information media of the CMC in a state of emergency, in a crisis situation and in the event of a restricted or reduced access of their representatives'.

The PRD is developing many actions to educate and raise the awareness of the public. There is a long-term plan in place, which includes the integration of preparedness lessons in education programmes. In the short term, these are aimed at preparing for winter weather. In addition, there are established lines of communication with national media sources – all of which are automatically informed in the event of an emergency. The main priority of the PRD is to reach 'soft' targets such as schools, as these host vulnerable populations.

Existing documents that are operatively accepted as risk assessments of institutions of different levels are available to broader user groups through printed material or, more commonly, through websites of the competent institutions. There is no specific single basis of public information, and each institution, in accordance with governmental needs (mostly at the time of occurrence of a natural or other disaster), informs the public about its own plans and the latest results of its work.

During the flooding in 2017, the Prime Minister and the Director of the PRD gave media statements informing the public of the situation.

The PRD's new Head of Public Relations has developed contacts with national media organisations (print, radio and online) in order to share risk information with the public. This appears to be primarily focused on prevention and preparedness activities – for instance, a 'prepare for winter' campaign including advice on driving in snow.

The PRD is developing contacts with the Ministry of Education and Science to include prevention and preparedness advice in school lessons for primary and secondary education. They are also looking to launch a Macedonian-language version of the 'Fire School' app, aimed at children and already in use in other Balkan countries. The CMC is separately developing training materials and sessions for schoolchildren on risk preparedness, including for children with special educational needs (e.g. translations into braille).

Several respondents indicated that the lack of an education strategy vis-a-vis public protection-related issues – particularly when compared to the former Yugoslav curriculum – had contributed to a reduction in the prestige associated with practitioner work. This was repeatedly identified as a factor that contributed to practitioner organisations' reduced ability to attract and retain staff. There is no strategy in the form of a standalone document. The majority of this activity is delivered at local level through school work plans, educational materials and training organised mostly through international cooperation with donors (international institutions or bilateral partners) interested in working in this field.

▶ Both the CMC and the PRD have responsibilities for warning and informing the public, as defined in the laws for protection and rescue, and for crisis management. Nevertheless, the overlap between these two pieces of legislation allows for misunderstandings in relation to which organisation has responsibility for which aspects of public communication during a crisis, and raises the potential for uncoordinated and conflicting messages to the public.

3.1.4 Administrative, financial and technical aspects

During the risk assessment activities, the involved institutions demonstrated having the basic material and technical means necessary for determining the elements of the risk assessment.

Nevertheless, most institutions seem to have insufficient, outdated and inadequate material and technical resources and be unable to follow European standards.

The only exception to this rule is the PEMF, which presides over a pool of approximately 1 050 on-call (well-equipped) firefighters. The PEMF generally acts as the first line of defence against forest fires, and equips its units through a combination of grants, government, and internal funding. Revenues are derived from the contracts it fulfils as part of its role as North Macedonia's authority on forest management. Unlike North Macedonia's territorial units, the PEMF's on-call responders have access to equipment such as (relatively) modern vehicles, rubber suits, etc.

The lack of inter-institutional communication greatly disables and complicates monitoring, upgrading, evaluation

and reporting on risk assessment issues. Frequent internal personnel changes, and the political and economic situation, influence the quality of the process and often disrupt the implementation of lessons learned.

Training courses are carried out within the framework of their own systematic solutions or as part of joint training organised by international partners both at the internal level of North Macedonia and also in the context of regional meetings attended by other countries. All institutions mostly rely on international partners (the EU, UN, NATO etc.) and on bilateral relationships, such as with Japan and Denmark.

In terms of financing, all institutions in the area of DRR, from local to state level, have the obligation to plan budget funds for this purpose within their own activities that are implemented on DRR issues.

A special budget for DRR is not planned at any level of organisation.

3.2 Risk management planning

In accordance with the political and economic system, risk management planning is in great demand. This is because it is not a priority due to the complex economic, social and political situation. Most of the activities in this area are carried out within the relevant institutions and in accordance with the competencies defined by law.

3.2.1 Risk management planning process

Within the DRR system in North Macedonia, both the PRD and the CMC have certain rights and obligations. In some segments, these issues are interwoven within the competence of these two institutions. International institutions have expressed uncertainty about the place and the role of each of these institutions in the overall system of communication. There are also a number of national coordinators independent of these institutions, with the MoD, MoI, or MoEPP actively engaged in some jurisdictions.

As part of operational work, there are elements of cooperation between public and private institutions. However, this issue is not legally regulated by a single regulation.

3.2.2 Administrative, financial and technical aspects

At local level, communities receive funding from municipalities and are expected to maintain their own budgets. There is no linkage between the PRD's (national-level) funding and funding made available for practitioners at local level. If there is an emergency, local-level first responders – in addition to (depending on the crisis) the PEMF – are the first to react. The PRD can step in only when the local-level response is deemed insufficient.

In reality, local-level authorities do not maintain budgets and the municipalities always refer to the PRD. In the case of forest fires, an initial assessment of an event's ability to be contained is made by the PEMF, which can then opt to engage local (and, by extension, national) authorities at its own discretion.

North Macedonia is currently working on establishing a national communication system.

This notwithstanding, there is a need for reforms. During the floods a few years ago, the country's dual system (PRD and CMC) collapsed as a result of these organisations being unable to work together. The floods showed there was no working communication strategy and, while it should have encouraged the development of a strategy, it created further disagreement.

3.3 Good practices and recommendations

Risk assessment results have not been translated into specific recommendations for related policy fields, such as chemical, biological, radiological and nuclear (CBRN), urban search and rescue or healthcare (see Annex III for recommendations). Recommendations for policy development do not have adequate support in terms of full respect at national and local level. In the operational sense, the recommendations come to the competent institutions not in a binding form but only as informative material that can be used in further work on DRR.

Good practices:

- ▶ **Risk mapping and risk assessment tools**: CMC's risk mapping and risk assessment tools give the organisation a good direct data feed from across North Macedonia about emerging and developing risks. We recommend that the CMC should work with all other stakeholders in the risk and crisis management system to ensure access, and encourage active participation to generate accurate and up-to-date data in the system.
- ► Local risk assessments reinforce the national risk assessment evaluation: The system for national risk assessment built on local risk assessments forms a robust evidence base to identify capability needs across the country as a whole.

Recommendations:

- ➤ To ensure that the limited finances are spent in the most efficient way, a clear process to manage expenses could be defined. While gaps in staffing are cited by the CMC and the PRD as a problem, the peers note that, in the absence of a finalised national risk assessment and corresponding capability assessment, it is not possible to say with certainty that the current organisational headcount in the PRD and the CMC is necessary to counter the risks faced by North Macedonia. Indeed, the team observed that the total number of police, fire and civil protection personnel who are properly equipped and trained would appear sufficient to deliver an effective risk and crisis management system, relative to the size of the country and when compared to the levels of personnel in other European countries.
- ▶ The lack of coordination between the PRD and the CMC at regional level weakens the ability of the two organisations to join up the national system and should be addressed. The CMC operates a system of eight regional centres and 35 municipal offices, while the PRD also has 35 municipal locations but does not have a regional structure. The CMC and the PRD's municipal locations are not always co-located the peers observe that, if the two organisations were kept separate, such co-location would improve day-to-day working and information flow between the two organisations.

4. Preparedness

The Law on Crisis Management²¹ and the Law on Protection and Rescue²² pertain to preparedness. Other documents include:

- ▶ the National Strategy for Rescue and Protection adopted by the Parliament every five years;
- ▶ the National Risk Assessment adopted by the government; and
- ▶ the National Plan for Rescue and Protection adopted by the government.

The Law on Crisis Management and the Law on Protection and Rescue deal with emergencies. But certain elements of these laws overlap and lack harmonisation.

This leads to inoperability, misunderstanding and mismatches in the complete phases of DRR (from analysis to action in emergencies).

The long-standing economic crisis continues to have a significant impact on the flexibility of action in case of emergency. Overlapping jurisdictions, through horizontal and vertical structures, leads to uncertainty in the functioning of the system.

4.1 Disaster preparedness and contingency plans

The Law on Protection and Rescue places a general obligation on the country's institutions, local self-government units, trade companies, public enterprises, organisations, services and citizens' associations to plan for and organise steps, activities and procedures of a preventive and/or operational nature in accordance with the principles, norms and procedures outlined in the PBBS.

► This general duty, which appears unqualified, is unlikely to lead to the development of appropriate disaster preparedness plans, unless accompanied by effective guidance to each organisational level about what is expected of them.

All institutions, from local to state level, are obliged to review and update their plans periodically. International practice requires continuity of analysis and updating of plans according to certain plans determined by timeframes. The peer review team was not presented documentation from which it would be visible how frequently North Macedonia is updating these planning documents.

²¹ The Official Gazette of R.M No. 29/05.

²² The Official Gazette of R.M No. 36/04,49/04,86/08,18/11.

In order for emergency plans prepared by different stakeholders such as the PRD, the CMC and other national and international organisations to be successful, North Macedonia must take important steps to define the roles and mandates of the institutions. As there is no experienced body that can coordinate and lead effectively on the ground, the communication is slow and often redundant. The government's cooperation with NGOs and the volunteering sector is also severely lacking, with these organisations' assets often being inefficiently deployed, if deployed and/or requested at all.

The system must be completely restructured to improve its efficiency. Risk assessment is currently geared towards response rather than prevention.

The PRD is in charge of adopting a plan for protection and rescue from natural and other disasters, and the local self-government units adopt such plans at the local level. For crisis management issues, public enterprises, public institutions and services, and trade companies have an obligation to plan for the protection of employees, other persons who are affected by them and material goods.

Plans are activated in accordance with the laws determined by the actions following receipt of information related to the emergency situation. All the institutions, from local to state level, are activated, according to the collected information, in the planned response to the emergency situation and complete activation of the plans.

At national and local level, the exchange of information between the institutions on one side, and between the institutions and non-governmental sector on the other side, is difficult, ad hoc and determined by the current situation.

There is no standard operating procedure for the exchange of information. The CMC is the main carrier of the system for collecting and exchanging information between local and national centres.

On the contrary, the distribution of information to international partners is done in a timely manner through situational reports.

4.2 Collaboration with stakeholders

There is a low level of interinstitutional cooperation, which takes place within the framework of minimal cooperation in crisis situations. The representatives of all the institutions with whom the peer review team met expressed dissatisfaction with the level of cooperation. There is a certain level of cooperation between the PRD and the private sector in the form of workshops and training.

Civilian military cooperation takes place in accordance with existing legal frameworks. In accordance with the Law on Defence of North Macedonia, the armed forces of North Macedonia is obliged to assist the authorities in the event of major catastrophes, or according to the request of the competent civil authorities.

According to the information provided by the representatives of the institutions during the peer review meetings, it is clear that there is a pronounced desire for cooperation, for organising joint training and for planning events and programming budgetary funds in this field. The armed forces of North Macedonia are regularly trained in their own plans in relation to assisting civilian emergency structures, and certain training programmes exist in cooperation with international partners through projects such as NATO Next-Generation Incident Command System (NICS) and the CMEP Council.

However, in the absence of an agreed national risk assessment and assessment of national capabilities and gaps, it is unlikely the military can provide the capabilities required in a range of emergencies.

One of the key outputs of national risk and capability assessments should be a clear set of requirements for the military.

4.3 Capability analysis and planning

Capacity analysis has shown that the competent institutions have units and equipment, as well as potential for training and education, that are not at the level of the prescribed European standards.

In line with the complex situation in economic and political terms, there is a lack of opportunities to fund significant changes in the development of operational power, education, training and equipping. Competent institutions make annual plans of a certain level of progress.

According to the information received during peer review visits, North Macedonia's government does not have enough financial resources to support the planned capacity development.

The existing capacities are insufficient to reflect on the harmonisation of available capacities and possible DRR scenarios.

4.4 Training and exercises

According to the normative legal documents, the PRD has established a training centre that should be the primary carrier for training and conducting exercises within the institutions of North Macedonia. The peer review team could see that the capacities of the current training centre do not meet the basic needs in the processes, based on European standards.

While the peer review team was informed that a new training centre was promised for the future, there does not appear to be a plan to design, finance and deliver such a centre. A combination of factors, including insufficient infrastructure, professional staff, financial resources and systemic disorganisation, in terms of poor communication between the main stakeholders in the field of DRR, means that the existing training centre of the PRD does not have an adequate opportunity for quality work.

There is no formal legal document that would regulate the strategy in this area.

Within the regular activities, with extremely modest capacities and financial resources, planned and executed trainings and exercises are proportionately modest. There was evidence of some results and lessons learned as a result of exercises, but the peer review team interlocutors emphasised the lack of financial resources and low inter-departmental communication both at the national level (horizontally) and among the different levels of institutions (vertically).

North Macedonia actively participates in all training and exercises organised by NATO, the EU, bilateral partners and other international organisations. However, the problem of insufficient equipment remains.

North Macedonia has a number of **EU-trained search and rescue teams** and flood-related modules, but the peer review team was not provided with any information regarding these teams' certifications and/or registration in the UCPM.

4.5 International and regional collaboration

The requesting and sending of international assistance is regulated by national legislation from various fields. Special attention is given to facilitating the border crossing procedures in these cases. The Law on CMC, Article 43, defines the method of requesting and sending international assistance, as well as the role of the CMC in these processes. On this legal basis, a standard operating procedure was prepared on how to request and send international assistance and manage inter-agency coordination.

North Macedonia is a signatory of the Memorandum between North Macedonia and NATO on facilitating border crossing procedures during emergencies.

As a Participating State of the UCPM, North Macedonia follows Host Nation Support (HNS) guidelines²³ as well as NATO Civil Emergency Planning (CEP) Guidelines. The above-mentioned standard operating procedure (p. 273) defines the formation of the HNS team in the event of receiving international assistance.

²³ https://ec.europa.eu/echo/files/about/COMM_PDF_SWD%2020120169_F_EN_.pdf

Following the independence of North Macedonia, many countries have pledged assistance. But this help is hindered by a lack of a clear overview of its own requirements, and North Macedonia has ended up with a disconnected set of collaboration programmes. These programmes²⁴ represent a basis for regional cooperation. Considering the geographical, political and economic position of North Macedonia, it is difficult or almost impossible to deeply utilise the DRR system in accordance with the forms demanded by EU institutions.

In addition to the above-mentioned regional and international cooperation, North Macedonia has three air tractor-type aircrafts and is in the process of procuring another aircraft of this type. The planning documents envisage the possibility for these aircrafts to participate in fire-fighting activities in North Macedonia, and according to the stated needs and financial possibilities, they can be sent to rescue activities in the region and beyond.

All international activities are planned on an ad hoc basis depending on the current situation on the ground. Most commonly, immediately after the occurrence of a large-scale emergency, stakeholders at the local level require national and international assistance solely because of their own lack of capacity and lack of financial resources.

The national plan has no segments that would address the issue of planning international assistance.

On the other hand, the CMC maintains North Macedonia's only 24/7 contact point in their national permanent HQ. Their eight regional offices also have 24/7 shift patterns. (The ERCC operational contact point for the European Commission is housed in the PRD.)

Taking into account the capacities of North Macedonia's institutions in charge of international cooperation, cooperation with international organisations takes place in accordance with the possibilities and needs. The PRD and CMC exchange timely information with the EU's Emergency Response Coordination Centre, NATO's Euro-Atlantic Disaster Response Coordination Centre and the UN's Office for the Coordination of Humanitarian Affairs. Most often, this occurs in situations where there is a need to engage forces from local or international components of the DRR system.

²⁴ To reiterate: Operation Florian; the PRD's relationship with the UCPM; and the CMC's relationships with NATO, GIZ, the UNDP, JICA, as well as the OSCE's police training projects.

4.6 Risk communication

The CMC has the responsibility to warn the public in the event of emergencies, through the activation of early warning systems. The national alerting arrangements include sirens and the national broadcasters (TV and radio), but interviewees informed the peer reviewers that these arrangements had lacked investment and exercising for many years.

The peers note that neither the PRD nor the CMC have developed contacts with mobile network providers who could provide a means to alert all mobile users in the country or a specific geographic area.

There is a need to develop a means to alert all mobile users in the country or a specific geographic area.

The law for Protection and Rescue requires trade companies, public enterprises, institutions and services to establish early warning systems. It is not clear how (if at all) this legislative requirement is enforced. The most common way of informing the public is through the media. Media usually provide the first information about such events. The competent institutions cooperate with the media to inspect the provision of adequate information. The information is compiled in the professional services of institutions such as the PRD, CMC, Mol, MoD and MoH.

The peer review team did not have the opportunity to meet with media representatives. The team did meet with individuals responsible for communications and media within PRD and CMC. Both organisations have developed their own media contacts and strategies. It was not clear to the team if the two organisations coordinate their respective media strategies during a crisis.

Media are an important factor in informing the public in potential cases of a major disaster.

Nevertheless, according to the available data, there is no training planned for the media representatives in emergencies.

4.7 Good practices and recommendations

Good practices:

- ▶ Positive synergy between state organisations and private companies: Ongoing collaboration between state organisations and private companies, for example between the PRD's training division and petrochemical companies to run joint exercises, will generate strong links that can be used during a crisis. We recommend that the PRD formalise this relationship by arranging one exercise involving the private sector every two years.
- ▶ Local volunteer fire service exemplifies a 'best practice unit': The volunteer fire service in Sveti Nicole has developed some strong relationships with national and international counterparts. These units exhibit high levels of morale, professionalism and leadership, and have gained access to international training programmes.

Recommendations:

- ▶ Reconsider funding and needs. The fire and rescue service, for example, appears to be underfunded and in need of better training and equipment. Decentralisation of responsibility for these units to mayoral and municipal level has resulted in significant variation in the financial support they receive. Several stakeholders cited a lack of institutional identity as affecting professionalism in these units. Training provision is ad hoc and, while required in legislation, not consistently enforced leading to what is likely a wide variation in quality of staff and responses across the country.
- ► The operational and strategic coordination among the police, fire/civil protection and medical forces should be improved, specifically regarding the 112 emergency number system. The introduction of a 112 system is a once-in-a-generation opportunity to develop and embed clear inter-agency cooperation processes.²⁵
- ▶ The need for improved training and equipment for fire and rescue forces, as well as additional capabilities, requires additional funding. While some specialised capacities are maintained, particularly aerial forest firefighting aircraft, basic capacities across the system require additional funding. Regional and municipal structures for both the PRD and the CMC appear to be very extensive given the geographic size of the country, but are costly to maintain particularly in terms of salaries).

²⁵ The UK's JESIP programme constitutes a good example in this regard: https://www.jesip.org.uk/home.

5. Key findings and recommendations

This report outlines good practices in North Macedonia's current system, before going on to outline identified challenges. Though the peers offer some recommendations vis-a-vis the good practices, these can be universally understood as constituting observations which should be either a) maintained going forward, or b) expanded upon. Because the challenges identified throughout this peer review are systemic and/or structural in nature, this report formulates a preferred strategy for addressing the factors they derive from, and offers a series of short-, medium- and long-term recommendations which – if operationalised by policymakers – could improve the safety and security of citizens in North Macedonia.

5.1 Good practices

- ▶ Insurance premium to fund capabilities: The PRD receives 12 % of IPT receipts on fire insurance policies to fund capabilities. This use of IPT constitutes a good mechanism to supplement tax receipts to fund the state's activities. We recommend that North Macedonia's government should look to extend this good practice to cover all risk areas covered by insurance products, with the PRD or other responsible agencies use this funding to develop the capacities it needs to drive risk reduction.
- ▶ **Risk mapping and risk assessment tools**: CMC's risk mapping and risk assessment tools give the organisation a good direct data feed from across North Macedonia about emerging and developing risks. We recommend that the CMC should work with all other stakeholders in the risk and crisis management system to ensure access, and encourage active participation to generate accurate and up-to-date data in the system.
- ► Local risk assessments reinforce the national risk assessment evaluation: The system for national risk assessment built on local risk assessments forms a robust evidence base to identify capability needs across the country as a whole.
- ▶ Positive synergy between state organisations and private companies: Ongoing collaboration between the state organisations and private companies, for example between the PRD's training division and petrochemical companies to run joint exercises, will generate strong links that can be used during a crisis. We recommend that the PRD formalise this relationship by arranging one exercise involving the private sector every two years.
- ► Local volunteer fire service exemplifies a 'best practice unit': The volunteer fire service in Sveti Nicole has developed some strong relationships with national and international counterparts. These units exhibit high levels of morale, professionalism and leadership, and have gained access to international training programmes.

▶ Passionate and driven individuals: There are passionate and driven individuals throughout North Macedonia's civil protection system who work collaboratively and effectively before, during and after crises occur. We recommend these individuals, whether professional or volunteers, should be identified at local, regional or national level and their passion and vision harnessed to train and enthuse others, and to develop the system as a whole.

5.2 Challenges and recommendations

The strongest message the peer review team heard, from every stakeholder, was that effective coordination within the system could be improved. Stakeholder responsibilities were identified as likely benefiting from clearer definitions, since existing laws overlap, offer ample room for interpretation, and incorporate non-standardised terminology (also relative to the UCPM). Every interviewee cited the competitive relationship between the CMC and the PRD. We observe that this is likely to be based on a number of factors, namely:

- ► Complex legislative basis for the system of risk and crisis management. Who does what?
- ▶ Need for direct and clear accountability for crisis management at the political level, both within municipal and national government structures and/or agencies. Who is in charge in an emergency, and accountable afterwards for the conduct of the crisis response?
- ▶ Need for direct and clear accountability for development of risk management capabilities at the national political level. Who is responsible for making sure the people, equipment and facilities work properly?

The peer review team also observed the following:

- ► The operational and strategic coordination among the police, fire/civil protection and medical forces should be improved, specifically regarding the 112 emergency number system. The introduction of a 112 system is a once-in-a-generation opportunity to develop and embed clear inter-agency cooperation processes.²⁶
- ➤ To ensure that the limited finances are spent in the most efficient way, a clear process to manage expenses could be defined. While gaps in staffing are cited by the CMC and the PRD as a problem, the peers note that, in the absence of a finalised national risk assessment and corresponding capability assessment, it is not possible to say with certainty that the current organisational headcount in the PRD and the CMC is necessary to counter the risks faced by North Macedonia. Indeed, the team observed that the total number of police, fire and civil protection personnel properly equipped and trained would appear sufficient to deliver an effective risk and crisis management system, relative to the size of the country and when compared to levels of personnel in other European countries.

²⁶ The UK's JESIP programme constitutes a good example in this regard: https://www.jesip.org.uk/home.

- ► The fire and rescue service, for example, appear to be underfunded and in need of better training and equipment. Decentralisation of responsibility for these units to mayoral and municipal level has resulted in significant variation in the financial support they receive. Several stakeholders cited a lack of institutional identity as affecting professionalism in these units. Training provision is ad hoc and, while required in legislation, not consistently enforced leading to what is likely a wide variation in quality of staff and responses across the country.
- ▶ Staff morale and level of professionalism within the national system has to be supported, providing efficient and clear instructions at operational level and a clearer vision regarding the mandate at political level. It is recommended that enhanced focus is established by creating organisations with clear objectives that aim at incentivising innovation and high performance, while discouraging inefficient and low-quality working standards that could affect the overall organisation's objectives.
- ➤ The need for improved training and equipment for fire and rescue forces, as well as additional capabilities, require additional funding. While some specialised capacities are maintained, particularly aerial forest firefighting aircraft, basic capacities across the system require additional funding. Regional and municipal structures for both the PRD and the CMC appear to be very extensive given the geographic size of the country, but are costly to maintain (particularly in terms of salaries).
- ▶ Additional funding might also be required to upgrade the system, facilities and equipment. The country would benefit from the identification of a political leader with ownership at national level, as this individual could advocate for funding in governmental spending discussions. The team recommend that the PRD should be incorporated into a ministry as soon as possible to ensure a clearer route for funding, and associated public accountability, for the fire and rescue/civil protection system.
- ▶ The lack of coordination between the PRD and the CMC at regional level weakens the ability of the two organisations to join up the national system. The CMC operates a system of eight regional centres and 35 municipal offices, while the PRD also has 35 municipal locations but does not have a regional structure. The CMC and the PRD's municipal locations are not always co-located the peers observe that, if the two organisations were kept separate, such co-location would improve day-to-day working and information flow between the two organisations.
- ▶ Volunteer services appear to be organisationally inconsistent across the country. It is nevertheless noted that some are better trained and equipped than others. Volunteers should be more clearly integrated into the fire and rescue services, as part of 'retained forces'.²⁷
- ▶ Volunteers are not always compensated for their services. While legislation allows for the payment of salaries to those who volunteer during civil emergencies, these payments are rarely made due to lack of resources. Insurance for those who volunteer to cover injuries or death while conducting voluntary activities is not covered by the civil protection authorities. This is likely to undermine the potential for volunteers to come forward.

²⁷ See, for example, the UK's retained firefighters https://www.fireservice.co.uk/recruitment/retained-firefighters/ or Germany's Freiwillige Feuerwehr.

- ▶ Alerting or early warning systems could be improved to become more effective. While the CMC and the PRD both report good contacts with national print, TV and radio media, it is unclear whether these could be utilised in a coordinated way to issue clear messages in times of crisis. National alarm systems, present under the former political system, have not been funded, used or exercised for many years.
- ▶ Human resources management could be improved to become more efficient. There seems to be a lack of staff in certain sectors, with qualifications not necessarily matching requirements. In addition, evidence suggests individuals have overlapping responsibilities and are reluctant to engage in teamwork.
- ▶ Stakeholders at national level (CMC, PRD, etc.) would benefit from a higher degree of information exchange (both with each other and within their respective organisations). This contributes to North Macedonia's difficulties in formulating a comprehensive DRR strategy and effectively engaging international partners and NGOs. This derives from (among other factors) the lack of a nationwide Common Information Sharing Environment (CISE) system, interinstitutional competition and a weak culture of openness at national and/or organisational levels.
- ▶ International cooperation occurs in an ad-hoc manner, with the PRD managing outreach to the UCPM and the CMC having ad-hoc relationships with (among others) the JICA. Fragmentation surrounding this issue resulted in several international organisations reporting uncertainty visarvis the appropriate channels through which to engage North Macedonia on issues relating to risk management and DRR. The peer review team also observed that this fragmentation reduced the PRD and CMC's ability to provide relevant international partners (including NGOs) with critical information regarding the scope of crises and/or aid requirements.

5.3 Proposals for development

To further reinforce the ability of society to function in crisis situations, robust structures connecting the ministries, as well as different levels of government, should be put in place.

The current situation is compared with the desired situation in order to define strategic security objectives and identify the starting point for further development. The type and intensity of action to be taken should be proportionate, and those actions which most effectively improve North Macedonia's system for risk and crisis management should be prioritised, informed by a national risk assessment. While duplication should be avoided, enough redundancies should be built into the organisation (for example, standalone means of communication) to cope with crises.

To ensure that the state bodies and administration take action appropriate to the situation, they should pursue the following strategic goals on their own responsibility:

- ensuring the organisational capacity to act;
- ensuring staff capacity to act;
- ► safeguarding communication; and
- ensuring structural-technical operability.

The national emergency response system rests on the potential of the fire services, the units of local-level disaster management authorities and participating relief organisations, as well as any organisations participating pursuant to state laws on disaster management.

The following capabilities should be available as needed:

- ► self-protection;
- warning;
- ► structural protection;
- ▶ fire protection;
- evacuation/redistribution;
- ▶ medical Care;
- ▶ health protection;
- ▶ protection against the effects of chemical, biological, radiological and nuclear incidents (CBRN protection);
- ► technical assistance; and
- ► facility protection.

The entire population should have basic skills and knowledge in the following areas:

- ▶ safe shelter in threat situations;
- what to do in case of CBRN incidents:
- ► self-sufficiency;
- ▶ first aid; and
- ▶ firefighting.

These skills and knowledge are taught using appropriate information and training measures.

5.4 Principal recommendation on national arrangements for civil protection

Internal feedback and external observations indicate that the structure of the overall civil protection system in North Macedonia, as it stands, could benefit from several adjustments and modifications. There are a number of options available to improve the overall system.

Preferred option:

Merge the PRD and the CMC to form one Civil Protection Directorate. This Directorate should become part of the MoI. The Directorate will have two pillars: Operations (formerly PRD) and Strategy (formerly CMC). Each pillar will be headed by a Deputy Director.²⁸ Both Deputy Directors report to the Director of Civil Protection who oversees the work of both pillars. The Director in turn reports to the Minister of Internal Affairs. Consequently, the two existing laws on protection and rescue, as well as on crisis management, should be merged into one new law.

There should be one regional Civil Protection Office in each of the eight regions29 of North Macedonia (i.e. in Veles, Stip, Ohrid, etc.). These regional offices should act as the operational centres for civil protection in the regions. They should conduct the following activities:

- ▶ Hosting regular meetings of a Regional Resilience Forum to consider risk planning and prevention activity. This is a risk prevention and management structure not a crisis response HQ. Membership would include all organisations in the region with a role in civil protection, including (but not limited to) mayors (or their representatives); regional police, fire and ambulance services; hospitals; volunteer organisations and NGOs; public or private sector organisations responsible for any critical infrastructure in the region, including energy, transport, communications, food and water. It is also beneficial to include military planners for units based in the region in these forum meetings to ensure that their role in supporting civil authorities in an emergency can be considered.
- ► **Assessing risks present in the region** (e.g. flooding, forest fires), informed by the knowledge and expertise of the Regional Resilience Forum, and feeding this into the National Risk Assessment.
- Hosting and maintaining specific equipment needed for Disaster Response Teams (see below).
- ➤ Supporting regional mayors and municipalities when there is a crisis. A representative from the regional office would be present in the municipality crisis response HQ, under the relevant mayor. Their role would be to provide the link between the locally-led response and any national support, or mutual aid from other civil protection regions, which can be provided to support the locally-led response.

²⁸ We only set out the proposed structure here. The seniority of the leadership team would be a decision for the government of North Macedonia - our recommendation would be that the "Director" should be sufficiently senior to report directly to Ministers, oversee a large organisation, and have delegated authority to take budgetary decisions in line with financial procedures.

²⁹ Eastern, Northeastern, Pelagonia, Polog, Skopje, Southeastern, Southwestern and Vardar.

► Ensuring all relevant individuals and organisations within the region, particularly the territorial and volunteer firefighters, have sufficient basic equipment and are conducting regular training and exercising, in line with nationally-agreed standards.

In addition, local branch offices can be established in those locations where there is a verifiable additional need – for example, where it is necessary to hold specific response equipment in a particular location. These should be under the control of the relevant regional Civil Protection Office.

There is a need to retain a good level of decentralisation in the system, from local, to regional, to national. The overall number of response teams needs to be reduced and replaced by teams with better training and equipment for different response scenarios. This will ideally mean that a differentiation is made between local disaster response teams, regional teams and one national team. Depending on the form and scope of the disaster, additional layers could be activated as needed, from local to national.

The local municipalities should maintain a civil protection structure within the mayor's office, which is responsible for leading the municipality response to a crisis. While the mayor is ultimately politically responsible for risk and crisis management in their municipality/region, they should have an advisor in their staff. Under the current structure, this would ideally be the chief of the territorial fire brigades. Both should receive comprehensive training on civil protection issues, their roles and responsibilities, including the link with the Civil Protection Office. The mayor/municipality are responsible for financing all basic equipment for territorial and volunteer fire services (e.g. personal protective equipment, basic firefighting equipment, small vehicles and uniforms). Either the municipalities or the PRD should be responsible for financing the recruitment, training and exercising of all firefighters.

While the territorial fire brigades remain under the jurisdiction of the local municipalities, the PRD should appoint a national chief for the territorial fire brigades to ensure consistency and similar quality across all territorial fire brigades; this chief would be a professional firefighter and senior adviser in the Mol. The PRD should assign annual funding to invest in capabilities that could be delivered by the fire services, e.g. major vehicles, equipment for swift water rescue, urban search and rescue, firefighting and rescue at height; these decisions on capability investment must be informed by the professional views of experts in the national civil protection system.

The current role of the National Coordinator for the national platform on DRR seems to be not clearly defined. The peers would recommend providing a clear mandate – this should preferably complement the work of the PRD and the CMC, without interfering with their activity. In this regard, the National Coordinator's sole responsibility could become being the national focal point for the Sendai Framework on Disaster Risk Reduction, and to oversee the establishment of a national platform. The National Coordinator should additionally be made responsible for submitting reports to the UNISDR with the support of the PRD and the CMC.

The peers note that the recommendations above to improve North Macedonia's system of risk and crisis management closely match those made by a number of other groups, both inside North Macedonia and externally, over the last decade. North Macedonia should not wait to experience another emergency like the flooding in 2016 before addressing some of the issues identified by these internal and external reviews, and again in this report. One possible mechanism through which to enact incremental change (and to communicate the EU's commitment to improving the situation to authorities in Skopje) presents in the long-term embedding of EU-affiliated technical advisors within North Macedonia's crisis management system.

5.5 Justification

A change in the system, as suggested above, would align the civil protection system of North Macedonia with regional and international standards and best practices while retaining essential local characteristics and recognising the unique national context in North Macedonia.

The current system exhibits a certain degree of redundancy, which leads to unnecessary overlaps and duplications, as well as to an unclear division of responsibilities and to a suboptimal command and control structure. Human and financial resources are not always put to optimal use. The police forces already falling within the jurisdiction of the Mol would become part of a well-integrated civil protection system. Closer coordination between the fire, police and ambulance services are essential as North Macedonia looks to implement a 112 emergency number, with its associated requirement for a single coordination and dispatch arrangement. The proposed changes also make the implementation of an incident command system more feasible, as it facilitates the process of centralising incident reporting and response.

5.6 Other recommendations to improve the existing system

The peers maintain that the above outlined course of action represents the most pragmatic approach to delivering an effective system for risk and crisis management in North Macedonia. While these changes are being implemented, or in the event that the government chooses not to implement these wider reforms, the experts recommend that the following additional actions be considered.

If the government agrees to integrate a single organisation within the Mol, this body could implement (directly or through coordination with other bodies) these further suggested actions. Otherwise, organisations such as the PRD, the CMC, Mol, mayors and municipalities will need to implement these changes in a collaborative way.

5.7 Short term (<12 months)

- ▶ The PRD should conduct a zero-based review of expenditure, with a view to identifying efficiency savings that might be re-invested in equipment and training programmes. This should include an assessment of whether maintaining the current level of aerial firefighting capability is the best use of resources. A saving of one third of the annual running costs for the three firefighting air crafts would provide more than three times the current annual budget for capital investment, which could be spent on better equipping the municipal fire services. This would increase the capacity of the fire and rescue system as a whole, including increasing their ability (through better equipment and training of ground units) to manage forest fires.
- ▶ The government of North Macedonia should consider outsourcing its aerial firefighting capabilities to a private company. A private company could make the planes available for other disasters in the region or even wider Europe, whenever they are not needed in North Macedonia. The savings of an estimated EUR 500 000 to EUR 750 000 per year could be reallocated towards hiring more specialised experts and to provide better and more training and equipment to all layers of the civil protection system in North Macedonia. The government could continue to access these aircraft as a paid-for service, as and when required. As the capabilities of the ground firefighting teams improve, the need for aircraft would presumably reduce.
- ► The Mol should conduct a review of 112 implementation to ensure that this programme will integrate all emergency services, and will be accompanied by adoption of a national emergency services interoperability programme and an incident command system, agreed by police, fire, ambulance and hospitals as part of an integrated civil protection system.
- ▶ The PRD and the CMC should meet regularly at working level, as well as at Head of Unit level. Regular working sessions would help establish a common culture of cooperation and would help define a shared view on how to protect lives, property, infrastructure and the cultural heritage of the nation. More generally, a culture of openness and collective endeavour and shared objectives towards common goals should be fostered within North Macedonia's overall DRM system.
- ► In the same way, the Director of the PRD should attend regular meetings with the Heads of Section and the Heads of Section should have regular meetings with their staff. It is furthermore recommended that sections have internal meetings as necessary to improve their collaboration.
- ► Certain PRD sections could be combined to rationalise the use of resources. To this end, it is suggested to start an analysis.
- ► The PRD and the CMC should continue to harmonise the protection and rescue system in line with EU legislation.

5.8 Medium term (6-24 months)

- ▶ Even if wider reforms are not taken forward to combine the PRD and CMC into one entity in the Mol, the government should co-locate all the PRD and the CMC municipal offices to improve cooperation and information flow between the two organisations.
- ▶ More thought should be devoted towards the introduction of a CISE. The successful implementation of such a system would likely require changes in operational procedure on the part of (among others) the CMC, the PRD and the territorial firefighting services, and would require up-front investment in modest technologies (one regional firefighting HQ that was visited by the peer review team presided over only a landline) and training of staff. The CISE would ideally be compatible with and/or draw data from the previously recommended nation-wide 112 system, and would expedite North Macedonia's compatibility with the EU's TESTA system. The implementation of such a system could be supported and/or facilitated by North Macedonia's Ministry of Information Technology and Administration (MITA).
- ▶ The PRD (or its successor) should consider other models for regional presence. A hub-and-spoke model, using larger equipment facilities and greater use of rapid reaction teams, may deliver more effectively in a crisis than the existing network of municipal facilities. This will mean closing or merging some municipal/regional offices.
- ▶ The PRD (or its successor) should develop a mandatory training programme, with common content and delivered to a consistent standard, for all territorial and volunteer fire and rescue/civil protection staff, including regular refresher training. Attendance at basic training should be mandatory, and units not adhering to basic standards should be subject to management action and (as necessary) prosecution.
- ► The PRD (or its successor) should consider a national award for civil protection. This could be granted to those, particularly volunteers, who have made significant contributions to improving the safety and security of citizens in North Macedonia.
- ► The PRD (or its successor) should fund an insurance scheme for volunteers, to cover injury or death while on official duties. This would contribute to attracting more volunteers to serve in the civil protection forces.
- ► The Mol should conduct a legislative review, focussed on whether a single piece of legislation can replace existing laws for crisis management, protection and rescue and firefighting, in order to consolidate in a single unified law for risk and crisis management/risk reduction.
- ▶ The PRD and the CMC (or their successor) should develop a joint communications strategy to engage with the public on prevention, preparedness and response activities. This should include exploring collaboration with national mobile network providers as a means to deliver emergency messages to citizens' phones. The communication system should ensure maximum effectiveness for public awareness and be tested once or twice a year, and the results should be analysed.
- ► The PRD and the CMC (or their successor) should develop and make national, regional and local maps and plans available to the public and continue developing information products such as booklets or websites for schools to help the public protect itself.

- ► The PRD and the CMC (or their successor) should develop and make the flood hazard and risk maps and the information in the flood risk management plans available to the public. This would raise public awareness of flood risk and empower individuals to take their own prevention and preparedness measures.
- ► The PRD and the CMC (or their successor) should conduct a capability assessment, on the basis of a completed national risk assessment, to identify current and future capability needs. This should be used to ensure the military are clearly tasked with developing and maintaining specific capabilities to support the civil authorities in their crisis management tasks.
- ▶ Meetings with the PRD showed that there is a lack of structured crisis management training, as well as a lack of necessary funding. Initiatives to strengthen crisis management capacities through the training of multipliers for exercise-based training courses should therefore be considered. The main objective is to establish an independent training concept through the accompanied education of future lecturers.

For potential themes for further medium-term development, see Annex III.

5.9 Longer term (12-36 months)

- ► The PRD and the CMC (or their successor) should review staff roles in the regions to see whether there are efficiency savings that could be made and duplication that could be removed.
- ► The PRD (or its successor) should integrate volunteers into the fire and rescue services. This should allow some salary costs to be reduced, while increasing professionalism among both full-time and volunteer services.
- ▶ The PRD (or its successor) should develop leadership programmes for each of the emergency services (fire, police, ambulance and civil protection) and the institutions (the PRD, the CMC and municipal authorities) to identify and nurture the best talent, with reward and promotion based on performance. This could include partnerships with academia to provide qualifications in organisational leadership and risk and crisis management.

For potential themes for further long-term development, see Annex III.

Annex I – Terminology

Contingency planning — a management process that analyses specific potential events or emerging situations that might threaten society or the environment, and establishes arrangements in advance to enable timely, effective and appropriate responses to such events and situations.

Disaster — any situation that has or may have a severe impact on people, the environment or property, including cultural heritage.

Emergency services — a set of specialised agencies that have specific responsibilities and objectives in serving and protecting people and property in emergency situations.

Early warning system — the set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities and organisations threatened by a hazard to prepare and to act appropriately and in sufficient time to reduce the possibility of harm or loss.

Peer review — a governance tool by which the performance of one country in a specific area (in this case risk management and civil protection) is examined on an equal basis by fellow peers who are experts from other countries.

Preparedness — a state of readiness and capability of human and material means, structures, communities and organisations enabling them to ensure an effective rapid response to a disaster, obtained as a result of action taken in advance.

Prevention — is understood as (1) where possible, preventing disasters from happening, and (2) where they are unavoidable, taking steps to minimise their impact.

Resilience — the ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including by preserving and restoring its essential structures and functions.

Response — any action taken at national or sub-national level in the event of an imminent disaster, or during or after a disaster, to address its immediate adverse consequences.

Risk management capability — the ability of a Member State or its regions to reduce, adapt to or mitigate risks (impacts and likelihood of a disaster) identified in its risk assessments to levels that are acceptable in that Member State. Risk management capability is assessed in terms of the technical, financial and administrative capacity to carry out appropriate: (a) risk assessments; (b) risk management planning for prevention and preparedness; and (c) risk prevention and preparedness measures.

Stakeholders — actors with an interest in DRM include scientific communities (including engineering, geographical, social, health, economic and environmental sciences), practitioners, businesses, policymakers, central, regional and local levels of government and the public at large.

Sub-national level — entities at the regional or local government levels tasked with DRM.

Annex II – List of documentation

No.	Type of document	Title	Version
1	Legislation	Law on Protection and Rescue	2004
2	Legislation	Constitutional Law of the Republic of North Macedonia	1991
3	Legislation	Conception for Security and Defence	2003
4	Legislation	Law on Defence	2017
5	Legislation	Law on Firefighting	2013
6	Legislation	Law on Crisis Management	2005
7	Report	Potential and Capacities of the Subjects Directly Included in the Local Level System of Crisis Management	2009
8	Guideline	National Platform of the Republic of North Macedonia for Disaster Risk Reduction	2010
9	Guideline	Guidelines – Peer Review	2018
10	Guideline	General Peer Review Framework	2018
11	Progress report	North Macedonia: National progress report on the implementation of the Hyogo Framework for Action (2013-2015)	2015
12	Progress report	North Macedonia: National progress report on the implementation of the Hyogo Framework for Action (2011-2013)	2013
13	Report	Climate Vulnerability Assessment: Republic of Macedonia	2012
14	Report	Country Briefing for North Macedonia	2018
15	Report	Critical Analysis of the Systems for Crisis Management and Protection and Rescue in Republic Macedonia	2014
16	Report	Evaluation Report on the trial of Multi-Agency Working between Emergency Services in North Macedonia based on the UK Model	2016

Annex III – Themes for potential further development

Medium-term

Evacuation capabilities

Evacuation capabilities in the future should include the following:

- ▶ routing traffic;
- providing transport and safeguarding means of transport;
- evacuating persons in need of special care and special facilities, such as hospitals, prisons, psychiatric hospitals, homes for the elderly and those requiring long-term care;
- ▶ relocating and registering evacuees, reuniting family members; and
- ► maintaining security and order.

CBRN

To deal with CBRN incidents, the following capabilities are needed:

- ► CBRN detection;
- ► CBRN decontamination;
- personal protection;
- ► collective protection; and
- ► CBRN health protection.

Even apart from civil protection situations, it is crucial that all government agencies with relevant tasks in the CBRN area are effectively linked to each other. This includes the authorities of non-police threat prevention responsible for CBRN protection and the police agencies responsible for managing CBRN threat situations.

Capabilities needed for CBRN detection are:

- ▶ rapid detection of contamination by ionising radiation, biological agents and chemical substances;
- ▶ rapid localisation of the threat and georeferenced situation display;
- ► rapid, unambiguous qualitative and quantitative identification of the precise threat (e.g. type of radiation, type of pathogen, definitive substance identification);
- ► national network of laboratories to detect agents with bioterrorism potential from environmental samples;
- ► standardised sample-taking for CBRN;
- ▶ management/network of geographically dispersed CBRN detection units;
- professional situation assessment;
- ▶ availability of appropriate means of decontamination;
- ▶ decontamination of responders in personal protection equipment; and
- emergency decontamination of persons, decontamination of area surfaces, infrastructure and equipment.

When defining target groups for personal protection, a distinction should be made between CBRN responders, other responders and the public with different levels of protection needs.

Personal CBRN protection for CBRN responders enables them to operate in a contaminated area without endangering themselves. With this in mind, all CBRN responders should have personal protection equipment appropriate to their function, to enable them to work under CBRN conditions.

Personal protection for all other responders (police, relief workers, etc.) enables them to move in a contaminated area without significant danger to themselves. With this in mind, all other responders should have basic personal protection equipment and be appropriately trained in its use.

Capabilities of health-related CBRN protection are the CBRN-specific aspects of the following capabilities:

- ► medical services (pre-clinical care);
- hospital response planning (clinical care); and
- ▶ stockpiling of medical supplies (medicines and medical devices) to supplement conventional health protection.

CBRN-specific requirements for the medical service are:

- ▶ setting up and operating a patient holding area between a contaminated and uncontaminated area;
- ▶ setting up and operating a decontamination station for injured persons outside a hospital; and
- decontaminating injured persons.

CBRN-specific requirements for hospital response planning include:

- ▶ taking CBRN incidents into account in the risk assessment for the specific institution;
- cordoning off the hospital to avoid contamination;
- setting up a decontamination station;
- providing subject-specific basic and advanced training for staff; and
- ▶ providing medical care for those affected by CBRN materials.

In the case of purely biological agents, no decontamination is necessary, but self-protection and hygiene measures to prevent the spread of contamination must be planned.

CBRN-specific requirements for the stockpiling of medical supplies are:

- ► appropriate reserves of antibiotics/antiviral drugs;
- ► appropriate reserves of antidotes;
- ▶ appropriate reserves of potassium iodide tablets; and
- ▶ appropriate reserves of mechanical ventilators.

Long-term

Urban search and rescue capabilities

Urban search and rescue capabilities in the future should include the following:

- ▶ locating and rescuing people and property;
- ► clearing and demolition;
- ► shoring up structures;
- ▶ stabilising after damage; and
- ► water rescue and recovery.

Health care capabilities

Health care capabilities in the future should include the following:

- setting up and operating emergency shelters;
- setting up and operating food service facilities;
- ▶ providing basic care and referral to emergency administrative and mental health services;
- ▶ looking after persons in need of special care (such as the elderly, persons with disabilities, parents with small children, unaccompanied minors); and
- ▶ registering evacuees, providing documentation and tracing services.

To manage mass-casualty incidents, the following capabilities are needed in particular:

- ► medical services (pre-clinical care);
- ▶ hospital response planning (clinical care); and
- ▶ stockpiling of medical supplies (medicines and medical devices).

The medical service provides pre-clinical care, which includes all measures to protect the health of sick or injured persons, from the place where they became sick or were injured until they are transferred to a medical facility. **Its tasks include:**

- setting up and operating treatment stations;
- ▶ triage;
- ▶ patient transport;
- setting up and operating one or more patient holding areas;
- setting up and operating one or more emergency aid areas;
- ▶ providing emergency mental health care and referrals for further care;
- ► registering evacuees; and
- providing documentation and tracing services.

Hospital response and operational planning includes in particular:

- drawing up a risk assessment for the specific institution;
- making preparations to deal with identified risks;
- ▶ making organisational arrangements for alerts, operational command, triage, communications;
- ▶ training;
- exercises;
- ▶ hospital occupancy rates (for example, for specific days) broken down by departments;
- capabilities of critical hospital departments such as accident and emergency departments, operating rooms, intensive care units;
- > specialised resources such as beds for severe burn victims; and
- ▶ isolation wards.

Crisis management training

The topics should include:

- ▶ fundamentals and methods of crisis management;
- ▶ development and operational structure of crisis management;
- exercises; and
- ▶ preparation, steering and evaluation of exercises.

This should lead to:

- ▶ methodology for risk management/risk analysis;
- development of emergency plans;
- ▶ development of a crisis management concept for all levels/organisations;
- risk and crisis communication;
- ▶ training of trainers seminars on risk- and crisis management at administrative/strategic level;
- ► training for administrative decision-makers from all involved organisations regarding national risk and crisis management;
- ► tabletop exercises; and
- ▶ support for training infrastructure (staff training)/offering equipment.

The aim would be to:

- ► strengthen risk and crisis management capacities through training of multipliers for exercisebased training courses;
- establish an independent training concept through the accompanied education of multipliers and future lecturers in the area of risk and crisis management;
- ▶ train administrative decision-makers and politically responsible authorities; and
- ► have equipped training facilities available.

The content could be, for example:

- ► knowledge of public law/guidelines;
- ► tasks and responsibilities;
- ► staff organisation/staff work;
- ▶ decision-making process;
- ▶ development of curricula; and
- ▶ development of exercises.

