

# III 4 Sec Reports

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

Valeri Ratchev

### ЧЕРНА ГОРА:

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

Валери Рачев



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

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**IT4SecReports 122** "MONTENEGRO: Capabilities, Organisations, Policies, and Legislation in crisis management and disaster response" This report looks into the case of Montenegro, a former Yugoslav Republic, which had to develop its national civil protection system after 2006 almost from scratch, using what remained from federal institutions and applying up-to-date global and European practices and standards. It further presents the process of transition from "civil defence" to "civil protection." Small in size, but highly vulnerable to natural hazards, Montenegro often faces the consequences of earthquakes, wild fires and hydro-meteorological phenomena such as floods, droughts, heat waves, and heavy snowfall. Of particular concern are the frequent landslides and rock falls linked to the country's mountainous terrain. The report provides also details on the policy, legal and operational characteristics of the Montenegrin crisis management system.

**Keywords:** disaster preparedness, disaster response, Montenegro, legislative base, Directorate for Emergency Management

# IT4Sec Reports 122 "ЧЕРНА ГОРА: Способности, организация, политики и законода-

телство за управление на кризи и реагиране при бедствия" Докладът е посветен на Черна гора, бивша югославска република, която развива националната си система за гражданска защита едва след 2006г., започвайки от кота 0, като използва за основа остатъците от федералните институции и се опитва да приложи добри международни практики. По-нататък в доклада се разисква концептуалният преход от "гражданска отбрана" към "гражданска защита" и влиянието му върху процеса на изграждане на системата. Малка по размер, но силно уязвима, Черна гора често се налага да се справя с последиците от земетресения, горски пожари и хидрометеорологични феномени като наводнения, суша, горещини и обилни снеговалежи. От особено значение са също честите проявления на свлачища, свързани с характерния планинския терен. Докладът разглежда политиките в областта, както и правните и оперативни аспекти на черногорската система за управление при кризи.

**Ключови думи:** подготовка, отговор при бедствия, Черна гора, законодателна рамка, Дирекция за управление при извънредни ситуации

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#### Overview

Despite its relatively small territory and size of population, Montenegro is highly exposed and vulnerable to natural hazards. The country has to address primarily earthquakes, wild fires and hydro-meteorological phenomena such as floods, droughts, heat waves, and heavy snowfall. Of particular concern are the frequent landslides and rock falls linked to the country's mountainous terrain.

As most of the other former Yugoslavia countries, Montenegro's authorities have been developing the national civil protection system since 2006 on what remained from the federal institutions, applying modern global and European practices and standards. Gradually, the civil protection mechanism has moved away from the former "civil defence." In result, the country's framework on civil protection and disaster relief is not contained in a single formal document. However, in terms of legal arrangements and policy statements, the harmonisation with international norms and standards is relatively successful.

At the policy level, the National Strategy for Emergency Situations defines the risks and responsibilities of different state, local, and private authorities to deal with such. Directorate for Emergency Management has been established to implement mechanisms for prevention, preparedness and response. The Law on Rescue and Protection is the core legal act, supplemented by the Environment Law (1996), Law on Waters of (1995), Law on Protection against Natural Disasters (1992), Law on Protection of Air against Pollution (1980), and others. The principal political-managerial body on civil protection is the National Coordination, headed by the Prime Minister and the ministers are remaining members. The core administration of civil protection is provided by the Ministry of Interior and Administration (MoI).

Introduction of emergency regime is a right and obligation of the Parliament.

The civil protection concept is comprehensive and relatively well balanced among the state, the municipalities (21 in numbers), business, and private citizens.

By way of comparison with best practices, the country's civil protection framework does not require development of hazard-specific contingency plans.

Montenegro is engaged in the Southeastern European international co-operation for risk reduction and disaster response.

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#### List of Abbreviations

(SES) DEM (Old: Sector for Emergency Situations and Civil Protection) Directorate for

**Emergency Management** 

DPPI Disaster Preparedness and Prevention Initiative

DRR Disaster risk reduction

EC European Commission

EMCT Emergency Management Coordination Team

GIS Geographical Information System

HFA Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and

**Communities to Disasters** 

HMI Hydro-meteorological Institute of Montenegro

MoD Ministry of Defence

Mol Ministry of Interior (In some documents: Ministry of Interior and Public

Administration)

MRC Montenegro Red Cross

NGO Non-governmental organisation

OG Official Gazette of Republic of Montenegro

SEE South-East Europe (Southeastern Europe)

SFRY Socialist Federal Republic of Yugoslavia

SZCG Seismology Institute of Montenegro

UNHCR Unite Nations High Commissioner on Refugees

### 1 Policy

Until independence, a national policy on risk reduction had not existed in Montenegro. While in different state configurations, all responsibilities for disaster risk management and civil protection had been assigned to various ministries, having neither a single political document nor legislation.

After obtaining independence<sup>3</sup> in 2006, the new Government has adopted National Strategy for Emergency Situations, aimed to establish ground for building an adequate system of protection and rescue in emergency, and for policy on risk reduction based on prevention, mitigation and preparedness measures.

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<sup>&</sup>lt;sup>1</sup> However, Dr. Petar Miljanić has conducted the first systematic measuring in Montenegro on 1 September 1882 in Podgorica. The measuring included basic climate elements, atmospheric temperature, precipitation, and humidity, atmospheric pressure and wind direction.

<sup>&</sup>lt;sup>2</sup> For details see <a href="http://www.britannica.com/EBchecked/topic/1251949/history-of-Montenegro">http://www.britannica.com/EBchecked/topic/1251949/history-of-Montenegro</a>

<sup>&</sup>lt;sup>3</sup> Montenegro has a population of 620,145 people. The country, with a total area 13,812 km2, is divided into 23 municipalities. The capital city Podgorica, which has a population of 185,937 and the city of Niksic, with a population of 72,443, account for almost one third of the total national population. Populations of municipalities are small and the average is under 10,000 people.



Figure 1. Montenegro in the region of the Western Balkans

According to an international assessment (EU-UNDP, 2011), based of consultations with a wide range of stakeholders, the strengths and gaps for the disaster risk reduction, protection and relief policy of Montenegro include:

The key strengths of the country's policy on civil protection include:

- Experience with disasters;
- Documented damages;
- Easy and good communications flow;
- Relatively high level of autonomy of local governments in creating local development policies and measures;
- Existence of institutions such as the Hydro-meteorological Institute (HMI);
- Network of online stations that connect Seismology Institute of Montenegro (SZCG) with the neighbouring countries;
- A single system for developing assessments and plans at all levels;
- Good relationship with NGO's and international organisations;
- Experienced and knowledgeable management staff;
- Excellent informal relations and communication between the members of Directorate for Emergency Management with colleagues in the region and international community.

Weaknesses in country disaster risk reduction and relief capacity include:

- Montenegro's legal framework often lacks necessary disaster risk reduction (DRR) components. The country has no DRR National Action Plan and lacks the capacities to implement policies, strategies and mechanisms. To avoid overlaps and clarify responsibilities, standard operational procedures need to be developed for all stakeholders involved in disaster response;
- The absence of specific allocation mechanism for DRR in the national and local budgets leads to insufficient funding for many DRR-related areas. For instance, this prevents the HMI to operate a 24/7 analysing forecasting system;
- There is no post-disaster data collection and no database of hazards. A country-level Geographical Information System (GIS) database should be created;
- Risk assessments taking into account vulnerability and capacity considerations need to be strengthened at local level;
- Information management lacks established protocols and mechanisms. Little
  information has been exchanged; hydro-meteorological data for instance is not
  integrated into development plans, agriculture sectorial plans and the like. It is
  important to define ways for better utilisation of the seismic and hydro-meteorological
  data produced;
- The building codes are not properly enforced. Roles and responsibilities regarding the legalisation and approval of constructions should be clarified;
- Gender issues are currently not mainstreamed into the Montenegrin DRR planning. To tackle this problem, gender sensitive DRR training programmes should be offered to planners in ministries;
- Climate change adaptation mechanisms are hardly to find in the country's DRR approach, and no cross-border partnerships for production and utilisation of climate change related data exist.

#### 1.1 Risk Assessment

Little information is available concerning specific disaster risks vulnerabilities. Much data is merged with data from Serbia. Average annual losses from major disasters comprise 1.6 per cent of GDP (according to Emergency Events Database, EM-DAT). Vulnerabilities include outdated building codes, unplanned land use and forest and mineral resource exploitation. Capacity needs identified in various studies include the establishment of a National Platform (NP) for: coordinating disaster risk reduction; developing a country-level GIS database for spatial planning activities; preparing a disaster management plan for the country; and improving and developing legislation on land-use planning and building codes.

Climate-related hazards and a large number of illegal and irregular constructions have seriously affected Montenegro's vulnerability. Official sources believe that there are over 100,000 illegal and irregular constructions in Montenegro, which if evenly distributed in a country with an average household size of 3.4 members, suggests every other household is illegal or irregular. (ECIS, 2012)

Furthermore, national authorities consider that a vast majority of these housing units, especially those built on the coast, carry a high level of seismic risk and, as the country recently found out, are highly vulnerable to floods (there is no disaggregate data on risk of either hazards). The communities are likely to experience severe negative externalities of unplanned and unregulated construction such as congestion, lack of access to many services and pollution – from a disaster risk perspective a possible domino effect of earthquakes and a host of other climate-related disasters, including floods, is likely. Montenegro represents a case where a rush for growth has triggered haphazard development including increased human settlements, investment in high-risk coastal areas and exposure of a greater number of people and assets in the path of floods. All of this generates vulnerability and increases the risk of large-scale damages and fatalities during a disaster.<sup>4</sup>

Risk identification, assessment and monitoring is mainly organised and implemented at the national level. Threat assessments are to be developed according to the Rulebook on the Methodology for the Development of Threat Assessment Studies of Natural, Technical-technological and Other Disasters, which serves as basis for the Directorate for Emergency Management (DEM) to produce the National Plan for protection of extreme meteorological occurrences. In this endeavour, the DEM is supported by line-ministries that provide specific data and mostly qualitative analysis of threats. The Rulebook prescribes that threat assessments should describe characteristics of threatened territory, assess potential impact, human and material potential to respond to the hazard (and thus vulnerability of the area to disasters) and identify where material and technical resources, knowledge, organisational structures could be improved. The Montenegro Red Cross (MRC) has conducted vulnerability and capacity assessments in ten pilot communities.

Globally, the DEM has made progress on making DRR and risk identification a priority for a broader group of governmental institutions. However, many documents such as the Directorate National Emergency Plans (National Plan for Protection from Earthquakes etc.) still show little evidence of comprehensive risk assessment including vulnerability, hazard and capacity considerations. An international study (EU-UNDP, 2011) has concluded that more financial, technical and qualified human resources need to be allocated to the area of risk identification in order to advance the DRR agenda. Cooperation between institutions should be improved as well, allowing information exchange.

The National security Strategy presumes that "Natural, ecological, technical and technological disasters, man-made accidents, and epidemics of human or contagious animal diseases may generate challenges, risks and threats against national security." <sup>6</sup>

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<sup>&</sup>lt;sup>4</sup> ECIS, 2012

<sup>&</sup>lt;sup>5</sup> Available at <a href="https://www.google.bg/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=Rulebook%20on%20the%20Methodology%20for%20the%20Development%20of%20Threat%20Assessment%20Studies%20of%20Natural</a>

<sup>&</sup>lt;sup>6</sup> National Security Strategy, Art. 3.2, www.govme/biblioteka/1154096856.doc

#### A) Natural hazards

Among the most significant natural hazards in Montenegro are listed:

- Earthquakes;
- Heavy rains that cause floods and erosion, including river flooding;
- Heat waves, forest fires and droughts;
- Heavy snow, snowstorms and frost;
- Wind storms;
- Airborne sand from deserts;
- Some epidemics, which could be directly or indirectly related to hydrology, meteorology and weather conditions.

Almost all of Montenegro is exposed to frequent seismic events, especially along the coast, the Zeta-Skadar depression and the Berane basin. Around 40 per cent of country's territory is within a zone of anticipated seismic intensity, greater or equal to magnitude 8 on the Richter scale. This affects around 60 per cent of the country's population. A devastating earthquake in April 1979 occurred on the coast and wider area of Skadar Lake — it caused damages amounting to USD 4 billion, affected 100,400 people and killed 136 people. There is a high probability that future earthquakes would activate large landslides and rockslides.

Meteorological hazards in Montenegro include floods and drought. Floods are the most frequent natural hazard (there have been six destructive floods in the last 20 years). Pazickopolje and the Lim River valley are most prone to flooding. The biggest floods were recorded in the upper flow of the Tara and the Lim rivers in 1963, 1979, 1999 and 2000. The analysis of the last five years shows the increasing trend of frequency and intensity of extreme meteorological events in Montenegro. These include unprecedented levels of precipitation and increase of temperature during the winter, which disables the rain to turn into the snow. Historic data on flooding in Montenegro shows that in the period 1979-1997 there were 5 major flooding events; but in the six years, 2004-2010, floods occurred 6 times. The biggest floods were recorded in the upper flow of the Tara and the Lim rivers in 1963 and 1979, and then at the end of 1999 and in the first half of 2000.

The December 2010 floods had unprecedented water levels, the extent of flooded areas and damage occurred in 12 out of 21 municipalities in Montenegro. Transport routes, electricity



Figure 2. Detailed map of Montenegro

supply and communication lines between the northern region and the rest of the country were obstructed for some time and 1.5% of the population had to be evacuated. The "Post-Disaster Needs Assessment following the November – December 2010 Flood Disaster" in Montenegro, estimated the total damages and losses at approximately EUR 44 million, or 1.49% of the 2009 GDP.

In January 2012, the country faced a cold freeze, with heavy snowfall blocking access to lifeline services and communications for many communities in the mountainous areas. The Government had to declare a state of emergency and national and international resources had to be mobilised to provide humanitarian relief to the stranded areas.

Strong droughts and increased summer temperatures were recorded in the periods 1981–1990 and 2000–2009. The most dangerous natural disasters in Montenegro for the period 1900-2014 are presented in the Table below:

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<sup>&</sup>lt;sup>7</sup> Ulcinj Capacity Assessment Report. Third ECIS Disaster Risk Reduction Community of Practice Workshop, Montenegro, 4-6 June 2012.

Table 1. The most serious disasters in Montenegro 1900-2014

Disaster	Date	Number of total affected people	Number of deaths	Financial lost
Earthquake	April, 1979	100 400	136	US\$ 4 billion
Flood	3/12/2010	5000		EUR 44 million
Extreme low temperature with heavy snowfall	JanFebr., 2012	4500		
Flood	12/11/2010	1350		
Flood	26/11/2007	1086		
Flood	25/12/2009	450		

#### Earthquakes

A thorough analysis on seismic risk was conducted in 1984 by the National Seismologic Institute of Montenegro in cooperation with the Institute for Geological Research of Montenegro and the Institute for Earthquake Engineering and the Engineering Seismology Institute of Skopje (now in FYROMacedonia), largely through research into the effects of the devastating earthquake of April 1979. This study serves as foundation for current vulnerability assessment of building stocks. The mentioned institutions constructed a first seismic zoning map of Montenegro and the whole region in 1982. From 1984 to 1988, the Institute for Geological Research of Montenegro realised seismic micro-zoning and maps showing the degree of suitability for constructions for urban areas within all municipalities in Montenegro.

From 1987 on, the seismologic institutes of the former Yugoslavia has prepared a series of seismologic maps, which facilitated the establishment of building codes in seismic areas and the Regulations on Technical Norms for Building Construction in Seismic Areas<sup>10</sup> still in force in Montenegro. An isolated map for the seismogenic zone of Berane was also created. The last hazard map of 2005 is currently being updated, and as part of the NATO' Science for Peace Project it will be harmonised with the seismic hazard maps of other western Balkans countries. However, these are the only studies carried out in the field of hazard characterisation for Montenegro.

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<sup>&</sup>lt;sup>8</sup> The Structure, Role and Mandate of Civil Protection in DRR for SEE, (UNISDR, 2008), available at <a href="http://www.unisdr.org/files/9346">http://www.unisdr.org/files/9346</a> Europe.pdf

<sup>&</sup>lt;sup>9</sup> Emergency and civil security Directorate of the Ministry of Interior, 2005, National Strategy for Emergencies

 $<sup>^{10}</sup>$  Official Gazette of SFRY no. 31/81 with amendments no. 49/82, 29/83, 21/88 and 52/90

The DEM considers as a critical priority to enlarge seismic risk assessments to cover the whole national territory, especially for the most populated municipalities located in high-risk zones such as Budva, Herceg Novi, Bar, Ulcinj and Podgorica.

One of the biggest challenges is the large number of informal settlements; these complicate the development of risk analyses because it is difficult to ensure that the data corresponds with reality. (EU-UNDP, 2011) The entire area of Montenegro, and especially its coastal and central part (Zeta-Skadar depression and the Berane basin), is a seismically active area, exposed to low- and medium-intensity earthquakes, and occasionally to devastating earthquakes of large magnitude.

Modern research has confirmed the lasting existence of a high level of seismic activity and earthquake hazard in this part of the lithosphere, practically the entire region of Montenegro. The coastal area, the Zeta-Skadar depression and the Berane basin should be highlighted as significant seismically active areas of the country.

The earthquake of 15 April 1979 at the coast and wider area of Skadar Lake had a devastating effect. 101 people were killed in Montenegro and 35 more in Albania (in Shkodër and Lezhë counties), while the injured reached 1172 and 382, respectively. After the earthquake, 100,000 people were left homeless (of which 20% were in Albania).<sup>11</sup>

Damage surveys of circa 58,000 buildings in the affected areas of Montenegro (6 coastal and 6 inland municipalities) showed that worst affected was Ulcinj municipality with 47% of its building stock classified as collapsed or destroyed, followed by the municipality of Bar (37%). Severely affected were also the municipalities of Budvar, Kotor and Cetinje (all three lost circa 22% of their building stock). In total almost 15,000 buildings were destroyed (16% of which in Albania) and another 25,000 were damaged (49% of which in Albania and 4% in Croatia). Damage to historic buildings and other heritage sites of Montenegro was particularly serious, with over 1600 cultural monuments being affected as well 33,000 of works of art and valuable collections. The old towns of Ulcinj, Bar, Budva, Kotor, and Herceg-Novi were so badly damaged that their entire artistic contents had to be rescued and stored elsewhere, while the old towns of Budva, Ulcinj and most of Kotor were entirely evacuated as they were in a highly dangerous condition.

The cost of the earthquake according to the Yugoslav government's final estimate was 4 billion USD including 275 million USD indirect losses (7.5% of Yugoslavia's GDP in 1979).

The National Strategy of Emergency Situations (2006) evaluates the seismic risk through out the country in the following way:

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<sup>&</sup>lt;sup>11</sup> Damage was also significant in coastal areas of southern Croatia (particularly in the old city of Dubrovnik) and in Southwestern districts of Bosnia-Hercegovina.

Table 2. Seismic risk, area and potentially affected population in Montenegro<sup>12</sup>

Region	Maximum intensity	area		Population	
		Km²	%	people	%
Coastal region	IX	1,900	13.8	151,000	24.4
Podgorica-Danikovgrad region	VIII	3,030	21.9	205,000	33.1
Central region of Montenegro	VII	7,600	55	229,000	36.9
Seismogenic zone of Berane	VIII	340	2.5	20,000	3.2
Northern region	VI	940	6.8	15,000	2.4

More recently, the seismic activities are concentrated along the seacoast and the Southeastern part of the country. According to the HMI, last three years the strongest earthquake has been on November 3, 2012 with 3.0 Richter magnitude in the area of Radanovića.

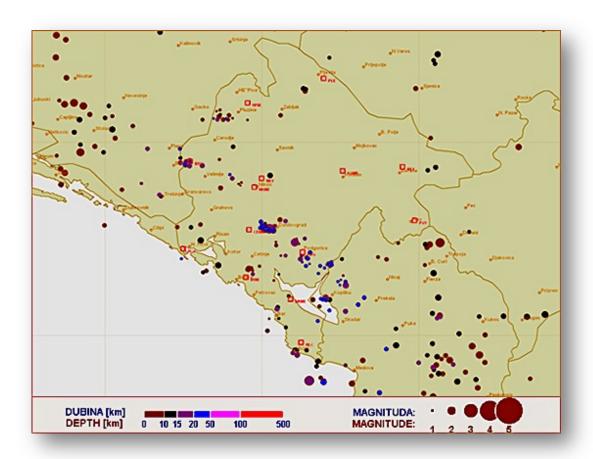


Figure 3. Seismic activities in Montenegro in 2012. 13

<sup>&</sup>lt;sup>12</sup> Source: National Strategy of Emergency Situations (2006)

<sup>&</sup>lt;sup>13</sup> Source: http://www.seismo.co.me/maps/jan2010.htm

Heavy rains that cause floods and erosion, including river flooding

Floods are the most frequent natural hazard (there have been six destructive floods in the last 20 years). Pazickopolje and the Lim River valley are most prone to flooding. The biggest floods have been recorded in the upper flow of the Tara and the Lim rivers in 1963, 1979, 1999 and 2000.

The best and most fertile land in Montenegro is regularly flooded. The Pazicko polje is vulnerable to flooding, and flood events were reported there in 1980 and 2001. The valley of River Lim at the estuary of the River Moraca, and the Zeta plain are also susceptible to flood. Flooding occurs irregularly in other areas due to the karstic structure.

With average flowing off, which is 40 litres/s/km2, and in cubic capacity it is about 19,5 km3/year, Montenegro is a part of 4% of the world territory with biggest average flowing off. Water is the country's biggest natural resources as 95,3% of watercourses are formed within the country (both source and drainage basin). (UNDP, 2011)

The December 2010 floods had unprecedented water levels, the extent of flooded areas and damage occurred in 12 out of 21 municipalities in Montenegro. Transport routes, electricity supply and communication lines between the northern region and the rest of the country were obstructed for some time and 1.5% of the population had to be evacuated. The "Post-Disaster Needs Assessment following the November – December 2010 Flood Disaster" in Montenegro, estimated the total damages and losses at approximately EUR 44 million, or 1.49% of the 2009 GDP. (ECIS, 2012)

#### Extreme heat and droughts

According to the available data, i.e. in a series of measurements since 1949, and at some stations and since 1958 until the present day, it is evident that since 1998 extreme heat has started appearing more often, and especially during August. In the Northeastern regions of Montenegro (confluence of the Tara and the Lim), maximum annual precipitation in mm/day has been on the rise since the 80's. However, there is no systematic increase and it has been strictly localised. Strong droughts and increased summer temperatures were recorded in the periods 1981–1990 and 2000–2011.

#### Cold weather

In January 2012, the country faced a cold freeze, with heavy snowfall blocking access to lifeline services and communications for many communities in the mountainous areas. The Government had to declare a state of emergency and national and international resources had to be mobilised to provide humanitarian relief to the stranded areas.

#### B) Technological hazards

As well as natural hazards, Montenegro's ageing industrial base present major risks for the population. As UNISDIR study illustrates, in a train crash killed 45 people because of intrinsic problems in railway system.

Major technogenic hazards include oil storages along the seacoast, mines in the mountains, steel factories and several small chemical plants, transport and railroad infrastructure (including bridges and tunnels) and the electric grid.

In terms of its preparation for EU membership, Montenegro has indicated that the so-called Seveso II Directive, i.e. Directive 96/82/EC on the control of the major-accident hazards involving dangerous substances as amended by Directive 2003/105/EC, is at a very early stage of transposition. Full alignment to the Seveso II Directive is planned for 2015 by the adoption of a new Law on Environment in 2014, and a number of secondary legislative acts in 2015. The practical implementation of the Seveso II Directive has yet not started (as of 2013).<sup>14</sup>

#### 1.2 Policy and Governance

As has been reported by the EU, Montenegro stated that it has completed important steps towards building and upgrading its emergency management system, in particular by the adoption of the 2007 Law on Protection and Rescue, the National Strategy for Emergency Situations and the 12 national plans on protection from fires, floods, extreme weather, earthquakes, accidents etc. According to Montenegro, the current revision of the 2007 Law on Protection and Rescue will bring it more in line with the EU civil protection acquis and disaster management policies. The competent authorities are in place. For protection from floods, the responsibility is shared between the Ministry of the Interior and MoARD. For industrial accidents, competences are shared between the Ministry of Interior and the MoSDT. The Ministry of the Interior has established a Directorate for Emergency Management responsible for the preparation and implementation of emergency management actions. Montenegro has acknowledged that the organisation is facing a lack of financial resources and insufficient administrative capacity.

Montenegro has stated that it plans to apply to join the EU Civil Protection Mechanism, established by Decision 2007/779/EC (recast) before the end of 2013 with the aim of completing the necessary preparations and becoming a participating state in 2014. A decision on accession of Montenegro to EU Civil Protection Mechanism has been adopted by the Government on 1 August 2013. The Department for Emergency Management has around the clock operational English-speaking contact points with the Emergency Response Centre of the European Commission. (EU, 2013)

<sup>&</sup>lt;sup>14</sup> Source: <a href="http://ec.europa.eu/enlargement/pdf/montenegro/screening\_reports/screening\_repor

According to UNDP-Montenegro, <sup>15</sup> the Law on Protection and Rescue (2007) defines the responsibilities, rights and obligation of citizens, legal entities, local self-government, and state administrative bodies pertaining to protection and rescue. The Government adopted National Strategy for Emergency Situations in 2006. The National and Local Plans for Protection and Rescue are adopted at the national and municipal levels and at the level of specific companies. The National Strategy of Sustainable Development (2007) and Spatial Plan of Montenegro (2006) are other instruments identifying risk mitigation measures. The Montenegrin National Forestry Policy and National Forest Inventory identify potential threats to the forests. The Law on Montenegrin Red Cross identifies the Red Cross role in emergencies; training, evacuation support, family unification, tracing and first aid. The 2010 Law on Hydro-meteorological Matters and Law on Hydrographic Activities gives mandate to the Hydro-meteorological Institute of Montenegro to issue warnings.

The Ministry of Interior is mandated for risk management, preparedness and response since 2004. The Directorate for Emergency Management (DEM) subordinate to the ministry has been established in 2004 and has started considering DRR since 2010.

#### 1.1.1 Strategy scope and focus

The overwhelming national security document – the National Security Strategy of Montenegro, determines that the country should be ready to respond to variety of threats against national and international security by undertaking three missions:

- Prevention and management of vital threats,
- Crisis management for the purpose of promoting peace, and
- Defence.

The Strategy rules out that "Managing emergency situations caused by natural disasters, ecological, technical-technological (manmade), chemical, biological, nuclear and radiological disasters, epidemics, as well as consequences of terrorism and other hazards that might create risks and threats against the security of Montenegro and the region" is one of the core national security missions. <sup>16</sup> Within the mission Prevention and management of vital threats, the document states that all instruments of security policy should be used (in particular) for "...helping to relieve natural and man-made disasters in Montenegro and abroad; protecting people, critical national infrastructure and vital facilities..." <sup>17</sup>

The Government, for achieving this aim, will pay special attention to "strengthening the capacities and institutions responsible for management in emergency situations caused by natural, technical-technological (manmade), biological, chemical, nuclear, radiological and other accidents, ...' <sup>18</sup>

<sup>17</sup> National security Strategy, Art. 3.4, <a href="https://www.gov.me/biblioteka/1154096856.doc">www.gov.me/biblioteka/1154096856.doc</a>

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<sup>&</sup>lt;sup>15</sup> Source: http://www.me.undp.org/content/montenegro/en/home.html

<sup>&</sup>lt;sup>16</sup> Ibid, p. 9, point 4.2.3

<sup>&</sup>lt;sup>18</sup> Ibid, p. 6.

Based on these propositions, the scope of disaster management strategy and policy of Montenegro include natural and man-made disasters at national, local, business and private levels. As the capacities of municipalities are relatively limited, the focal point of all preparations is at the Government and the governmental agencies.

At the documental level (National Security Strategy, National Strategy for Emergency Situations and Law on Protection and Rescue), strategy and policy apply an integrated approach to disaster management that includes preventive and operational plans and operations. Disaster risk reduction and resilience have not been introduced yet, despite that some elements have been implemented through the recent international programmes (UN, World Bank, EC).

However, Montenegro does not use the concept of 'civil protection' as one of the core Government functions. Instead, the Law on Protection and Rescue stipulates that 'Civil protection shall consist of civil protection units, protective and rescue equipment, buildings and devices.' (Art. 56)

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

Disaster data is poorly integrated in Montenegro. Because of its relatively short history as an independent sovereign state, much data is still merged with data from Serbia and former Yugoslavia. Institutionally, a DEM division – Department for Risk Assessment, is responsible for the repository and management of the national database on risks.

In order to create the necessary preconditions for the successful and efficient management in protecting and saving, it exercised a system of continuous monitoring of all possible causes of emergencies, as well as re-evaluation of the elements of the relevant hazards, in particular:

The National Strategy for Emergency Situations prescribes the following set of monitoring and evaluation requirements:

- Creation of new and improvement of existing technical capacity for reliable continuous monitoring of all natural phenomena and technological processes, as well as biological hazards, which can result in disasters such as: seismological, hydrological and meteorological phenomena, as well as radiological, environmental and health conditions and parameters;
- Equip existing laboratories and establishment of new laboratories necessary for an
  efficient detection technology and radiological accidents, in order to effectively
  prevent and reduce accidents,
- Develop modern integrated information systems (GIS) for automated monitoring of all important processes as the basis for system management in emergency situations;
- Periodically re-evaluate all types of important hazards in Montenegro, in order to provide valid data for reliable preventive action and emergency management;

 Provision of the institutions engaged in monitoring natural phenomena and technological accidents with relevant equipment and training.<sup>19</sup>

The Rulebook on the Methodology for the Development of Threat Assessment Studies of Natural, Technical-technological and Other Disasters stipulates that threat assessments should constantly stay up-to-date. Therefore, they are subject to compulsory analysis at least once a year. To enable the harmonisation of contents between different levels, the Ministry of Interior/municipalities submit their reports to municipalities/companies. The Assessments are to be stored in print and electronic version within the Ministry of Interior, the competent self-government body at local level and legal persons or entrepreneurs within companies. <sup>21</sup>

However, it seems that the Rulebook's methodology is not widely acknowledged or practiced, particularly at municipal level, notably because of limited capacities. According to an international study (EU-UNDP, 2011), the Montenegro Red Cross, for example, does not use the existing risk identification methodology either, and receives risk information only in emergency cases and through the DEM rather than on a regular basis.

The hydrological, meteorological, oceanographic, air quality, and water quality data, collected by the Hydro-meteorological Institute through its networks, is stored in the digital Oracle database. The HMI maintains two types of databases – meteorological and environmental – and there is a linkage with systems measuring various parameters (radiological, weather, seismologic, air quality), as well as operating procedures for providing data to relevant services. The HMI does not collect or keep any separate hazards statistics, but statistics for high wind, heavy precipitation and extreme temperatures can be produced for each synoptic observation station.

Local community units collect data on the impact of hazards on the population: police units report on the impact of landslides and rockslides on transport. However, they are rarely consulted regarding this data.

An international study concludes that currently no evidence of modern disaster risk reduction information management technology. Data is scattered amongst various players and no formal mechanism has been developed to store or access it. There is no central depository of hazard-related data, no data storage bank to facilitate data collection and dissemination. Although

<sup>20</sup> Rulebook on the Methodology for the Development of Threat Assessment Studies of Natural, Technical-technological and Other Disasters Article 16

<sup>&</sup>lt;sup>19</sup> Exert from National Strategy for Emergency Situations, V.3. MONITORING I EVALUACIJA HAZARDA

<sup>&</sup>lt;sup>21</sup> Rulebook on the Methodology for the Development of Threat Assessment Studies of Natural, Technical-technological and Other Disasters Article 17

<sup>&</sup>lt;sup>22</sup> From the IHMS web-site <a href="http://www.meteo.co.me/">http://www.meteo.co.me/</a> The Institute's analyses on averages, variability and extremes are available on their website.

DRR-related data can be accessed informally on demand, many stakeholders are unaware of its mere existence because of its unsystematic collection and updating. Beyond hazard-related data, vulnerability and capacity maps are not existent. Information sharing needs to be improved and systematized. (EU-UNDP, 2011)

The Ministry of Environment conducts risk monitoring but issues limited early warning messages. The ministry has developed predictive hydrological models and is considering the development of similar models for other risks. Existing risks are reflected in the ministry's development plans through policy documents – however, it is not clear how this information is used in the development of programmes of other governmental institutions. In case of forest fires, there is no monitoring and prevention mechanism in place, even in protected areas. (UNDP, 2012)

Seismological Observatory in Montenegro is responsible for the monitoring of seismic hazards – probably the best-monitored hazard in the country. Other hazards are monitored to a lesser extend or not at all.

The Institute of Hydro-meteorology and Seismology (IHMS), by using its network of monitoring stations (10 automatic stations, 20 climatological stations, 60 precipitation stations and 51 hydrological stations, out of which 23 are automatic) provides data on a regular basis to the DEM and other government organisations. According to an UNDP study, the institute does not have a specific methodology for risk identification when monitoring floods, droughts and fires. The IHMS has counted on the support of the World Meteorological Organisation (WMO) for risk assessment and monitoring. The study also concludes that lack of funding and human capacity is a concern for the smooth functioning of the institute. (UNDP, 2012)

Montenegro has joined the ARGOS consortium<sup>23</sup> to enable better identification and monitoring of chemical, biological, radiological and nuclear threats.

#### 1.1.3 Policy for Prevention

Prevention, within the disaster risk reduction strategy, has been considered and addressed by the Montenegrin authorities only since 2010. Montenegro is slowly getting aware of the possibilities existing regarding this issue, for instance through earthquake-resistant design, spatial-city planning and preparation against earthquakes to alleviate seismic risk.

The National Strategy for Emergency Situations prescribes the following set of prevention priorities:

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<sup>&</sup>lt;sup>23</sup> ARGOS is a Decision Support System for crisis and emergency management for incidents with chemical, biological, radiological, and nuclear releases. The current member countries of the ARGOS Consortium are (November 2014): Australia, Brazil, Bosnia-Herzegovina, Canada, Denmark, Estonia, Ireland, Lithuania, Macedonia, Montenegro, Norway, Poland, Serbia, and Sweden: http://argosconsortium.org/members.html

- It is necessary to build facilities and installations in accordance with the local risk of emergencies and with respect to technical norms;
- Microbiological laboratories must be certified and permanent supervision of their work shall be established;
- It is necessary to intensively implement monitoring of transportation of dangerous goods;
- The arms, military equipment and dual-use goods regimes should be strengthened;
- Appropriate plans for protection against all hazards must be developed; the plans shall
  be concrete and focus on prevention the occurrence of harmful effects from
  emergencies as well as on rehabilitation in case they happened;
- Conduct a periodical (at least once a year) review of the readiness of responsible personnel and mobile teams for all types of assumed potential disaster;
- Provide reserves of necessary materials for all anticipated disasters;
- Establish preventive measures to protect sources of drinking water supply of large urban areas;
- Develop national contingency plans in case of emergencies;
- In cases of accidents, interventions need to be coordinated between institutions and with the local authorities.<sup>24</sup>

At community level, municipalities have the responsibility to build their own capacities. Thus, their development processes are mostly ad hoc and depend on their respective budgets.<sup>25</sup> In flood-prone areas like Berane, Ulcinj or Rozalje, local municipalities are building embankments as preventive measures, but processes like these vary according to municipalities.

Risk mitigation measures were integrated to a good extent into the spatial development plan, even though vulnerability due to different hazards has not been worked out.<sup>26</sup> The Vienna Declaration (2004) has recognised the construction of illegal settlements in the countries of South-East Europe as evident problem.<sup>27</sup> As a signatory state, Montenegro is now committed to undertake measures necessary for defining causes of illegal construction and initiating and implementing reforms in the field of sustainable urban development and housing policy through appropriate inspection and supervision. Illegal construction in some local self-governments has been significantly reduced, e.g. in the capital Podgorica. However, lack of professional personnel for execution of the works related to inspection supervision<sup>28</sup> and disrespect of regulations by legal entities and natural persons hamper the state's efforts to suppress illegal construction and to improve existing legislation in the area of spatial planning.<sup>29</sup> As one of the measures to reduce seismic risk, the municipalities have to define

<sup>26</sup> http://drace-project.org/index.php/map/montenegro

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<sup>&</sup>lt;sup>24</sup> Based on Chapter V.4. PREVENTIVNE MJERE;

<sup>&</sup>lt;sup>25</sup> Law on Protection and Rescue, Article 41

<sup>&</sup>lt;sup>27</sup> Vienna declaration is available at <a href="http://www.stabilitypact.org/housing/f%20-%20050415">http://www.stabilitypact.org/housing/f%20-%20050415</a> <u>Vienna%20Declaration.pdf</u>

<sup>&</sup>lt;sup>28</sup> Spatial Plan Status Report p.69

<sup>&</sup>lt;sup>29</sup> Spatial Planning Support Project Revised Work Plan September 2010 – August 2011

procedures for seismic risk to be assessed and considered when elaborating local planning documents and urban development.

An environmental assessment taking into account seismic risk and climate change is compulsory for the construction of critical infrastructures such as bridges, schools and hospitals. However, whether the responsibility of approving construction lies at the municipal or central level is not always clear. (EU-UNDP, 2011)

#### 1.1.4 Policy for Preparedness

At national level, the National Strategy for Emergency Situations (2005) provides a basis to respond quickly to technological and natural disasters. Simulation exercises to test the strategy in reaction to earthquakes have been carried out in collaboration with international experts in Danilovgrad. However, funding is an issue and these exercises highly depend on donor support.

The Rulebook on Methodology for the Development of Protection and Rescue Plans<sup>30</sup> provides a more systematic guidance on the policy for preparedness. The Rulebook establishes how contingency plans for the a) prevention, b) crisis management and c) early recovery should be developed at national level, local level and within companies. To comprehensively address the three disaster management phases, the following aspects should be covered:

- Spatial planning issues,
- Regulate river flows,
- Control torrent,
- Protect from fire,
- Monitor,
- Build local early warning systems,
- Distribute protection and rescue tasks,
- Prepare water sanitation and install potable water sources, and
- Implement health measures.

Plans should also define which body is accountable for taking decisions, transmitting information to the 112 Centre, executing and managing mobilisation, making reports, and where funding and personal and material resources are to be found.

It requires also a layered map to be created at national level (1:200 000), identifying population density, threatened zones, and border crossings where international aid and rescuers could potentially arrive. At local level, 1: 25 000 maps should help locate temporary settlement areas, access roads for intervention, evacuation routes, zones where to place refugees, medical facilities. Similar map should be created for companies (places for administration of first aid, shelters).

<sup>&</sup>lt;sup>30</sup> Official Gazette of Montenegro 13/07, Rulebook on methodology for the development of protection and rescue plans, <a href="http://www.questionnaire.gov.me/Annexes/Annex082.pdf">http://www.questionnaire.gov.me/Annexes/Annex082.pdf</a>

#### 1.1.5 Policy for Response

The Law on Protection and Rescue (Art. 11) regulates the policy for response in the following way:

"Activities and practices that are mandatory conducted in the time of risk, are especially:

- 1) activation of protection and rescue units;
- 2) implementation of evacuation and care and support for the population and material goods;
- 3) preventing the spread of risk and risk consequences and
- 4) coordinating the activities of participants in protection and rescue."

At national level, the Emergency Operations Centre situated within the Emergency Management Coordination Team (EMCT) operates standby troops. At local level, Municipal Teams for the Management of Emergency Situations include members of the Montenegro Red Cross (MRC), who are volunteers, and a representative of the DEM (professional rescuers), and are led by the mayors.<sup>31</sup>

Protection and rescue operations are conducted by civil protection units of the government, fire-fighting units, local government units, specialised protection units, business organisations, airborne (helicopter) and terrestrial fire units, trained volunteers, and employees of Ministry of Interior, which have passed the state licence exam for working on protection and rescue affairs. More than 4000 people not including the Army and Police units can be counted on to respond to any emergency. <sup>32</sup> From the 10,000 Red Cross volunteers, 1,000 are operational on a daily basis.

The DEM can additionally activate its local branches, local MRC units, as well as local Police Units and its operational helicopter unit. When needed, the MoD can deploy steady Civil Protection Units to complete resources and capacities of the DEM and municipalities.

The quality of protection services greatly depend of the municipality's financial capacity. A UNDP study cites the response of the municipality of Berane to the 2010 flash floods: 700 persons could be accommodated in sport halls and provided "with food, mattresses, blankets, cooking sets, hygiene items, potable water, baby formula and diapers". However, according to the report, this has been greatly due to external funding provided by the UNHCR, Caritas Luxemburg and UNDP (the MRC also provided some donations), and the funds were not sufficient to cover urgent repair of houses. 33

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<sup>&</sup>lt;sup>31</sup> Law on Protection and Rescue Official Gazette of Montenegro 13/07, 2007.

<sup>&</sup>lt;sup>32</sup> The numbers are provided by the Directorate for Emergency Situations.

<sup>&</sup>lt;sup>33</sup> UNDP, 2010, Montenegro flash floods early recovery support for riverside Berane.

#### 1.1.6 Policy for Relief and Recovery

The terms "relief" and "recovery" have not been used in the relevant legislation and documentation of Montenegro. However, the Law on Protection and Rescue (Art. 12) prescribes the policy of "elimination of risk consequences" in the following format:

"The activities and practices that mandatory conducted for the elimination of risk consequences are, especially:

- 1) Assessment of the damage and consequences;
- 2) Remediation of risk affected areas;
- 3) Ensuring and providing necessary assistance to vulnerable and affected population;
- 4) Implementation of health and hygienic and epidemiological measures;
- 5) Implementation of appropriate protection of animals and plants and animal and plant products and
- 6) Organising supply with resources for assistance and provision of utility services for a fast normalisation of life.'

There is no available information on the mechanism of post-disaster assessment and delivery of compensations at national level. It seems that the Government decides on case-by-case basis all consequence management issues.

According to the Law on Protection and Rescue (Art. 41), "The municipality shall, in exercising rights and obligations in the protection and rescue field: ... decide on the amount of budgetary funds for damages caused by risk." Based on this regulation, local committees conduct damage assessments at the municipality level. A special budget for disaster response is allocated to municipalities and managed by the mayor. However, citizens are not compensated in full. The municipality authorities decide the amount to be compensated, but usually it does not go beyond 50 per cent of the total cost of the damage (regarding construction, this practice covers both legal and illegal construction).

As a result, richer municipalities may apply higher standards for damage and loss compensation. In case the available budget in the municipality is not sufficient to compensate the citizens, the central level provides a mechanism to access funds for this purpose. According to Art. 76 of the protection and rescue law "Cost of accommodation of evacuated population shall be provided in the budget of Montenegro."

EU-UN sponsored study concludes that early recovery issues in Montenegro "... are only addressed as much as the budget allows it, which is very superficially, and not specifically incorporated into any strategies, legal acts, plans or institutional arrangements. Financial means are by far not sufficient to effectively allow communities to quickly recover in times of emergencies." (EU-UNDP, 2011)

#### 1.3 Financing

According to the Law on Protection and Rescue there are the following sources of disaster management funding:

"Protection and rescue shall be funded from:

- The budget of Montenegro;
- Municipal budget;
- Voluntary contributions;
- International assistance;
- Funds of business organisations, other legal persons and entrepreneurs;
- Other sources."

According to the Government report (MoI, 2014), the Budget of the Ministry of Interior for 2013, for the purposes of the Directorate of Emergency Management is at the amount of 2,552,337 euros.

The structure of the funds spent by positions is:

- Gross wages and employer contributions -1,474,081 euros;
- Other personal payments 280,567 euros;
- Expenses for materials 117,045 euros;
- Expenses for services 29,473 euros;
- Expenses for maintenance 376,623.83 euro;
- Annuity 90,000 euros;
- For other tasks 184,545 euros.

#### 1.3.1 Investing in preparedness

Neither that Law, nor any other document prescribes how the budget should be dedicated to risk reduction and crisis response. However, despite that the DEM has been working on DRR since 2010, at central level there is no budget to develop disaster risk reduction activities, as the existing budget is allocated to covering salaries. Furthermore, within other ministries, annual planning needs do not include specific programs oriented towards risk reduction so budgets cannot be allocated for them.

At the municipal level, spending on developing or implementing DRR measures is on ad hoc basis.

HMI is severely under-financed for essential parts concerning DRR and it does not have resources to operate a 24/7 analysing and forecasting system.

According to World Meteorological Organisation study, it can be expected that, if Ministries prepare adequate DRR programmes or projects, there could be possibility of funding from EC funds. UNDP has also channelled activities through the Bureau of Crisis Prevention and

Recovery, which could be directed at capacity development and improving risk assessment practices. (WMO, 2011)

Table 3 below provides information on the annual budget allocation in Montenegro and gives opportunity to compare national civil protection burden with the countries of SEE:

Table 3. Disaster management funding in Montenegro compered with the SEE countries.

Country	National Disaster Fund	Size (in millions of USD)	Annual appropriations (in millions of USD)	Local disaster funding
Albania	Civil emergency fund  Council of Ministers reserve fund (can be used for emergencies)  Ministries' reserve funds	0.4 17	0.4 annually if needed, plus additional budgetary appropriations in case of an emergency	Local government reserve funds
Croatia	Budget reserve	5.5	Annual allocations	Municipal budget funds
Bosnia and Herzegovina Fund for special reimbursement for protection and rescue		0.5	0.5 payroll tax	
Republika Srpska	Budgetary reserve		Annual appropriations	
Bulgaria	Republican fund*	31.25	Depends on annual budgetary appropriations	Municipal budgets
FYR Macedonia	State budget reserve The Solidarity fund	6.0	Annual appropriations  Donations	
Moldova	Reserve fund Agencies' reserve funds	2.3	Annual budgetary replenishments	2% of local budgets
Montenegro	Disaster assistance fund	0.52	0.52	
Romania	Intervention fund Reserve budgetary fund	5.0	Annual appropriations  Annual local budget appropriations	5% of local budgets
Serbia	Disaster Emergency Fund	1	1	
	Reserve Fund	21	1	
Slovenia	Budget reserve fund	40	Annual budget appropriations	

#### 1.3.2 Investing in consequence management

Concerning the size of emergency assistance, Montenegro does not regulate the maximum amount of aid per person or legal entity, in the case of large disasters. However, the emergency assistance typically covers only a small fraction of total damages, as the overall amount of aid is mainly limited to government budget reserves for emergencies. The amount, provided by the Government of Montenegro is up to 10 per cent (while in Slovenia compensation is 40-60 per cent of damages).

Municipalities in Montenegro dedicate to disaster management between one and three per cent of their budgets. Mayors manage this funds according recommendations from established committees. Presumption is that, if the disaster is significant and damages are above the local budgets capacity, than the Government to provide additional funding for reconstruction and compensation of people.

Concerned the specific requirements for pricing, reserving or reporting disaster risk underwritten by local insurers, Montenegro companies are allowed to form equalisation or other reserves, but only after a formal approval by the Insurance Regulator.

In terms of personal and family insurance culture, most of the population do not have (or are not aware of the need for) insurance against natural disasters – it barely exists in Montenegro. It is the responsibility of the citizens to activate the insurance, but since it is not mandatory by law, the population and companies don't see the need for it. In practice, citizens expect the State to somehow compensate them. Furthermore, it is not clear if the insurance system in the country is capable of issuing insurance products covering natural disasters, as there is no proper risk assessment that could be used by the insurance companies for costing their products.

#### 1.4 Policy review, Evaluation & Organisational Learning

#### 1.4.1 Post-Disaster Assessment

Art. 36 of the Law on Protection and Rescue requires the Government to "...submit a report to the Parliament of Montenegro and the President of Montenegro on the type, cause and scope of the resulting state of emergency, the measures and activities taken to protect and rescue and estimates regarding the possible future developments."

However this requirement, the policy on civil protection, obviously, is a part of the Ministry of Interior's internal planning, implementation and accountability process. There are not publicly available plans or annual reports neither at Ministry of Interior, nor at Directorate for Emergency Management levels.

A collection of data and assessment has not been established yet in a formal manner that makes post-disaster policy review unavailable.

Recently, the post-disaster recovery is not introduced into disaster preparedness planning.

UNDP-Montenegro has organised 'Post-Disaster Needs Assessment following the November – December 2010 Flood Disaster in Montenegro' observing damages to households and livelihoods in Berane.

#### 1.4.2 Departmental Lessons Learned systems

No available data.

#### 1.4.3 Centralised (national) Lessons Learned system

The Department for Risk Assessment within the DEM is responsible for managing a national risk database, 34 but no formal mechanism for the collection, storage and accession of information exists at national level. There is little retrospective country-specific disaster data

<sup>&</sup>lt;sup>34</sup> The Structure, Role and Mandate of Civil Protection in DRR for SEE, 2008

available and data collection is generally undergone ad hoc at different levels, mostly by local committees, and by organisations pertaining to hazards, which impacted them. There is an extensive belief expressed by the stakeholders that a standardised methodology for impact assessment is needed.

The DEM has an inventory of information about some past floods (local commissions made damage assessment reports in the aftermath of the 2009/2010 floods, some information is available concerning the 2000 droughts), but the data is neither organised nor harmonised. The same holds true for data from the Ministry of Agriculture, which prepares surveys on damages caused by floods at municipal level when farmers claim for indemnities. The only comprehensive post-disaster assessment was developed for building stocks after the 1979 earthquakes in order to serve as basis for a study assessing the vulnerability to seismic hazards. (EU-UNDP, 2011)

However, it is difficult this achievements to be qualified as lessons learning system.

#### 1.4.4 International exchange for Lessons Learned

Obviously, the authorities in Montenegro are aware with the fact that the country has not sufficient resources and capabilities to protect, rescue and relief in a case of major natural or technological disasters. The National Strategy for Emergency Situations reflects this understanding, requiring to establish communication with relevant international institutions, which in the case of a major disaster could render appropriate assistance, such as the International Red Cross, WHO, FAO, UNEP, UNCOPS, UNIDO, IAEA, and others. The Strategy stipulates the importance of regional crisis management cooperation in SEE in order to gain new experiences and improving response capabilities.

#### 1.4.5 Regular policy reviews

The Law on Protection and Rescue requires the Government to "... submit an annual activity report to the competent working body of the Parliament of Montenegro." (Art. 36)

#### 1.5 Resilience

The Montenegrin authorities do not implement the concept of resilience. There are neither legal, nor policy regulations on the use sustainability standards by public institution or private business.

## 2 Legislation

Following the dissolution of the Socialist Federal Republic of Yugoslavia (SFRY) in 1992, Montenegro federated with Serbia, first within the Federal Republic of Yugoslavia and subsequently, after 2003, in a union of Serbia and Montenegro established by adoption of the Law on Implementation of the Constitutional Charter.

Since 2003, and following the declaration of its independence on 3 June 2006, the Parliament of Montenegro approved a number of laws and regulations with the aim of modernising the old jurisdiction of the SFRY, as well as introducing new State competences. However, the legislation in force is still based on a large number of laws, regulations and decrees approved and implemented by the parliament of SFRY both in the frameworks of geophysical risk, meteorological risks, and industrial and technological risk.

Within this framework, civil protection represents a critical issue for the country, since historically Montenegro has suffered the dramatic effects of natural and technological disasters that have caused huge damage and suffering.

Specific laws relevant to civil protection have been approved as follows: the Law on Protection and Rescue, Law on Transfer of Dangerous Goods, Law of Explosive Materials and Law of Flammable Liquids and Gases.

The National Strategy for Emergency Situations, adopted by the Government of Montenegro in December 2006, can be considered as a foundation document for the modern structure of civil protection in Montenegro.<sup>35</sup>

#### 2.1 Crisis (emergency, disaster) management concept

In circumstances of a certain destructive natural or technological hazard, the National Strategy for Emergency Situations represents one of the strategic documents concerning national security with the aim to secure the state's acting and the efficient acting of other institutions in states of emergencies caused by all kinds of large-scale natural accidents, technical and technological accidents and epidemic infectious diseases, in order to decrease number of accidents through prevention activities and mitigate their consequences.

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<sup>&</sup>lt;sup>35</sup> Source: Building Resilience to disaster in the western Balkans and Turkey, <a href="http://seekms.dppi.info/countries/general-info-montenegrian/legal-institutional-framework/legal-framework/">http://seekms.dppi.info/countries/general-info-montenegrian/legal-institutional-framework/</a>

An "emergency" is a state caused by extraordinary circumstances' effects of natural or manmade character, which directly endanger people's lives and health, their property, environment, cultural-historical heritage in certain areas and it also represents a situation when a community is not capable of combating the consequences on its own but it needs help from the state and sometimes from the international community. Numerous victims, great damages and need for help are main features of catastrophes. Suddenly and drastically, the catastrophes create social and ecological misbalance causing worsening of hygiene-epidemic situation in the area.

Uncontrolled effects of few natural phenomena cause emergencies. In the geographic area that Montenegrin territory belongs to those events are most often earthquakes, huge rockslides (landslides), floods, long lasting extreme meteorological phenomenon, snow slides, fires on regional levels and other big natural catastrophes. Big technical-technological accidents may result in catastrophes and emergencies and those are accidents caused by damages on oil and oil derivate installations, transport accidents while storing chemical and toxic materials, explosive and radioactive substances, drinking water springs contamination, big traffic accidents, mining accidents, industrial accidents caused by explosions, radiological, biological-epidemical and other technical-technological accidents. Epidemic infectious diseases (epizooty and epiphytotic disease) as mass infections of people, animals and herbs may cause emergency.

The constant existence of a considerable level of risks that can be caused by natural and technical factors is unarguably proven in Montenegro by numerous experiences accumulated for centuries. As it was mentioned earlier, during the last few decades Montenegrin territory has been affected by variety of destructive hazards. It is realistic to expect for such natural phenomena to manifest themselves in the forthcoming period, but also for technical hazards as the consequence of the region's technological and industrial development of the region, not only on the territory of Montenegro but also of the influential neighbouring countries. From this point of view, the implementation of the Strategy has as the main goal defining considerable decrease of all kinds of losses, human, material, cultural and environmental – in circumstances of possible big catastrophes and technological accidents on short or long term basis. (WMO, 2011)

The National Strategy for Emergency Situations can be summarised in the following priority commitments:<sup>36</sup>

- Normative regulation of salvage and preventive action in order to protect against natural disasters, technical and technological accidents and biological hazards;
- Establishment of national system of disaster management through the Directorate for Emergency Situations and Civil Security as an organisational unit of the Ministry of Internal Affairs of Montenegro, which will functionally integrate all relevant

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<sup>&</sup>lt;sup>36</sup> Source: Chapter V of the National Strategy for Emergency Situations (translation from http://www.mup.gov.me/biblioteka/strategije)

institutions involved in the process of monitoring of natural and technological hazards, protection and rescue;

- Initiate social processes to long-term development of scientific research in the field of phenomenology of natural disasters and their impact on society;
- Strengthen the overall preparedness of the community and awareness of the importance and need for organised and effective social action in the prevention and treatment of adverse effects and emergencies at regional and local level;
- Improve the system of continuous monitoring of all significant natural, technological and biological hazards, in order to provide reliable and efficient detection and notification;
- Provide relevant and sufficient equipment and training of specialised institutions and individuals for protection and rescue in emergency;
- Take all necessary measures to prevent the occurrence and reduce harmful effects of disasters;
- Create a formal basis and establish international cooperation with other organisations for protection and rescue in the region in order to create conditions for regional rescue and relief in cases of large-scale emergences.

#### 2.2 General crisis (emergency, disaster) management law

The legislative framework of civil protection from natural and technological hazards derives from the National Strategy for Emergency Situations and includes:

- The Law on Protection and Rescue (Official Gazette of Republic of Montenegro no 13/2007);
- The Law on Water (OG RM, no. 27/07);
- The Law on Hydro-meteorological Services (OG RM, no. 26/10);
- The Law on Hydrographic Services (OG RM, no. 26/10).

The Law on Protection and Rescue provides the legal background for response to all disasters caused by natural and man-made hazards. In order to protect effectively the population and the material heritage against possible disasters and preventing the spreading of risk, the Law prescribes to conduct activities related to collection and processing of data on potential risks, establish information and early warning systems.

The Law mandates that these preventive activities include assessment of vulnerabilities<sup>37</sup> as well as development of plans for protection and rescue, spatial development and building buildings, establishment of a protection and rescue system and provision of material resources, personnel and other resources necessary to carry out the planned activities. The

<sup>&</sup>lt;sup>37</sup> Defined as "a qualitative and quantitative analysis of data on the possible hazards of the occurrence of natural disasters" "with predictions of their possible future course and consequences, the proposal of the level of protection against risk and proposal of preventive and other measures for protection and rescue."

Law enables the overall adequate functioning and gives to municipalities' competencies to act in cases of disasters.

Pursuant to Article 34 of the Law on Protection and Rescue, the Ministry adopted two documents: the Rulebook on the Methodology for the Development of Threat Assessment Studies of Natural, Technical-technological and Other Disasters and the Rulebook on Methodology for the Development of Protection and Rescue Plans.

The Law stipulates that the Directorate for Emergency Management coordinates the development of National Plans of Protection and Rescue. The National Plan for Protection of Extreme Meteorological Occurrences and the National Plan for Flood Protection derivate from the National Plan.

#### 2.3 Emergency rule

The Law on Protection and Rescue introduces the emergency rule as "state of emergency." It is stipulated, that state of emergency shall be proclaimed by the Parliament of Montenegro, based on Government proposal. Such a proposal should be made at the occurrence of a hazardous event, or after it occurred, if the hazard could not have been foreseen. The emergency rule might be proclaimed for the territory of Montenegro if there is imminent hazard that would affect or has already affected at least two municipalities.

State of emergency shall be introduced for a municipality if there is an imminent hazard that would affect or has already affected part or the entire municipality. In case of introduction of an emergency rule, the key role is of the Ministry of Interior. It is responsible to:

- Deliver the official communications about the hazard;
- Inform about the introduction of state of emergency and its scope, activities and measures to protect and rescue to be taken;
- Coordinate and command the task forces, implementation of mobilisation, timely notification and control of implementation of required measures and activities to protect and rescue, with the exception of search and rescue at sea;
- Keep records of task forces, resources and measures taken to protect and rescue in states of emergency.

However, the Law on Protection and Rescue and the other normative acts do not regulate what human rights and civil freedoms could be limited or dismantled by introducing "state of emergency" and for how long. Obviously, the presumption is that the parliament will be responsible enough to introduce only the necessary restrictions, on a concrete territory for as shorter as possible period.

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

#### Directorate for Emergency Management on Threat Assessment

Pursuant to Article 34 of the Law on Protection and Rescue, the Ministry of Interior has adopted two documents: the Rulebook on the Methodology for the Development of Threat Assessment Studies of Natural, Technical-technological and Other Disasters and the Rulebook on Methodology for the Development of Protection and Rescue Plans.

The Rulebook on the Methodology for the Development of Threat Assessment Studies of Natural, Technical-technological and Other Disasters delegates responsibility:

- To the Directorate for Emergency Management and other ministries for risk assessment on the territory of Montenegro;
- To the local governments in coordination with the Directorate for Emergency Management for the vulnerability assessment of municipalities and
- To companies with more than ten employees, again in coordination with the Directorate for the vulnerability assessment of companies activities and infrastructure.

#### The threat assessment shall include:

- An assessment of hazards or causes that may lead to the occurrence of disasters and the consequences that may arise for people, material and cultural goods and the environment;
- Determining the appropriate organisation of protection and rescue in order to prevent the occurrence of disasters or for purposes of rescue of people; and
- An assessment of needs and possibilities in the provision of human and material potentials necessary for achieving the estimated protection and rescue organisation.

#### Military

There is no legal basis on the role of the army in disaster management and disaster response. There are, however, a National Security Strategy and a National Defence Strategy. There are no by-laws and standard operational procedures (SOPs)on the role of the army on disaster management. The Ministry of Defence (MoD) has not been involved in the development of any of the legal documents related to disasters. This, however, does not exclude the co-operation between the MoD and the DEM, which have been working together during the floods in December 2010. The MoD is considering the development of internal SOPs for disaster response.

#### Construction

The Law on Construction establishes construction practice and construction codes. However, in reality new codes and practices are better applied to new constructions and to a lesser extend to older and illegal constructions. Although this particular law has a provision for disaster situations, most of the sectorial legislative documents do not mention DRR.

#### Water

The Law on Water defines the obligation of preparation of a General Plan for Protection from the Harmful Effects of Water (The current plan covers the period 2010-2016). It especially contains: works and measures, which are undertaken preventively and in the period of high waters for protection from floods and erosion; method of institutional organisation of defence; duties and responsibilities of the manager for protection; method for monitoring and recording data; method for early warning.

The law foresees the preparation of an annual Operational Plan for the Protection from the Harmful Effects of Floods. At national level, it should be prepared by the Water Department and the Ministry of Rural development and Agriculture (MoRA), while at local level it should be prepared by competent local authority, with the approval of the MoRA's Water Department. The Operational Plans determine the names of managers of protection against the harmful effects of water, headquarters, bodies and names of companies and other entities that conduct legal protection against the harmful effects of water and means for operational implementation of protection.

#### Hydro-meteorological service

The laws on "hydro-meteorological services" and on "hydrographical services" (2010), define the tasks of the Hydro-meteorological Institute of Montenegro (HMI). It states that the HMI has duty to:

- Produce non-scheduled meteorological and hydrological information and warnings in situation before atmospheric and hydro-sphere emergency situation;
- Organise emergency observation and measurement of the hydrological stations profiles
- Submit emergency information;
- Monitor weather and waters;
- Collect and analyse data;
- Prepare forecast;
- Inform and alert responsible agencies.

#### Air

There is also a Law on Environment and Air Quality. In 2007, the Government has adopted the National Strategy of Sustainable Development, which recognises climate changes and protection of ozone layer as a priority.

# 2.5 Specific to the regional and local authorities legal arrangements and regulations on emergency and disaster management

In the event of a disaster, the first responding level to protect and rescue the local population from natural and man-made disaster is the local level, as stated in the Law on Local Self-Government. In the event of a disaster, an emergency management team led by the mayor (which includes a representative of the DEM in a deputy position) is created, and it comprises all relevant authorities and stakeholders (including the Red Cross).

The protection services are managed locally and their equipment and training is provided with municipal funds. International studies report that few richer municipalities have an adequate mechanism to respond to emergencies, while most of them have very scarce means.

In case the municipality does not have enough means to respond to the disaster, it can request the Ministry of Interior for support. The DEM, based in the Ministry of Interior, has local branches, however its capacities at the local level are modest.

# 2.6 Legal regulations on the involvement of volunteers and specialised NGOs

The Law on Protection and Rescue determines that "Civil protection shall be part of a single protection and rescue system in states of emergency. Civil protection shall consists of civil protection units, protective and rescue equipment, buildings and devices." (Art. 56)

Citizens that reached 18 years of age shall be entities under obligation to participate in Civil Protection until 63 years of age (men) or 55 years (women). At the same time, all men and women older than 15 years may voluntarily participate in civil protection, with rights and duties of civil protection members. (Art. 59)

Under these circumstances, the citizens who voluntarily perform protection and rescue activities shall be organised in "specialised units." They have to be registered, certified and managed (during emergencies) by the Ministry of Interior. In case of engagement of crisis response operations the volunteers have to be compensated by the Ministry.

The Law determines that the Red Cross of Montenegro, as a volunteer organisation, shall especially do the following:

- "Perform search service tasks in view of collection and recording of data on evacuated persons, refugees, displaced and missing persons;
- Participate in giving shelter and accommodation of evacuated population, refugees and displaced persons, provision of assistance in the implementation of other

- measures that may contribute to the care and support for afflicted and vulnerable population, refugees and displaced persons;
- Run, organise, conduct or participate in solidarity actions for assisting vulnerable persons;
- Organise and train teams for activities in the field of social security, hygienic and epidemiological protection, care of the wounded and sick, rescuing on water and mountains and psychosocial support to the population and
- Advertise and organise voluntary blood donation actions, in cooperation with medical institutions for blood transfusion, keep records of voluntary blood donors, establish conditions for granting awards to voluntary blood donors and grant awards." (Art. 66)

The Law also provide opportunity business organisations, entrepreneurs, and other legal and physical persons to organise voluntary units. (Art. 67) These units shall be completely provided with resources and training by the establishment bodies, which are also obliged to submit annual and monthly activity reports to the Ministry of Interior and the mayor of municipality.

# 2.7 Legal regulations for international engagements of first responders and crisis managers

The Directorate for Emergency Management has signed on behalf of the country a number of bilateral partnership agreements, mostly related to cooperation in emergency response, with countries such as Bosnia and Herzegovina, Slovenia, Croatia, Macedonia, Greece, Serbia and the Russian Federation.

Montenegro also participates in regional and international frameworks in the area of disaster management such as Disaster Preparedness and Prevention Initiative, Programme for the Prevention Preparedness and Response to Natural and Man-Made Disasters (PPRD South), Civil-Military Emergency Preparedness, and the Organisation for the Prohibition of Chemical Weapons, among others.

However, the Law on Protection and Rescue does not provide any special regulations concerned the engagement of foreign first responders in emergencies on the Montenegrin territory and for sending Montenegro rescuers abroad. It only states that the Ministry of Interior shall "…cooperate with the competent authorities of other countries and with international organisations and institutions." (Art. 37)

# 3 Organisation

# 3.1 Organisational chart

In 2004, the Government of Montenegro has adopted changes and amendments to the regulations on the state administration. Under the terms of the new regulation, the Ministry of Interior and Public Administration has been made responsible for managing risks, managing civil protection and rescuing in emergency situations and managing relieving of consequences in the extraordinary situations (earthquakes, fires and other natural and technical/technological catastrophes).

The regulation also has established a Directorate for Emergency Situations and Civil Security as a unique body to coordinate Civil Protection in Montenegro. The Directorate has changes name in 2013 in Directorate for Emergency Management (DEM) and the ministry has been titled Ministry of Interior (MoI).

Ministries and state agencies, engaged in disaster management with different responsibilities and resources, include the Ministry of Interior (the DEM), Ministry of Defence, Ministry of Health, Ministry of Foreign Affairs and European Integration, Ministry of Transport and Maritime Affairs, MoRA, Ministry of Sustainable Development and Tourism, Army of Montenegro, Police Directorate, Agency for Environment Protection, Institute for Hydrometeorology and Seismology, Centre for Ecotoxical Researches, Medical Emergency Service, Montenegro red Cross, other.

Within the current legal and organisational framework, there are three levels of disaster protection and rescue: political, administrative and local (municipalities).

#### A) Political level

The key political leadership, guidance, coordination and control are provided by:

- Emergency Management Coordination Team (The Prime Minister heads the team and all ministers are members);
- Ministry of Interior (Directorate for Emergency Management is core national administrative authority on protection and rescue from natural and other disasters);
- Ministry of Sustainable Development and Tourism (Institute of Hydrometeorology and Seismology Service of Montenegro controls the waters, air, sea, and seismic activities).

#### B) Administrative level

The Directorate for Emergency Management (DEM) is the leading national agency responsible for issues related to disaster management, which is well established and recognised by other national and international organisations. DEM is responsible for:

Development of strategies, projects, programs and monitoring their implementation;

- Implementation of the process of harmonisation of legislation on civil protection with the EU legal system;
- Drafting of laws and regulations;
- Analysis and monitoring of the situation in the area of protection and rescue;
- Establishing programmes to equip and develop the system of protection and rescue;
- Preparing draft decisions on the provision of material reserves for the protection and rescue;
- Giving directions for the management of the protection and rescue and proposing measures to protect participants and rescue;
- Collecting data on threats, causes and consequences of emergency situations;
- Assisting in eliminating the consequences of emergencies;
- Applying control on the preparedness of emergency operational units;
- Preparing and monitoring the execution of the contract on the use and operation of specialised units;
- Prescribing technical standards of protection and rescue system in accordance with international standards;
- Planning and development of civil protection and alignment of its activities with the operational units of protection and rescue;
- Preparing proposals for decisions on sending overseas operating units for training exercises and humanitarian activities;
- Seeking and accepting help from other countries in the event of emergencies;
- Receive calls and information in emergency situations through a single Operational Communications Centre 112;
- Inspection within the jurisdiction and power established by law in the areas of:
  - Protection and rescue, transportation of dangerous goods, manufacturing, transportation, procurement, storage and use of explosive materials, storage, possession, transport, handling and use of flammable liquids and gases;
  - o Review of technical documentation;
  - o Transport and transit of arms, military equipment and dual-use goods;
  - Technical protection of people, space and facilities;
  - o Preparation, organisation and implementation of programmes for professional development and training of the operational units members;
  - Organising and implementing preventive, operational and remedial measures for the protection and rescue; carrying out rescue activities in the event of emergencies;
  - o Preparing and informing citizens in the event of emergencies;
  - Elimination of unexploded explosive devices;
  - Organisation and operation of the unit for extinguishing fires from the air;
  - Search and rescue operations from the air;
  - Pilot training, pilot simulator and mandatory technical rehearsal; implementation
    of the program of cooperation with international and regional organisations,
    institutions and other entities involved in the protection and rescue;
  - Preparation and monitoring of the implementation of international agreements in the field of protection and rescue.

The Directorate<sup>38</sup> for Emergency Management is divided into five divisions ("direkcia"), four departments and seven territorial units:

- 1. Division for Civil Protection and Humanitarian Aid
- 2. Division for Prevention
  - 2.1. Department for Risk Management
  - 2.2. Section for Management of Hazardous Substances
- 3. Crisis Management Division
  - 3.1. Department for Training and Operations
  - 3.2. Emergency Calling Centre 112
- 4. Helicopter Unit
- 5. Inspections and Prevention Division
- 6. Regional Emergency Units:
  - 6.1. Podgorica Regional Unit for the Capital City of Podgorica, capital of Cetinje, and Funtana and municipality of Kolasin
  - 6.2. Regional Unit for the municipalities of Niksic Niksic, Šavnik and Plužine
  - 6.3. Branch Office Bijelo Polje for the municipalities of Bijelo Polje and Mojkovac
  - 6.4. Regional Unit for the municipalities of Berane Berane, Roţaje, Andrejevica and blue
  - 6.5. Regional Unit for the municipalities of Pljevlja Pljevlja and Zabljak
  - 6.6. Branch Office Bar in the municipalities of Bar and Ulcinj Budva
  - 6.7. Regional Unit Herceg Novi for the municipalities of Herceg Novi, Kotor and Tivat

Division for Civil Protection and Humanitarian Aid. Its main duty is the identification and evaluation of the risks at national and local level, and the implementation of standard operational procedures for protection and rescue, usually based on the establishment of specific local Civil Protection Units. This Division has jurisdiction over the monitoring of the adoption of legislation, public education and awareness, the training of civil defence personnel as well as coordination sending and receiving humanitarian aid. This Division is also responsible for guidelines, strategies and programmes, and proposes draft laws relevant to the organisation and the functioning of the Civil Protection (institution) and monitors their realisation. The Division is responsible for the harmonisation of the regulations and laws in force in Montenegro with reference to EU regulations and international standards in civil protection.

As noted above, the *Division for Prevention* is divided into two departments:

 Department for Risk Management: It is responsible for the management of the national database of the risks as reported by the National Strategy for Emergency Situations. The duties of the Department encompass the drafting and development of strategic documents and plans at national or inter-municipal levels, cooperation with scientific bodies (universities), laboratories and other research institutions.

<sup>&</sup>lt;sup>38</sup> For the purposes of this study the rank of Montenegro's administrative units is presented within the hierarchy of "Directorate" that consists of several "divisions", each of which includes several "departments", while they are organised in sectors or sections.

 Section for Management of Hazardous Substances (HAZMAT): It has jurisdiction over the activities defined by the Law on Protection and Rescue and other regulations related to this area, including the construction of new buildings, the surveillance of warehouses containing dangerous substances, the transport of dangerous goods and military equipment, and the management of weapons.

The Crisis Management Division is also divided into two departments:

- Department for Training and Operations. It is in charge of the coordination of all organisations, companies, and State or local authority institutions in emergencies. The department provides municipal departments for protection and rescue and Civil Protection units with the equipment and training needed to cope with all types of risk.
- Emergency Calling Centre-112. The Centre uses the European emergency number 112
  and is designed to be a unique communication hub for all types of emergency. Once
  operational, it will process all the data and information relevant to emergencies,
  including protection and rescue activities and measures. The Centre will be responsible
  for broadcasting the information to the public, state institutions, legal entities, rescue
  units and other competent bodies and subjects for protection and rescue (including
  the ERCC).

Helicopter Unit (with the rank of division). The unit operates four helicopters - "Abell-412", "Abell-212", "Abell-206" and "Gazella", two planes type "Dromader" and two aircraft for fire extinguishing type "AT-802A Fire Boss". It is also responsible for search and rescue operations in Montenegro. The helicopters are also used for tactical transport of equipment and personnel in case of emergencies.

Inspections and Prevention Division. This Division controls functions and operations for protection and rescue; transportation of dangerous goods; manufacturing, transportation, procurement, storage and use of explosives; storage, possession, transport, handling and use of flammable liquids and gases; transport and transit of weapons, military equipment and dual-use goods. For facilities, in which are stored or used in technological process hazardous substances, the Division determines the zone of danger, security systems and other measures to increase security and reduce the risk of various fire-accidents, accidents, incidents, etc. <sup>39</sup>

Regional emergency units. They perform the following tasks: monitoring and enforcement of laws and other regulations for protection and rescue; assess the risk and protection and rescue plans; implementation of measures for the protection and rescue; formation and organisation units and teams of civil protection; coordinating the actions of participants in protection and rescue units of local self-government; training and exercises members of civil protection units; raising public awareness for emergency response; implementation of the mobilisation of civil

<sup>&</sup>lt;sup>39</sup> Source: Building Resilience to disaster in the Western Balkans and Turkey, <a href="http://seekms.dppi.info/countries/general-info-montenegrian/legal-institutional-framework/legal-framework/">http://seekms.dppi.info/countries/general-info-montenegrian/legal-institutional-framework/</a>

protection; collection, information processing and information; rescue activities in the formation of emergencies; proposing a system of measures for the implementation of established policy and forecasting consequences of legal decisions; perform other duties within the scope of the regional unit.

Protection and Rescue Task Forces perform all measures and operations for disaster management and include the following formations:<sup>40</sup>

- Civil protection units;
- Units for protection and rescue of municipalities (fire-fighting units, units for providing
  assistance to vulnerable and affected population and other protection and rescue
  units), organised as municipal protection and rescue services;
- Specialised protection and rescue units;
- Volunteer protection and rescue units;
- Units for protection and rescue of business organisations and other legal subjects and entrepreneurs; and
- Airborne fire-fighting unit.

According to an UNDP report as of 2011, the majority of municipalities do not have enough capacity to prepare and protect themselves from existing risks and hazards. The level of capacity is much lower compared to the central level. At the same time, it is the responsibility of the municipalities to fund the municipal protection service (local rescuers). However, in most of the cases, funding is limited to salaries only. Some municipalities, however, have established reserve funds for first immediate response and some have mid- and long-term development plans (as in the municipality of Bar). Nevertheless, plans do not, in most cases, include the existing risks and hazards. Information flow from institutions such as the Hydrometeorological Institute of Montenegro to municipal level is not regular and is not clearly framed. Municipalities are also not mandated to have cross-border cooperation with municipalities from neighbouring countries. (UNDP, 2011)

Institute for Hydrometeorological and Seismological Service of Montenegro (IHMS) is another organisation with important role in disaster risk reduction, mitigation and protection. The institute is under the Ministry of Sustainable Development and Tourism. The laws on "hydrometeorological services" and on "hydrographic services" approved in April 2010, define the tasks as to:

- Produce non-scheduled meteorological and hydrological information and warnings in situations before atmospheric and hydrospheric emergency situations;
- Monitor weather and waters;
- Collect and analyse data;

<sup>40</sup> Law on Protection and Rescue, Art. 14.

<sup>41</sup> Available in the local language at <a href="http://www.meteo.co.me/publikacije/Zakon%200%">http://www.meteo.co.me/publikacije/Zakon%200%</a>
20hidrometeoroloskim%20poslovima.pdf

<sup>&</sup>lt;sup>42</sup> Available in the local language at <a href="http://www.meteo.co.me/publikacije/Zakon%200%">http://www.meteo.co.me/publikacije/Zakon%200%</a>
20hidrografskoj%20djelatnosti.pdf

- Prepare forecast;
- Inform and alert responsible agencies

The IHMS has 112 staff, of which 59 are based in Podgorica. It is organised in the following way:<sup>43</sup>

Table 4. Organisational chart of the Institute for Hydrometeorological and Seismological Service of Montenegro

Department	Sector	Section (group)
Weather forecast and monitoring	Analysis and weather forecast; Meteorological monitoring	Weather forecast and modelling; Regional units; Satellite and radar meteorology
Meteorology	Climatology; Applied meteorology	
Hydrography and oceanography	Hydrology network stations; Hydrology analysis	Hydrography data and analysis
Water, air quality control	Water quality control; Air quality control	
Seismology	Instrumental and engineering seismology; Seismic data analysis and processing	
	Hydrometeorological Information systems	
	Administration and finance	
	PR and international cooperation	

The Department of Seismology in IHMS is in practice the Seismological Observatory of Montenegro. It exists since 1979 and is currently being transferred to the Ministry of Sustainable Development and Tourism and IHMS. The Observatory operates the seismic observation network, prepares regional and micro-local maps, and conducts research on earthquake effects on building structures, ground, water courses, and many more. The Observatory is organised in two departments within IHMS:

 Department for instrumental and engineering seismology responsible for recording of seismic data for earthquakes in Montenegro and its surroundings, technical maintenance of seismic and GPS instruments on all stations in seismological network, calibrating of seismographs and accelerographs, upgrading of equipment for acquisition of seismic data, processing and maintenance of database of digital

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<sup>&</sup>lt;sup>43</sup> Source: http://www.meteo.co.me/misc.php?text=about

- accelerograms, processing of macro-seismic data for strong and catastrophic earthquakes, determination of seismic hazard elements etc.
- Department for seismic data analysis and processing in charge for couple levels of automatic acquisition of seismic signals generated by earthquakes and explosions, modern numerical and graphical analysis and processing of seismic and GPS data, quantification of parameters for actual and historical seismicity in Montenegro, seismo-tectonic interpretation of seismic data, focal mechanism solutions for stronger earthquakes in region, seismological database maintenance, modernisation of methods and computer programs for seismic and geodynamic analysis, publishing and exchange of seismic data etc.

The Ministry of Defence (MoD) controls the army. The National Security Strategy determines as one of the internal tasks of the Montenegro Security Forces: "Providing support to state institutions and authorities in cases of environmental, natural or man-made disasters of greater scale, as well as in cases of human or animal epidemics, where human life, environment and material goods are under considerable threat ..." 44

However, according to an international study, the role of the MoD in disasters is not clear and has not been identified at national level or indeed within the ministry itself. In practice, during the floods of December 2010, the MoD's Operations Centre reported to the operations centre of the DEM, and based on an informal and personal level the cooperation worked well. (UNDP, 2011)

#### C) Local level

At local level, municipal teams are only responsible for the management of emergencies. These teams are led by the president/governor of each municipality. A deputy of SEM is present in each municipality to coordinate sectorial activities and serve as link between the government body and municipalities. The fire-fighting service, with its Municipal Rescue and Protection Units, plays an important role. Currently, 450 people are attached to these units. (EU-UNDP, 2011)

### 3.2 Organisational cooperation

Within the current legal and institutional framework, the organisational cooperation is mostly operational. Generally, the system works the following way in the most dangerous situations – of seismic and flooding emergencies:

<sup>&</sup>lt;sup>44</sup> National Security Strategy, Art. 5.

Table 5. Functional scheme of Montenegro disaster (floods and seismic) response system

Function	Head body	Sources; forces
Early warning	IHMS	Other entities International sources
		Citizen
Notification and alerting	DEM: Operational Communications Centre 112	Local authorities; Enterprises Specialised NGO organisations
Coordination 1 (Operational)	DEM	Inter-institutional and central-local coordination at administrative level
Coordination 2 (Political)	Emergency Management Coordination Team	Government level coordination (in cases of serious emergencies)
Operations	Task force(s)	Civil protection units; Units for protection and rescue of municipalities (fire-fighting units, units for providing assistance to vulnerable and affected population and other protection and rescue units), organised as municipal protection and rescue services; Specialised protection and rescue units; Voluntary protection and rescue units; Voluntary protection and rescue of business organisations and other legal subjects and entrepreneurs; and Airborne fire-fighting unit.

Considering the size of the country and its geological setting, trans-boundary initiatives play a crucial role in disaster mitigation and preparedness.  $^{45}$ 

<sup>45</sup> http://drace-project.org/index.php/map/montenegro

DEM has signed bilateral partnership agreements with Albania, Bosnia and Herzegovina, Slovenia, Croatia, Macedonia, Greece, Serbia and the Russian Federation, which define a common protocol for cross-border cooperation in the event of natural disasters. The latest flood emergencies have proved that these agreements are efficient, especially regarding provision of support, custom lifting and fast entry for rescue teams.

Montenegro participates in the following regional activities:

- The Disaster Preparedness and Prevention Initiative for South Eastern Europe and the EU-funded PPRD South Programme, to implement HFA objectives and priorities;
- The Civil Military Emergency Planning for South Eastern Europe, in cooperation with the U.S. Army Engineering Corps, to improve of civil-military coordination of disaster preparedness and response;
- The Drought Monitoring Centre for South East Europe, the European Centre for Medium Range Weather Forecasts and the Accident Reporting Guidance Operational System (ARGOS) to upgrade its hydro-meteorological services, weather forecasting products and early warning system;
- The Project SHARE (Seismic Hazard Harmonisation in Europe, 2009–2012), within the Seventh Framework Program of the European Commission, to provide an updated, living seismic hazard model for the Euro-Mediterranean region46 and NATO's Science for Peace project "Harmonisation of Seismic Hazard Maps for the Western Balkan Countries", whose end product will be an integrated database organized in GIS applications for the whole region with a regional earthquake catalogue and seismic hazard maps.

Specific memorandums of understanding in the field of education, technical training, preparedness and prevention are being considered with Turkey and Italy.<sup>47</sup>

While a number of regional agreements are signed at the central level, municipalities do not have the mandate to replicate this process at local level. Regarding the capacity of Montenegro's crisis response institutions to benefit from regional coordination and cooperation, leveraging expertise, capacities, resources and information across the region among SEE countries and with various regional centres in Europe the assessment of the EU – UNDP from 2011 is that the effectiveness of international cooperation is quite low, "...partially because of lack of experts and academic staff with good skills in European languages, especially English. This aspect is often under considered, but it dramatically hampers the participation of personnel to international workshops or trainings." (EU-UNDP, 2011)

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http://www.share-eu.org/

<sup>&</sup>lt;sup>47</sup> The Structure, Role and Mandate of Civil Protection in DRR for SEE, 2008

<sup>&</sup>lt;sup>48</sup> International organisations also contribute to the strengthening of DRR through the UN's Regional Disaster Risk Reduction Overview Course, UNDP projects such as the Spatial Planning Support Project, or the German Gessellschaft für Technische Zusammenarbeit and World Bank Land Administration and Management Project.

# 4 Procedures

# 4.1 Standing Operating Procedures (SOPs) and Guidelines

Recently, there are no by-laws and standard operational procedures (SOPs) for civil protection operations in Montenegro.

However, in 2013, the Department for Emergency Management has sent for coordination the final version of the Standard Operating Procedures (SOP) for crossing the border in the event of natural disasters involving the Ministry of Internal Affairs of Montenegro and the Ministry of Internal Affairs of the Republic of Serbia. 49

According to (UNDP, 2011), the MoD is considering the development of internal SOPs for army participation in disaster response operations.

# 4.2 Operations planning

Mol has "... provided two rulebooks<sup>50</sup> that regulate the content, development, adoption, update and storage of assessment studies as well as protection and rescue plans in Montenegro." Ministries and state agencies, municipalities, business and other legal subjects have been mandated to comply with the rulebooks in order to guarantee nationwide harmonisation of plans. (UNDP, 2011)

The overall national-level planning document on disaster management is the National Plan for Rescue and Protection. The plan is based on the vulnerability assessments for all major hazards, as they have been outlined by the National Strategy for Emergency Situations. The set of hazard-based national plans includes:<sup>51</sup>

- National Plan for Protection from Earthquakes;
- National Plan for Fire Protection;
- National Plan for Protection Against Chemical Accidents;

<sup>49</sup> Source: Izvještaj o stanju sistema zaštite i spašavanja u Crnoj Gori u 2013 godini.

<sup>&</sup>lt;sup>50</sup> Rulebook on the Methodology for the Development of Threat Assessment Studies of Natural, Technical-technological and Other Disasters and the Rulebook on Methodology for the Development of Protection and Rescue Plans.

<sup>&</sup>lt;sup>51</sup> Cross-referenced from Disaster Risk Reduction Capacity Assessment Report For Montenegro, (UNDP: April 2011) and the United Nations Office for Coordination of Humanitarian Affairs (UNOCHA) mission report to Montenegro in November 2010.

- National Plan for Protection Against Biological Accidents;
- National Plan for Protection Against Radiation Accidents;
- National Plan for Search and Rescue in Civil Aviation Incidents and Accidents;
- National Plan for Protection Against Floods;
  - National Plan for Protection Against Landslides and Avalanches;
- National Plan for Protection from Extreme Weather Phenomena;
- National Plan for Protection from Traffic Accidents on Road and Rail;
- National Plan for Protection from Technical and Technological Hazards;
- National Plan for Protection from Destruction of Power Plants.

As the floods are the current most serious source of risk, the authorities in Montenegro pay special attention to prevention, rescue and relief measures in cases of heavy rains and flooding. The Law on Water defines the obligation of preparation of a General Plan for the Protection of the Harmful Effects of Water. The current plan covers the period 2010-2016. It especially contains: works and measures, which are undertaken preventively and in the period of high waters for protection from floods and erosion; method of institutional organisation of defence; duties and responsibilities of the manager for protection; method for monitoring and recording data; method for early warning.

The Law foresees the preparation also of annual Operational Plan for the Protection of the Harmful Effects of Water. At national level it should be prepared by the Water Department and the Ministry, while at local level it should be prepared by competent local authority and approved by the Ministry. The Operational Plans determine the names of managers of protection against the harmful effects of water, headquarters, bodies and names of companies and other entities that conduct legal protection against the harmful effects of water and means for operational implementation of protection.

The overall protection plan provides that in case a major flood hazards (declaration of the highest degree of danger of flooding), the management of protection and rescue of people, material and cultural goods is to be ensured by the Emergency Management Coordination Team. In this case, further action regarding the protection and rescue operations are undertaken regulated by the National Plan for the Protection and Rescue of Flood, prepared by the Ministry of Interior in accordance with the Law on Protection and Rescue. Mol, through Department for Emergency Management coordinates the work of all segments of the system of protection and rescue, which include ministries, Police, the military, economic entities, operative units for protection and rescue, Agency for environmental protection, IHMS, the Centre for Eco-toxicological Researches, and others.

### 4.3 Logistics support in crises

The Law on Protection and Rescue prescribes that, in the case of imminent threat or in time of emergency on the territory of municipality, the president of municipality have the right and obligation to mobilise all human and material resources from the territory of that municipality,

in accordance with the municipal plan. Mobilised persons and material resources shall be entitled to reimbursement of expenses from the municipal budget, in accordance with the regulation of the municipality.

Concerned the citizen, the Law (Art. 61) stipulates that they have to make available to civil protection units the use of vehicles, machines, equipment and other material resources, land, facilities, devices and energy sources, necessary for protection and rescue in case of introduction of "state of emergency".

Material obligation is also considered to be the placing of instruments and devices for observing, notifying and informing on commercial and other buildings, and as an exception, on residential buildings as well, if the instruments and devices can not be placed on other buildings. The material obligation may be ordered to legal persons and entrepreneurs as well.

Military logistic support has been and could be provide based on decision of the Emergency Management Coordination Team.

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

The Emergency Management Coordination Team (EMCT) is tasked with management of the national early warning system.<sup>52</sup>

The Law on Protection and Rescue prescribes a set of measures and activities to prevent danger of natural disasters, technological accidents and other disasters. In order to protect effectively the population and the material heritage against possible disasters and preventing the spreading of risk, the Law prescribes to conduct activities related to collection and processing of data on potential risks, establish information and early warning systems.

The Law on Water defines the obligation of preparation of a General plan for protection from harmful effects of water. The current plan covers the period 2010-2016. It especially contains: works and measures which are undertaken preventively and in the period of high waters for protection from floods and erosion; method of institutional organisation of defence; duties

52 Improving the System is one of Montenegro's development priorities; however no fixed

at the end of the last decade. Currently, the DEM is working to expand early warning systems and data exchange to a broader range of natural hazards.(EU-UNDP, 2011)

budget is allocated and progress is highly dependent on external funding. A major stride was the implementation of the large-scale fire detection system FIREWATCH by the DEM in collaboration with German partners. Considerable progress towards establishing real-time data exchange for hydro-meteorological, seismic and fire hazards at national and cross-border level was made with help of WMO following catastrophes such as the earthquakes and floods

and responsibilities of the manager for protection; method for monitoring and recording data; method for early warning.

The early warning system (EWS) is currently in the process of being developed. The system is located with the DEM, and each relevant ministry and institution has place within it.

The IHMS provides the DEM and other governmental bodies with hydro-meteorological data. However, the Institute has not a focal point on the early warning system: data is only released by request, the cooperation with DRR management is mainly ad-hoc and Standard Operating Procedures and Quality Management Systems between the IHMS and the DEM have not been developed. Moreover, data is not always made available to municipalities, and customised reports and non-governmental users are charged. Hazards are monitored through a network consisting of 20 climatologic stations, 60 precipitation stations and 51 hydrological stations, out of which 23 are automatic. IHMS weather and hazard forecasts are based on global numerical weather predictions, produced by international centres. The IHMS is mandated with producing and disseminating warnings through media, internet pages and directly to relevant authorities: the DEM, relevant ministries, the 112 system, several agents within industrial Directorates and the public to a lesser extent via the media and internet pages. Warnings are issued for all hydro-meteorological and climate-related hazards and hazards taking their origins in climate extremes. This includes warnings when water level thresholds of rivers are crossed, and when heavy rainfall is forecasted in areas where it could trigger flash floods. While IHMS employees are usually well-trained, their number is insufficient, especially regarding the fact that most of them are tasked with running observation stations. There is practically no staff focusing on research and development, forecasting (only 2 of around 100 employees), climatology, agro-meteorology, or to cooperate with industry. According to international assessments, the IHMS lacks resources to purchase needed IT systems, automatic real-time hydro-meteorological observation stations, weather radars and lightning detection systems. This makes the operation of an effective 24/7 forecasting and warning system difficult.

Hydrometeorological Institute has 10 main meteorological stations (including aviation meteorological stations in Tivat and Golubovci). On large number of synoptic stations the work is organised constantly, and the data are sent to the centre on an hourly basis. On stations Bar and Kolašin, work is organised during the day from 03 up to 21 UTC (Universal Time Coordinated). The current climatological stations in Montenegro are the following:



Figure 4. Reference map on hydro and meteo data collection and early warning stations.

The Seismological Observatory operates three different types of networks monitoring seismic risks: 10 short period stations, 4 broadband stations, and 4 accelerometric stations recording ground motion parameters.

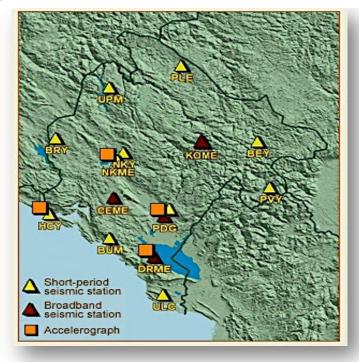


Figure 5: A network operated by the Seismological Observatory<sup>53</sup>

Data produced by the observatory is very reliable, covers the entire territory and presents a high spatial and temporal resolution. However, it is not used most effectively though. Seismic data is only available free of charge over the Internet and specific information on seismic activity is not published regularly.

<sup>53</sup> Source: Seismological Observatory, <a href="http://www.seismo.co.me/Seismic\_network.htm">http://www.seismo.co.me/Seismic\_network.htm</a>

Real-time data is exchanged via the seismological communication processor SeisComP3 with selected stations situated in Slovenia, Italy, the Republic of Srpska, Romania, Bulgaria, Kosovo, Croatia, Serbia, Greece, Albania and Macedonia. 54

The Observatory is developing micro-zoning hazard maps for Montenegro. Nevertheless, the link between available maps and the utilisation of this information for spatial planning is not clear. Most of the information produced by the Observatory is freely available on Internet, and there are a high number of hits registered. Nevertheless, no formal mechanism that facilitates the use of the information exists. (UNDP, 2012)

The Montenegro Red Cross is not using the existing risk identification methodology either and does not receive regular information on risks (only in emergencies and through the DEM). They have conducted vulnerability and capacity assessments in ten pilot communities.

A large number of municipalities do not have any early warning mechanisms or systems in place to reach the population.

When warned by the institutions named above or directly by local authorities (mechanisms exist at local level to identify risks of hazards and issue warnings up to the DEM), the Bureau for Public Relations, which has a seat on the EMCT, is responsible for the dissemination of all warnings to the public. Main communication channels are the media, 112 system, and mobile telephone operators who notify all prepaid customers.

Since 2013, Emergency Calling Centre 112 (ECC 112) has been included in all of the checks, monthly communication tests, communication with other RCC and MRCC (state centres for search and rescue in the event of a fallen aircraft) and real situations of danger or possible danger through standard operating procedure, which have been forwarded to these centres.

However, according to an official report, problems of a technical nature prevent completion of the project. The system is still not fully operational because the missing optical cables connections between ECC 112 in Podgorica, Bijelo Polje and Bar, and the hub at the Ministry of Interior and radio communications between all locations of EEC 112. (MoI, 2014)

As the system of 112 is still in the development phase and the television and radio is not always reliable in diffusing priority information, the current dissemination mechanism of warnings and advisories is not very efficient, especially to those situated in threatened areas. The warnings given directly to the public via the IHMS web pages are a very passive dissemination channel and do not actively meet people, authorities and public when needed.

While the DEM issues warnings and coordinates action with municipal representatives, the Parliament alone has the power to declare a national state of emergency. A major problem is the lack of clear guidelines as to how this decision is reached and how national emergencies should be announced to the public. Additional procedures concerning support of national and local authorities should be established, as well as a classification of emergencies and alerts. (EU-UNDP, 2011)

<sup>54</sup> http://www.seismo.co.me/Seismic network.htm

# 5 Capabilities

Human and material resources are considered as a very important component of the system of protection and rescue. It is essential that all subjects of protection and rescue operations at the state and municipal levels, are provided with resources to promptly undertake all planned and extraordinary measures for prevention of hazards and protection and rescue in case of disasters.

#### 5.1 Human resources

According to the Government annual report (MoI, 2014), in 2013 the Directorate of Emergency Management has employed 106 employees: 55 officers with higher education (of whom seven masters of science), 3 positions with a college degree and 48 officers with a high school diploma. From a total of 106 employees of civil servants and employees, 32 of them or 30.19% are women, and 74 or 69.81% are men.

In all municipalities in Montenegro organisations (units) for protection and rescue services have been formed. 582 members, of which 530 members have been permanently employed, and 52 - hired on contract have served in these units.

Pursuant to Article 65 of the Law on Protection and Rescue, Ministry of Internal Affairs has concluded a contract with rescue specialists (organised also in units). At the end of 2013 there is a contract signed with Mountain Rescue Courier Service. It has been established full cooperation of the MoI with the Red Cross of Montenegro and numerous joint activities on improving the system of protection and rescue have been planned and undertaken.

As part of the protection and rescue system, the volunteer fire departments that operate with a long tradition in the municipalities of Tivat and Kotor are of particular importance. In addition, procedures have been initiated for the establishment of volunteer fire companies in the capital Podgorica and in Banjani (the municipality of Niksic).

Entrepreneurial units, as a kind of operating units, are considered as very important because of the willingness to provide an adequate first response to certain types of hazards (fire), which may happen in a company, other legal entity or an entrepreneur. Entrepreneurial units are organised in White Shipyard, airports Tivat and Podgorica, Bar Harbor, KAP, Teljezara Niksic, Pljevlja thermal power plants and at "Monteput" Podgorica.

Units for extinguishing fires from the air (i.e. the helicopter unit of the DEM) is organised as a directorate within the Directorate for Emergency Situations. Total number of officers is 17, of whom 14 have been employed on full-time, while three have been engaged under a contract

of work. In addition to the above, in the course of fire season, contractors engage the additional four executors.

## 5.2 Materiel (non-financial) resources

Ensuring equipment, instruments and materials is a precondition for the establishment of a system of protection and rescue services. Units have to be able to act immediately and as longer as it is necessary to respond to disasters.

Facilities, accommodating service protection and rescue units in Podgorica, Bar, Budva and Niksic, Bijelo Polje, Mojkovac, Herceg Novi, Zabljak, Ulcinj, Roţaje, Berane and Cetinje, meet the accommodation requirements of professional members of the protection and rescue services. In Savnik, the unit shall move into a new facility, expected in the second quarter of 2014. In the municipality Andrijevci, by donation from the US Embassy in Podgorica, an object in the former barracks of the Army of Montenegro has been reconstructed, thereby creating conditions for normal operation and functioning of these units.

#### 5.3 Training

#### Training of protection and rescue services

Trainings on floods and fire response have been organised in cooperation with the US Embassy, the Ministry of Defence, the Ministry of Interior, the Red Cross and NGOs. However, these trainings are not coordinated and do not always benefit of adequate facilities. Done on an ad hoc basis, they do not facilitate the understanding of the specific roles and responsibilities of the various actors, including the role of technical agencies such as the HMI. More in-depth training on understanding disasters and their impacts are needed to complement experience with technical knowledge.

Despite its limited number of forecasters, meteorological and hydrological experts, the HMI participates in UNISDR courses and is currently involved in the development of an international strategy for risk reduction, which consists of 22 workshops that will bring international expertise. The Institute should furthermore participate in trainings of emergency personnel and the news media to address risks associated hydro-meteorological hazards.

Training of the protection, search and rescue teams at the local level is provided and funded by the municipalities. However, it is not always offered in a systematic way nor does it always reach out to all the municipal staff, since the size of the budget for preparedness and response activities is left to the appreciation of the municipalities.

Police and NGOs have their own training programs. The MRC has been training its preparedness and response teams in first aid at local, national and regional level. Some

elements of the regional disaster response teams have been trained to be deployed internationaslly. (EU-UNDP, 2011)

The flying experience of the Helicopter unit in 2013 is as follows (MoI, 2014):

Aircraft	Number of flights	Time
Helicopter AB 206	152	65:12
Helicopter AB 212	267	87:06
Helicopter AB 412	278	72:06
Aircraft AT 802 A s/n 0281	31	5:30

#### Training centres

Training activities are mostly geared towards various rescue and recovery specialists. The DEM has currently one training centre within the Police Academy in Danilovgrad for the training and education of rescue units. However, it is very much oriented towards theory. There are plans to open three training centres across the country that will deal with the special training needs of rescue units in a more practical way. DRR training programmes in relation to specific hazards are delivered regularly by the DEM for personnel involved in civil protection activities such as central and municipal rescue teams, fire-fighters, operational units, but also decision-makers at central level and the public. Worthy of note is a training course for seismic hazards, organised with the support of the French Securité Civile.

#### Hazards and disasters awareness rising

There are limited resources for capacity development and no formal process of awareness raising is in place. Moreover, legislation does not specify which governmental body is responsible for implementing DRR awareness raising projects, and authorities still lack DRR knowledge in order to design campaigns, especially as the DEM only addresses DRR since 2010. According to the government, awareness-raising activities are especially limited at local level. This greatly increases the population's vulnerability. To name just one example, no awareness raising activity was done in the highly earthquake-prone region of Berane. Campaigns informing about safe building codes should also be created.

The Bureau of Public Relations, the Government of Montenegro and the DEM coordinate media plans oriented towards public awareness of hazards and prevention, but involvement of the media Directorate to advocate DRR needs to be developed. Among the population and the media, awareness of disaster-related issues or preparedness and response is often limited, which can lead to inaccurate or inadequate information broadcasts.

The DEM plans to issue an awareness campaign to successfully implement the 112 single emergency number, as well as a pre-school program for small children on what to do in case of an emergency, and an introduction to hazards and reaction in emergency situations for the elderly.

Although the Montenegro Red Cross did not conduct any awareness raising activities until now, it plans to do so in the future by joining the Red Cross DRR regional programme and further cooperating with DEM. Actions have already been targeted at schools and the MRC plans to organise a DRR campaign together with governmental and non-governmental organisations. Ad hoc awareness raising events have been undergone by "Green Home" and the United States Agency for International Development, although the public service campaign did not specifically focus on DRR. The Fire Union of Montenegro has been educating the population about fire protection. <sup>55</sup>

Apart from occasional events, like classes visiting fire brigade units, DRR is not yet integrated into school curricula. This is likely to change when the primary education system reforms of 2010 are implemented. One of the reform plans for 40 optional modules, out of which one should include DRR content. Also, weekly lessons focusing on protection and rescue, what action to take in emergency situations and containing an introduction to natural hazards on the territory of Montenegro should be offered by head teachers. On the other hand, the reform cut the budget allocated to teacher training, including the training targeting disaster response. Educating children will be a difficult task for teachers, if they do not have the knowledge themselves.

A EUR 40,000 awareness project, which is part of the EU-funded Programme on Prevention, Preparedness and Response to Natural and Man-made Disasters (PPRD South), is targeted at 5,000 6th grade students (aged 12) in 62 pilot primary schools in Montenegro. The project will inform children about actions they and their family should take before and after earthquakes. If the subject "Protection and Rescue from Natural Disasters and other Man-made Accidents" is effectively re-introduced in the curricula of 7-9 grade students, this first awareness project would constitute an ideal introduction to disasters. <sup>56</sup>

No university program focuses on DRR only, but civil engineering, architectonic planning are taught at the Civil Engineering Faculty in Podgorica.<sup>57</sup>

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<sup>&</sup>lt;sup>55</sup> Report of Montenegro Ministry of Internal Affairs, Report of Montenegro to the United Nations' World Conference on Disasters Reduction (WCDR, Kobe-Hyogo, Japan, 2005)

<sup>&</sup>lt;sup>56</sup>http://www.euromedcp.eu/en/countries/montenegro/724-awareness-campaign-under-the-slogan-starts-in-montenegro.html

<sup>&</sup>lt;sup>57</sup> Report of Montenegro Ministry of Internal Affairs, Report of Montenegro to the United Nations' World Conference on Disasters Reduction (WCDR, Kobe-Hyogo, Japan, 2005)

#### 5.4.1 Procurement regulation

The basic Montenegro legislation on procurement is the Law on Public Procurement (Official Gazette of MNE, no. 42/11). However, concerned the disaster management, the Law stipulate that its provisions do not apply to: "Procurement aimed at protection and recovery from catastrophes and major disasters – state of emergency." (Art.3)<sup>58</sup>

The Public Procurement Directorate, Ministry of Finance as a line ministry, and the Commission for Control of Public Procurement Procedure have competences and are responsible for the control of public procurement procedures. The Ministry of Finance supervises the legality and effectiveness of administration operations. Judicial control over legality of the public procurement procedures is ensured by the administrative dispute before the Administrative Court of Montenegro.

The Public Procurement Administration, in accordance with Article 19 of the Public Procurement Law and its scope of work established by Article 42 - a of the Decree on organisation and manner of work of the state administration, shall be entitled to perform the following tasks:<sup>59</sup>

- 1. "To monitor implementation of the public procurement system;
- 2. To monitor the compliance of the legislation regulating the public procurement system with EU legislation, to prepare technical basis, to initiate and participate in preparation of the public procurement regulations;
- 3. To give approval to contracting authorities on fulfilment of conditions for conducting certain public procurement procedure in the cases envisaged by this ionLaw;
- 4. To provide advisory assistance upon contracting authority's request;
- 5. To organise and conduct professional development and advanced training of the human resources in charge of performing public procurement tasks;
- To organise professional exam for performing tasks in the area of public procurement;
- 7. To establish and maintain the Public Procurement Portal for the purpose of ensuring transparency of public procurement;
- 8. To publish public procurement plans, contract notices, decisions on candidates' qualifications, decisions on selection of the most favourable bid, decisions on suspension of public procurement procedure, decisions on annulment of public procurement procedure, public procurement

<sup>58</sup> Downloaded from: http://www.ujn.gov.me/en/novi-zakon-o-javnim-nabavkama-crne-gore/

From the web site of the Public Procurement Administration of Montenegro http://www.ujn.gov.me/en/nadleznosti/

- contracts, changes or amendments of public procurement plans, contract notices, decisions and contracts, as well as of other acts in accordance with this Law;
- 9. To prepare and publish a List of contracting authorities on the Public Procurement Portal;
- 10. To encourage the conducting of public procurement in electronic form;
- 11. To pursue cooperation with international organisations, institutions and specialists in the field of public procurement;
- 12. To prepare and submit to the Government annual reports on the public procurement, carried out in the previous year;
- 13. To prepare and publish a list of bidders on the basis of decisions on selection of the most favourable bid;
- 14. To prepare and publish a common public procurement vocabulary on the Public Procurement Portal;
- 15. To perform inspection control;
- 16. To issue publications and other technical literature;
- 17. To perform other tasks, in accordance with the Law."

Montenegro has adopted the following EU directives, relevant to procurement:

- Directive 2004/18/EC of the European Parliament and of the Council of 31 March 2004 on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts;
- Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014:
- Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014.

#### 5.4.2 Procurement procedures

#### Types of Procedures

According to the Law on Public Procurement (Art. 20), "public procurement procedures for goods, services or works are as follows:

- Open procedure;
- Restricted procedure;
- Negotiated procedure with prior publication of a contract notice;
- Negotiated procedure without prior publication of a contract notice
- Framework agreement;
- Consulting services;
- Contest;
- Shopping method;
- Direct agreement."

#### Value scales

The public procurement procedure shall be determined according to the estimated value of the public procurement, which is classified into the following value scales:

- I Value scale in cases when the estimated value of the public procurement is up to EUR 5,000, the contracting authority shall perform the direct agreement;
- II Value scale in cases when the estimated value of the public procurement exceeds EUR 5,000 up to EUR 25,000 for procurement of goods or services, or when the estimated contract value exceeds EUR 5,000 up to EUR 50,000 for procurement of works, the contracting authority shall perform the shopping method;
- III Value scale in cases when the estimated value of the public procurement exceeds EUR 25,000 for procurement of goods or services, or when the estimated contract value exceeds EUR 50,000 for procurement of works, the contracting authority shall perform some of the procedures listed in Article 20 items 1 to 7 of this Law.

#### Electronic License Registry

Registry is available at the Internet address www.licenca.me and includes 540 licenses, permits and approvals for performing the economic activities issued by 36 institutions. The Chamber of Commerce is responsible for maintenance of the Registry, in cooperation with the Ministry of Finance.

## 5.5 Niche capabilities

Montenegro suffers from insufficient disaster response capabilities due to limited funding and other resources. However, country's plans are focused on building capacities for mostly for response to floods and heavy snows in the mountains emergencies.

However, as the EU monitoring mechanism has stated, Montenegro is satisfactorily aligned with the EU civil protection acquis. Nevertheless, the country will need to further improve its administrative capacity in order to align the system with standards and good practices of the Member States. Technical and material resources need to be enhanced, in particular by further equipping and training civil protection and other concerned staff to reach a sound basis for adequate support for risk prevention and preparedness as well as necessary response in case of emergencies. Given the frequency of disasters in the country, disaster risk reduction and disaster management should be treated as a matter of priority at national and local level.

Montenegro will need to further develop work on disaster prevention, with an increased focus on risk assessment and risk management planning. Montenegro needs to prepare for its obligations as a participating state to the EU Civil Protection Mechanism by building up the necessary capacity to carry out national risk assessment, conduct risk management planning and assessment of its risk management capabilities and to inform the Commission. (EU, 2013)

# Resources

# Legislative acts

Law on Public Procurement

Zakon o Hidrografskoj Djelatnosti

Zakon o Hidrometeorološkim Poslovima

## Official documents (white papers, strategies, etc.)

Ministry of Interior, The Rulebook on Methodology for the Development of Threat Assessment Studies of Natural, Technical-Technological and Other Disasters: <a href="https://www.google.bg/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=Rulebook%20on%20the%20Methodology%20for%20the%20Development%20of%20Threat%20Assessment%20Studies%20of%20Natural</a>

Ministry of Interior, Directorate for Emergency Situations, National Strategy for Emergency Situations (in national language): <a href="http://www.mup.gov.me/biblioteka/strategije">http://www.mup.gov.me/biblioteka/strategije</a>)

Ministry of Spatial Planning and Environment, Initial National Communication on Climate Change of Montenegro to the United Nations Framework Convention on Climate Change (UNFCCC), (Podgorica, 2010): <a href="http://unfccc.int/resource/docs/natc/mnenc1.pdf">http://unfccc.int/resource/docs/natc/mnenc1.pdf</a>

The Government, National Security Strategy: <a href="https://www.gov.me/biblioteka/1154096856.doc">www.gov.me/biblioteka/1154096856.doc</a>

# Online resources (e.g. websites of key CM organisations)

Institute for Hydrometeorological and Seismological Service of Montenegro, <a href="http://www.meteo.co.me/index.php">http://www.meteo.co.me/index.php</a>

Ministry for Spatial Planning and Environment of Montenegro

Ministry of Interior, Izvještaj o Stanju Sistema Zaštite i Spašavanja u Crnoj Gori u 2013 Godini, (Mol: 2014), <a href="http://www.gov.me/ResourceManager/FileDownload.aspx?rld=164029&rType=2">http://www.gov.me/ResourceManager/FileDownload.aspx?rld=164029&rType=2</a>

Ministry of Interior, <a href="http://www.mup.gov.me/ministarstvo">http://www.mup.gov.me/ministarstvo</a>

Ministry of Sustainable Development and Tourism, <a href="http://www.mrt.gov.me/en/news/100500/CALL-FOR-EXPRESSION-OF-INTEREST.html">http://www.mrt.gov.me/en/news/100500/CALL-FOR-EXPRESSION-OF-INTEREST.html</a>

National Civil Protection Authorities: Ministry of Interior – Directorate (Directorate) for Emergency Situations, <a href="http://www.mup.gov.me">http://www.mup.gov.me</a>

Public Procurement Administration of Montenegro, <a href="http://www.ujn.gov.me/">http://www.ujn.gov.me/</a>

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