

# IT 4 Sec Reports

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

Todor Tagarev  
Petya Ivanova  
Nataly Ivanova

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

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

**Todor Tagarev, Petya Ivanova, Nataly Ivanova**

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Institute of Information and Communication Technologies  
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**IT4SecReports 128 „BULGARIA: Capabilities, Organisations, Policies, and Legislation in crisis management and disaster response“** This report provides information on the main risks for the population as result of natural disasters and industrial catastrophes and currently prevailing conceptual views on crisis management and disaster response, reflected in the Disaster Protection Law. In terms of organization, the central executive power continues to play the key role, primarily via the MOI General Directorate “Fire Safety and Civil Protection.” The Unified Rescue Service is the backbone of the country’s crisis management system, providing for preparedness and response of regional and municipal authorities, other ministries and agencies, critical infrastructure operators, other trade companies, volunteers, health services, and the armed forces. The report presents also information of levels and sources of financing, as well as Bulgaria’s crisis management capabilities, including those of potential interest to the EU and other Member States.

**Keywords:** Bulgaria, natural disasters, floods, forest fires, earthquakes, civil protection, Disaster Protection Law, specialization

**IT4Sec Reports 128 „БЪЛГАРИЯ: Способности, организация, политики и законодателство за управление на кризи и реагиране при бедствия“** Докладът представя основните рискове за населението, свързани с природни бедствия и промишлени аварии, и преобладаващите към момента концептуални възгледи за кризисното управление, отразени в Закона за защита при бедствия. Централната изпълнителна власт играе основна роля в организационно отношение чрез Главна дирекция „Пожарна безопасност и защита на населението“ на МВР. Единната спасителна система е основа на кризисното управление в страната, като осигурява готовност и реагиране на областни и общински власти, други министерства и агенции, оператори на критична инфраструктура, други търговски дружества, здравни заведения, доброволци и въоръжените сили. Докладът представя информация за равнището на финансиране и способностите на страната за кризисно управление, вкл. способности от потенциален интерес за ЕС и страни-членки.

**Ключови думи:** България, природни бедствия, наводнения, пожари, земетресения, защита на населението, Закон за защита при бедствия, специализация

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# Overview

Natural disasters in Bulgaria are on the increase. For just four months—from June to October 2014—heavy floods affected half of Bulgaria’s regions and took 18 casualties on five different occasions. By the end of October, the total number of disasters since the start of the year exceeded 600, including train crashes and explosions in ammunition factories, the most recent one killing 15 people.

The types of challenges faced come in sharp contrast with the traditional concerns and the approach to protection of the population prior to WWII and during the Cold war. After several waves of reorganisation of the former militarised system for *civil defence*, the civil protection units and their management bodies are now part of General Directorate “Fire Safety and Civil Protection” (FSCP) within the Ministry of the Interior.

The main legal act regulating their activities is the *Disaster Protection Law*. A separate concept does not exist at current. The Disaster Protection Law reflects currently prevailing conceptual views on crisis management and disaster response.<sup>1</sup> A number of strategies and executive regulations complement the law in regard to disaster prevention, the functioning of volunteers and volunteer organisations, consultative bodies, mid-term programmes, annual implementation plans, etc. Crisis preparedness and response need to adhere to a number of other laws, e.g. on the Ministry of the Interior, on the environmental protection, on the waters, on the regulation of territories, etc.

The central executive power continues to play the key role, primarily via the MOI General Directorate “Fire Safety and Civil Protection.” The regional and municipal authorities have their own disaster protection plans, and each region has a local FSCP directorate. Along with other ministries and central executive agencies, critical infrastructure operators, other trade companies, volunteers, health services, and the armed forces, they perform their crisis management duties in a *Unified Rescue Service*.

FSCP provides points of contact for international co-operation, including humanitarian aid, engagement for disaster response and relief, protection of European critical infrastructures, etc.

FSCP has about 8,000 personnel and is sustained through the budget of the Ministry of the Interior. Elements of the monitoring and early warning system are maintained through the budget of respective ministries, agencies, and institutes. Some equipment, infrastructure and training programmes are financed as part of international projects, including EU structural funds. In addition, the Joint Commission for Restoration and Relief (JCRR) to the Council of Ministers has an annual budget of 70-90 mln. BGN, or approximately 0.1 percent of the GDP, to finance “the prevention, containment, and overcoming the consequence of disasters.”<sup>2</sup>

Bulgaria has some crisis management capabilities of potential interest to the EU and other MSs, such as medium search and rescue units for urban environments, medium CBRN units, and land units for fighting forest fires, as well as the FSCP training range in the town of Montana. Mobile medical teams of the Military Medical Academy are regularly deployed abroad in disaster response operations. At the time of writing of this report, a Centre for Crisis Management and Disaster Response in Sofia, pending the accreditation from the North-Atlantic Council, will be declared NATO Centre of Excellence.

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<sup>1</sup> A separate Crisis Management Law enacted in 2005 treated issues of interest to DRIVER. It was cancelled in 2009 and is not examined in detail here.

<sup>2</sup> See for example the Law on the State Budget of the Republic of Bulgaria for 2014, *State Gazette* 109, 20 December 2013, article 1(2), item 4.1.1.

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## List of Abbreviations

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BAS	Bulgarian Academy of Sciences
BGN	Lev (the Bulgarian currency)
BSEC	Black Sea Economic Cooperation (Organisation)
CBRN	Chemical, Biological, Radiological, and Nuclear [protection]
CECIS	Common Emergency and Information System (EU)
CEPC	Civil Emergency Planning Committee (NATO)
CIS	Communications and Information Systems
CMDR	Crisis Management and Disaster Response
COE	Centre of Excellence
CPC	Civil Protection Committee (EU)
CPG	Civil Protection Group (NATO)
DPPI	Disaster Preparedness and Prevention Initiative (in South-Easter Europe)
EADRCC	Euro-Atlantic Disaster Response Coordination Centre (NATO)
ECURIE	European Community Urgent Radiological Information Exchange
EERC	European Emergency Response Capacity
ERCC	Emergency Response Coordination Centre (EU; formerly MIC)
FSCP	Fire Safety and Civil Protection (MOI General Directorate)
HFA	Hyogo Framework for Action
IAEA	International Atomic Energy Agency
ICPPDAC	Interagency Commission on Protection of the Population in Disasters, Accidents, and Catastrophes (not existing at current; replaced by ICRA)
JCRR	Joint Commission for Restoration and Relief (can be translated also as “Interagency Commission for Recovery and Assistance”)
MES	Ministry of the Emergency Situations
MIC	Monitoring and information Centre (EU; now ERCC)
MoD	Ministry of Defence
Moi	Ministry of the Interior
MUSAR	Medium Search and Rescue [unit]
NDPP	National Disaster Protection Plan
NIGGG	National Institute of Geophysics, Geodesy and Geography
NPP	Nuclear Power Plant
NSEWA	National System for Early Warning and Alerts



POL	Petroleum, Oil, and Lubricants
REMPAN	Radiation Emergency Medical Preparedness and Assistance Network
RODOS	Real On-line DecisiOn Support System
RRMMT	Rapid Reaction Military Medical Team
SEE CMEP	Council for Civil-Military Emergency Planning in Southeast Europe
TOE	Table of Organisation and Equipment
UNISDR	The United Nations Office for Disaster Risk Reduction
URS	Unified Rescue Service
WMD	Weapons of Mass Destruction
WWII	World War II

# 1 Policy

Bulgaria is a parliamentary republic. The People's Assembly (Bulgaria's single chamber Parliament) elects and discharges the Prime Minister and, on his or her proposal – the Council of Ministers. The formulation of policies, including the policy for disaster preparedness and response, is in the realm of this most senior body of the Executive branch power.

Head of state is the generally elected President, who is also Supreme Commander of the Armed Forces. The President chairs the Consultative Council on National Security, composed of the leaders of the political parties represented in parliament. The executive powers of the President are largely limited to appointment of heads of diplomatic delegations/embassies, highest ranking military personnel and, when this is required by law, civil servants,<sup>3</sup> and signing international treaties.<sup>4</sup> On these occasions, the President acts on the proposal by the Council of Ministers.

When the Parliament is not in session, the President declares war, given an armed aggression against the country or the need for urgent implementation of international obligations, military or *another extraordinary situation*. In such cases the Parliament convenes immediately to decide on the President's declaration.<sup>5</sup>

Bulgaria is a unitary state with local self-governance.<sup>6</sup> Currently, the country has 28 regions, each consisting of municipalities. Chapter 7 of the Constitution provides the grounds for local self-governance and administration. Each municipality has a Municipal Council, a Mayor, and its own budget. The Constitution also stipulates obligations of the citizens "to assist the state and society in the case of a natural or another disaster following legally defined regulations."<sup>7</sup>

Bulgaria does not have a crisis management policy document *per se*. In addition to the constitutional provisions, the foundations of CM policy are set in the Disaster Protection Law, while details emerge in the examination of a number of strategies, regulations, mid-term programmes, short-term implementation plans, organisational acts and resource allocation decisions.

Chapter 1 of the Disaster Protection Law defines 'disaster' as

*considerable disruption of the normal functioning of the society caused by natural phenomena and/or human activities, and leading to negative consequences of the life and the health of the population, properties, economy and the environment, the prevention, containment and overcoming of which exceeds the capacity of the system for servicing the common activities for societal protection.*<sup>8</sup>

The law defines the main principles of disaster protection:

1. Each person has the right of protection;
2. Saving human life has a priority over other protection activities;

---

<sup>3</sup> Mostly, the highest ranking professionals in the security ministries and agencies.

<sup>4</sup> Constitution of the Republic of Bulgaria, Articles 98, 99, 100.

<sup>5</sup> Ibid., Article 100(5).

<sup>6</sup> Ibid., Article 2(1).

<sup>7</sup> Ibid., Article 61

<sup>8</sup> Disaster Protection Law, article 2.

3. Provision of public information on disaster risks and the activities of the executive bodies for disaster protection;
4. Priority of the preventive measures in disaster protection;
5. Accountability for the implementation of the protective measures;
6. Gradual provision of forces and resources for protection.

The law—and respectively, the policy—treat the protection of life of health of the population, the environment and the property. Disaster protection involves executive bodies, legal entities and physical trade persons, coordinated in a unified rescue system, acting on a national, regional, and municipal level through:

- conducting preventive activities;
- conducting activities for protection during disasters;
- relief and recovery;
- allocating resources;
- providing and accepting aid.

Thus, Bulgaria's crisis management policy aims to provide effective coordination and use of national and local, public and private resources, as well as assistance provided through international co-operation, to prevent, or when prevention fails, protect life and property during and immediately following a crisis triggered by natural disasters or man-made catastrophes. The respective response is triggered whenever a disaster affecting the country, regions or local communities cannot be controlled through routine, daily and normal channels and procedures.

## 1.1 Risk Assessment

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### *Data on recent disasters and other crisis event*

Information on disasters is regularly reported by relevant Bulgarian ministries and agencies and is available to the public and international organizations and initiatives.

The FSCP website provides annual statistical reports, available online for 2008 and the following years.<sup>9</sup> While providing some information on natural disasters and industrial catastrophes, it is heavily focused on preventing fires and firefighting. The statistics provided by FSCP is detailed by region. For aggregated information for 2011 (the first year after the Fire Safety and Rescue and the Civil Protection directorates were merged), 2012 and 2013 see Table 1.

The Ministry of Environment and Water, through its own website or the websites of the four Basin Directorates, provides partial information on past floods. For example, the Basin Directorate for the Danube region provides an Excel file with information on 745 floods in that basin for the last century. 602 of those floods are assessed as being of significance for the respective town or village.

According to Regulation # 8 on the conditions and procedures for protecting forest territories from fires, the Executive Director of the Executive Agency "Forestry"<sup>10</sup> "creates and maintains an information system with a database on fires for all forest territories with the aim to have the necessary statistical information."<sup>11</sup>

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<sup>9</sup> See [www.nspbzn.mvr.bg/Sprav\\_informacia/Statistika/default.htm](http://www.nspbzn.mvr.bg/Sprav_informacia/Statistika/default.htm).

<sup>10</sup> The name is translated into English on its official website as "Executive Forest Agency." See [www.nug.bg/lang/2/index](http://www.nug.bg/lang/2/index).

<sup>11</sup> Article 12 /3/ of Regulation # 8 on the conditions and procedures for protecting forest territories from fires.

**Table 1. FSPB statistics on disasters, incidents, and rescue mission, 2011-2013.**

	2011	2012	2013
Natural disasters	154	700	70
Accidents	10	170	218
Home and industrial incidents	556	415	419
Incidents with dangerous substances and materials	681	643	487
Incidents with radiation sources	0	18	11
Total:	3412	3958	3218
Assistance, search and/or rescue missions	0	456	376

The Nuclear Regulatory Agency publishes daily bulletins on the gamma background on the territory of the country (see an illustration on Figure 1), information on events in nuclear facilities<sup>12</sup> and reports on incidents with radiation sources, with short description, lessons learned and recommendations.<sup>13</sup>



**Figure 1: Gamma-background Bulletin.**

Academic publications by the Agency’s experts add to the statistics and the analysis of individual cases. See for example Figure 2 for earlier statistics on incidents with radiation sources and brief description of key incidents in the article cited.<sup>14</sup>

<sup>12</sup> See [www.bnra.bg/en/emergency/nuclear-facilitie/npp-events](http://www.bnra.bg/en/emergency/nuclear-facilitie/npp-events), listing three events in the Kozloduy Nuclear Power Plant, respectively in 21 December 2013, 14 April 2014 and 23 April 2014 (accessed 09 December 2014).

<sup>13</sup> See for example “Incident with a gamma - irradiation facility in the town of Stamboliyski,” Nuclear Regulatory Agency, available in English at [http://www.bnra.bg/en/emergency/20110729-en?set\\_language=en](http://www.bnra.bg/en/emergency/20110729-en?set_language=en) (accessed 28 October 2014).

<sup>14</sup> Nizamska, Marina. “Analysis of the Reasons for Incidents with Radioactive Sources in Bulgaria and Preventive Measures.” *Information & Security: An International Journal* 24 (2009): 115-124, <http://dx.doi.org/10.11610/isij.2411>.

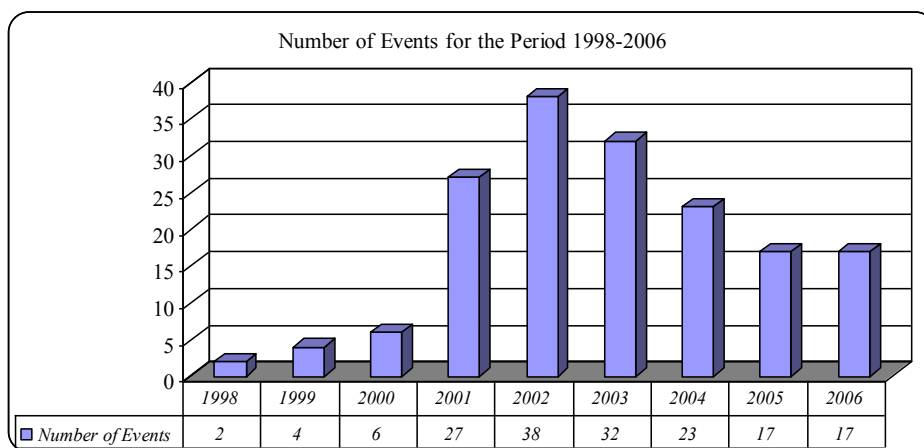


Figure 2: Radiation Emergencies (events per year) for the period 1998-2006.

The National Institute of Geophysics, Geodesy and Geography (NIGGG) at the Bulgarian Academy of Sciences provides real time information of seismic activity in Bulgaria and adjacent areas (see Figure 3 for the status as of 10 December 2014<sup>15</sup>). NIGGG provides feeds to international networks that track and provide statistics on earthquakes.

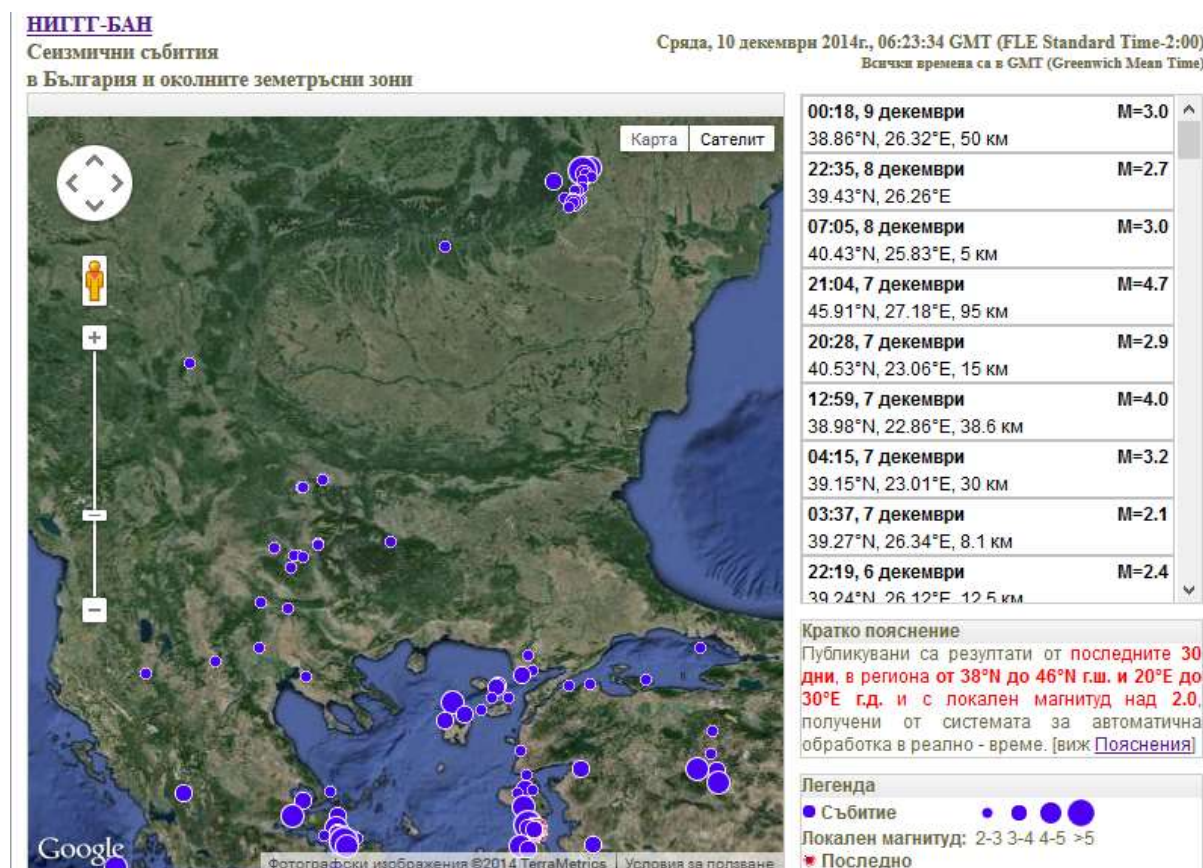


Figure 3: Seismic events in Bulgaria and adjacent earthquake zones.

<sup>15</sup> For current information see <http://ndc.niggg.bas.bg>.

Scientists regularly publish related data and their data- and evidence-based findings. See for example Table 2 for the strongest earthquakes in Bulgaria since the beginning of the 20<sup>th</sup> Century.<sup>16</sup> A common conclusion in these studies is that—within Europe—Bulgaria is among the most vulnerable to earthquakes.

**Table 2. Earthquakes in Bulgaria and adjacent areas since the beginning of the 20th Century with a magnitude over 5.**

<b>Date</b>	<b>Location</b>	<b>Magnitude on the Richter scale</b>
31 March 1901	b/n Shabla and cape Kaliakra	7,2
4 April 1904	in the Struma river valley	7,8
8 October 1905	along the Struma river	6,4
10 January 1908	Gorna Oriahovitsa	7,0
14 April 1909	Gorna Oriahovitsa	7,0
14 June 1913	Gorna Oriahovitsa	7,0
18 October 1917	Sofia	5,3
14 April 1928	Chirpan	6,9
18 April 1928	Popovitsa	7,0
25 April 1928	Galabovo	5,6
17 March 1942	Razgrad	7,0
30 June 1956	Shabla	5,5
4 March 1977	Vrancha, Romania	7,2
3 November 1977	Velingrad	5,3
28 February 1986	Strazhitsa	5,1
7 December 1986	Popovo	5,7
27 October 2004	230 km NE of Sofia, on the territory of Romania	5,5
22 May 2012	Pernik	5,6

The National Statistical Institute publishes statistical studies on disasters, their causes and consequences, including assessment of material losses and their monetary value, assistance provided by the Interagency Commission for Recovery and Assistance, insurance premiums and paid compensations from insurers. Aggregated data for years 2010-2013 is presented on Table 3.

<sup>16</sup> See Alexander N. Sadovski, "Spatial Analysis of Earthquakes in Bulgaria and Neighboring Areas," *Ecological Engineering and Environment Protection* 14, no. 2 (2014): 13-21 (in Bulgarian) and references therein. For older events, as well as earthquakes with magnitude between 4 and 5, see [http://bg.wikipedia.org/wiki/Земетресения\\_в\\_България](http://bg.wikipedia.org/wiki/Земетресения_в_България).

Table 3. Crisis events for 2010-2013 – total for the country.

Indicators	Number of events				Stated losses, in thousand BGN				Amount to be restored, in thousand BGN				Expenditures for rescue and urgent recovery activities, in thousand BGN			
	2010	2011	2012	2013	2010	2011	2012	2013	2010	2011	2012	2013	2010	2011	2012	2013
<b>Crises event – TOTAL</b>	<b>4571</b>	<b>8268</b>	<b>10826</b>	<b>2728</b>	<b>100594</b>	<b>487254</b>	<b>106160</b>	<b>443067</b>	<b>74047</b>	<b>424127</b>	<b>36167</b>	<b>399240</b>	<b>7593</b>	<b>11726</b>	<b>104228</b>	<b>21814</b>
Fires	1630	2185	3010	764	2239	2186	1437	2013	479	192	47	308	991	113	70	231
Landslides	59	76	72	51	2182	224790	17384	294459	1881	221735	3651	291633	1292	775	1783	1068
Earthquakes	12	4	22	6	224	0	59037	915	506	232	17960	1242	0	0	23	15215
Draught	6	30	23	3	1	117	149	0	1	0	0	0	0	13	0	0
Floods	651	382	692	547	38882	206659	20898	15285	16375	201136	9855	7338	4524	3289	5819	1941
Storms, tornados, whirlwinds	47	48	528	89	54722	1614	3488	99387	53791	257	1787	98227	111	714	1202	3350
Hail	16	13	14	13	505	50150	187	0	318	120	147	0	307	0	34	0
Snowstorms (snowdrifts)	103	94	93	50	441	1205	945	200	366	266	868	0	173	6692	95260	9
Icing, frostbites	18	134	186	20	0	128	135	0	0	25	132	0	0	70	6	0
Accidents	7	24	312	314	24	39	319	257	77	26	318	218	10	11	0	0
Catastrophes with vehicles	1937	5218	5858	841	926	285	2164	528	14	82	1402	221	18	0	0	0
Contamination	45	42	7	19	2	68	8	30023	0	45	0	23	6	49	31	0
Epidemics (people)	12	7	7	6	0	0	0	0	0	0	0	0	0	0	0	0
Epidemics (animals, incl. birds)	5	2	0	1	0	2	0	0	0	0	0	0	0	0	0	0
Calamities	2	0	0	2	30	0	0	0	45	0	0	30	15	0	0	0
Other disasters and crisis events	21	9	2	2	416	11	9	0	194	11	0	0	146	0	0	0

International organisations and initiatives can serve as additional sources for statistics on crises and disasters in Bulgaria, as well as their impact. Although based on information provided by Bulgarian authorities, these sources may be more useful for research purposes due to the common language, data structure, easy to use online interface, etc.

One such source is the UN Hyogo Framework for Action (HFA) – a 10-year plan to build resilience of nations and communities to disasters.<sup>17</sup> The *PreventionWeb* site provides respective disaster statistics for the 30-year period from 1980 till 2010. An overview of the number of events and their consequences is presented in Table 4.<sup>18</sup> The top events of significance and the respective statistics on their occurrence are presented on Figure 4.<sup>19</sup> The same source provides data on the top 10 natural disasters, the numbers of people killed and affected, and the estimated economic damages.<sup>20</sup>

**Table 4. Overview of natural Disasters in Bulgaria from 1980 - 2010.**

<b>Number of events:</b>	<b>34</b>
<b>Number of people killed:</b>	<b>111</b>
<b>Average killed per year:</b>	<b>4</b>
<b>Number of people affected:</b>	<b>23,566</b>
<b>Average affected per year:</b>	<b>760</b>
<b>Economic Damage (US\$ X 1,000):</b>	<b>478,104</b>
<b>Economic Damage per year (US\$ X 1,000):</b>	<b>15,42</b>

The United Nations Office for Disaster Risk Reduction (UNISDR) maintains a database with visualisation tools of exposures to risks. A sample of the Global Risk Update 2013, featuring human and economic exposure to earthquakes is presented on Figure 5.<sup>21</sup>

The global assessment reports on disaster risk reduction are built on the information in DesInventar – disaster information management system maintained by UNISDR. UNISDR provides software that allows to construct databases capturing information on damage, loss and general effects of disasters. Bulgaria is interested in this opportunity to better understand disaster trends and their impacts, and achieve better prevention, mitigation and preparedness,<sup>22</sup> but data on Bulgaria is not available on the DesInventar website at time of finalising this report.

<sup>17</sup> See [www.unisdr.org/we/coordinate/hfa](http://www.unisdr.org/we/coordinate/hfa).

<sup>18</sup> See [www.preventionweb.net/english/countries/statistics/?cid=26](http://www.preventionweb.net/english/countries/statistics/?cid=26).

<sup>19</sup> Ibid.

<sup>20</sup> The criteria for including an event in the database are defined by EM-DAT – The International Disaster Database, maintained by the Centre for the Research on the Epidemiology of Disasters in Brussels, [www.emdat.be/criteria-and-definition](http://www.emdat.be/criteria-and-definition).

<sup>21</sup> Global Assessment Report on Disaster Risk Reduction 2013, Global Risk Update GAR 2013, available at <http://risk.preventionweb.net:8080/capraviewer/main.jsp?tab=0>.

<sup>22</sup> Interview with an expert from FSCP General Directorate, 10 November 2014.



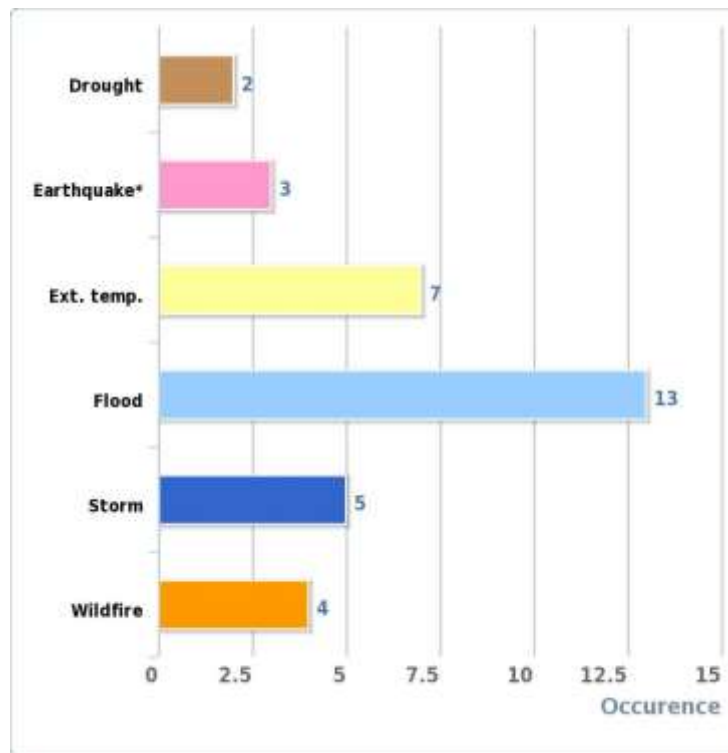


Figure 4: Natural Disaster Occurrence, reported by Bulgaria.



Figure 5: Exposure of Bulgaria to Earthquake hazards.

### *Conducting Risk Assessments and Examples*

There is a growing understanding that a systematic approach to disaster data collection and analysis can facilitate better policy-making and thus to the reduction of disaster risks and enhanced response to disasters. For example, the *Strategy for Mitigating Disaster Risks 2014-2020* includes a 15-page annex with overview of key disaster risks, supported by aggregated data, and their likely impact given our prediction ability, prevention and mitigation measures.<sup>23</sup>

At current, the analysis, assessment and mapping of disaster risks are seen in Bulgaria as key preventive activities.<sup>24</sup> They are implemented in accordance with the *Regulation of the conditions, procedures, and bodies for conducting analysis, assessment and mapping of disaster risks*.<sup>25</sup> This normative document, approved by the Council of Ministers in October 2012, designates the following risks as subject of analysis, assessment and mapping:<sup>26</sup>

- seismic risk;
- risk of flooding;
- risk of nuclear or radiation accident;
- geological risk (landslides, landslips, active faults, and other geological processes);
- risk of forest fires.

Risks are analysed and assessed every six years, unless a specific law defines another term for reassessment. They can be re-examined given a change with potentially significant impact on the risk, if the data and information on which assessment has been made invalid or inadequate, if the negative consequences of actual disasters are higher or of different type than the ones forecasted, or based on lessons learned from past disasters.

The responsible bodies for analysis and assessment are as follows:<sup>27</sup>

- the Minister for Regional Development – for the seismic and geological risks;
- the Chairman of the Nuclear Regulatory Agency – for the risk of nuclear and radiation accidents;
- the Minister of Environment and Water, through the directors of Basin Directorates – for the risk of flooding;
- the Minister of Agriculture and Food – for the risk of forest fires.

The mapping follows the requirements of the EU Directive 2007/2/EC (INSPIRE) and other relevant requirements and standards.

The risk maps need to indicate the threatened territories and the likely negative consequences expressed through the following indicators:<sup>28</sup>

1. the approximate number of potentially endangered citizens (casualties, injured, or with their health under threat);
2. material losses;

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<sup>23</sup> *Strategy for Mitigating Disaster Risks 2014-2020*, available at <http://www.strategy.bg/StrategicDocuments/View.aspx?lang=bg-BG&Id=894> (in Bulgarian).

<sup>24</sup> Disaster Protection Law, article 6(1), items 1 and 2.

<sup>25</sup> Regulation of the conditions, procedures, and bodies for conducting analysis, assessment and mapping of disaster risks, *State Gazette* 84 (2 November 2012), as amended in *State Gazette* 9 (31 January 2014).

<sup>26</sup> *Ibid.*, article 1(2).

<sup>27</sup> *Ibid.*, article 2.

<sup>28</sup> *Ibid.*, article 5(3).

3. affected technical infrastructure
4. affected economic activities in the respective area;
5. affected industrial installations (defined in Annex 4 to the Environmental Protection Law);
6. areas for water protection (identified in Article 119a(1) of the Law on Waters);
7. potentially affected areas under Article 6 of the Law on Biological Diversity
8. the level of disruption of the normal functioning of society
9. sites with the stature of immovable cultural values
10. other information considered useful by the relevant bodies.

Article 6(8) of the Regulation declares that the disaster risk maps are public and are announced on the MOI website, while adhering to the requirements of the Law on Protection of Classified Information.<sup>29</sup> At the time of finalizing this report,<sup>30</sup> it was possible to find publically available information on just a few actual risk maps. With amendment to the Regulation in January 2014, the deadline for analysis and assessment of disaster risks has been extended till the end of 2015.

Partial results are nevertheless useful and being used in informing policy decisions. For example, Figure 6 provides an indication of seismic risks on the territory of Bulgaria<sup>31</sup> (understanding also that earthquakes in the Vrancea region of Romania, northern Greece or western Turkey may also have destructive effects on Bulgarian territory). Governmental assessments of earthquake and other seismic hazards and risks are complemented by rigorous academic studies on Bulgaria, such as those of Tzenov and Botev (2009) and Bayliss and Burton (2013).



**Figure 6: Map of seismic hazards showing maximum values of acceleration of the ground in (g) with a period of repeatability 475 years.**

Most advanced is the process of mapping the risk of flooding. Risk mapping is performed by the four regional Basin Directorates (part of the Ministry of Environment and Water) and partially financed by the European Union. Two maps are included below for illustrative purposes. Colours on Figure 7 indicate threshold depths for a medium probability flooding of the city of Plovdiv (the second biggest

<sup>29</sup> Translated also as *Classified Information Protection Act*.

<sup>30</sup> December 2014.

<sup>31</sup> See the annex on p. 13 in Bulgarian State Standard EN 1998-1/NA, available in Bulgarian at [http://www.bds-bg.org/images/upload/Nacionalni\\_prilojenia/BDS\\_EN\\_1998-1\\_NA.pdf](http://www.bds-bg.org/images/upload/Nacionalni_prilojenia/BDS_EN_1998-1_NA.pdf) (accessed 8 December 2014). The same map is included in Annex 64 to the National Plan for Disaster Protection (2010), p. 371.

Bulgarian city, built on the banks of river Maritsa). The blue colours on the map on Figure 8 show the depth of flooding under the same assumptions.

Researchers contribute to the assessment and mapping of the risk of flooding both in terms of methods and their specific implementation, e.g. assessing risks of flooding for the population along the Black Sea coast,<sup>32</sup> estimating flood prone territories along river basins,<sup>33</sup> etc.

On this background, the analysis, assessment and mapping of the risk of forest fires lag behind. A report of the National Audit Office, covering the period 2011-2103 makes such a statement with the addition that “There is no approved methodology and the risks of forest fires have not been analysed. No organisational unit within the Ministry of Agriculture and Forests and/or Executive Agency “Forestry” has been tasked to analyse and assess the risks of forest fires and their consequent mapping.”<sup>34</sup>

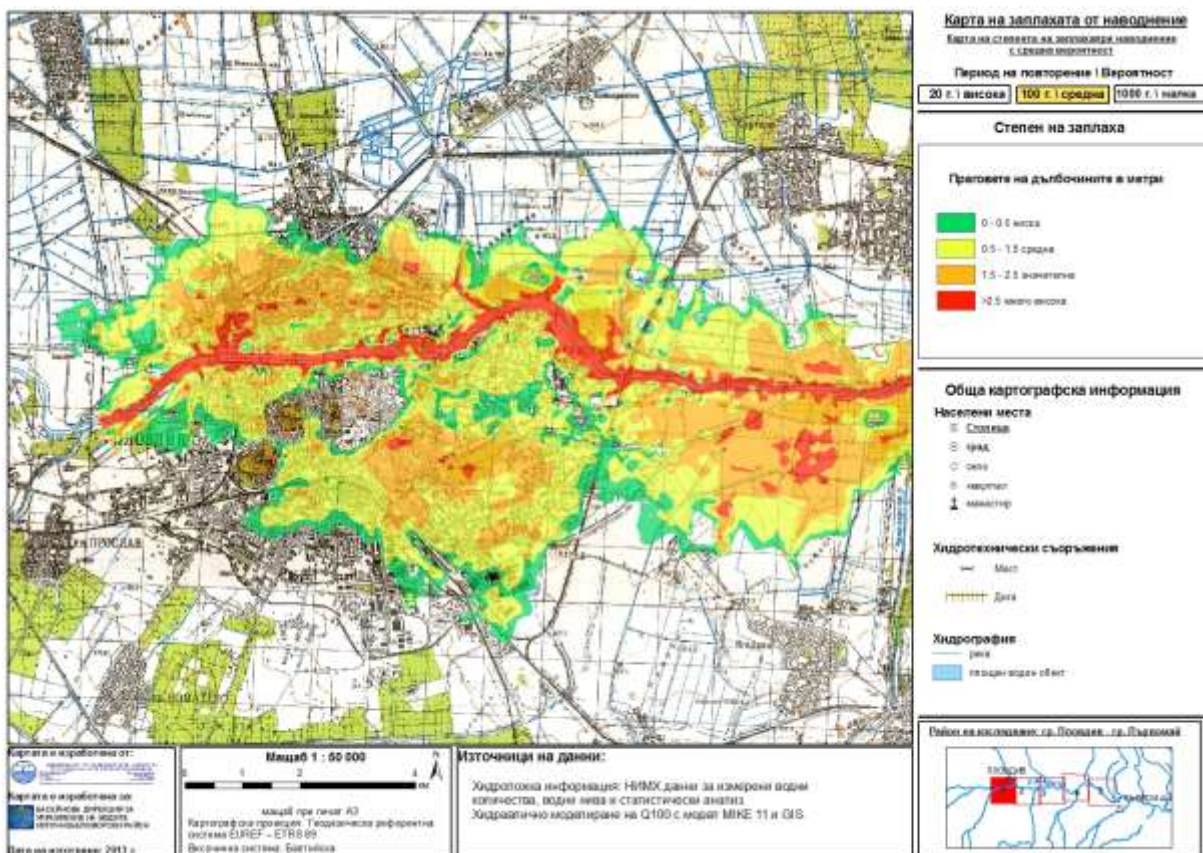


Figure 7: Map of the risk of flooding for the city of Plovdiv, threshold depths.

<sup>32</sup> Atanas Palazov and Hristo Stanchev. "Risks for the Population along the Bulgarian Black Sea Coast from Flooding Caused by Extreme Rise of Sea Level." *Information & Security: An International Journal* 24 (2009): 65-75, <http://dx.doi.org/10.11610/isij.2407>.

<sup>33</sup> M. Nikolova, et al. "Implementation of the "KINEROS" Model for Estimation of the Flood Prone Territories in the Malki Iskar River Basin." *Information & Security: An International Journal* 24 (2009): 76-88, <http://dx.doi.org/10.11610/isij.2408>.

<sup>34</sup> Audit Report # 0300002413 on "Prevention and Response to Forest Fires" for the period 1 January 2011 – 31 December 2013, Bulgarian National Audit Office (15 October 2014). – in Bulgarian, quote on p. 11.

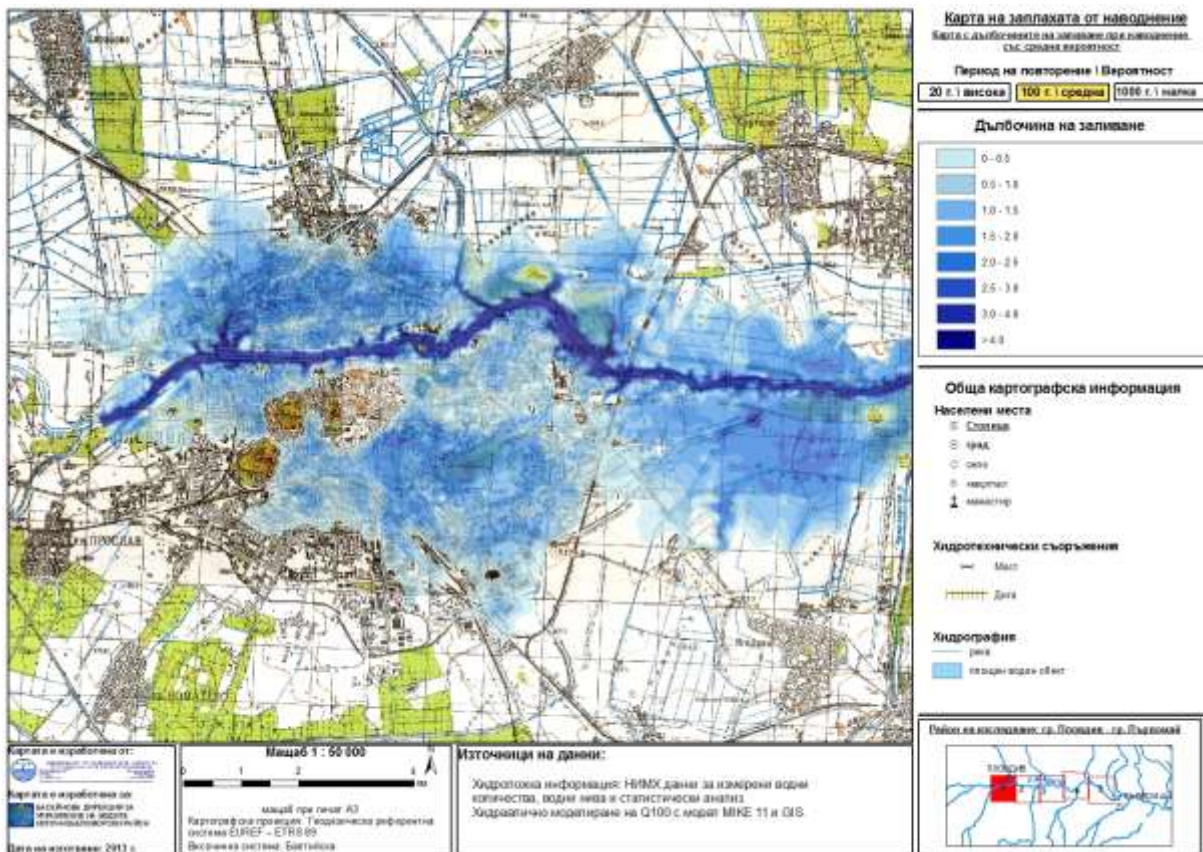


Figure 8: Map of the risk of flooding for the city of Plovdiv, depth of flooding.

## 1.2 Policy and Governance

The national disaster prevention and response framework envisions distributed crisis management within a unified response system, emphasising local preparedness and response by public bodies and the capabilities of the executive (providing also for engagement of companies and nongovernmental, including volunteer organisations).

The country’s policy on disaster protection is formulated by the Council of Ministers.<sup>35</sup> This most senior executive body adopts a strategy for mitigating disaster risks, national programme for disaster protection and annual plans for its implementation, as well as a National Plan for Disaster Protection. Disaster protection is performed on national, regional and municipal levels<sup>36</sup> and includes prevention, protection measures when a disaster occurs, assistance and recovery.<sup>37</sup> Each region and each municipality have their own disaster protection plans.

The response to disasters is organised through the Unified Rescue System (URS), which includes structures of ministries and agencies, municipalities, trade companies, non-governmental organisations, including organisations of volunteers, and the armed forces. All these structures

<sup>35</sup> Disaster Protection Law, article 62(1).  
<sup>36</sup> Bulgaria is a unitary state with 28 regions (region = ‘oblast/ област’) and 256 municipalities.  
<sup>37</sup> Disaster Protection Law, article 5. Disaster protection includes also “resource allocation” and “.provision and acceptance of aid.”

preserve their institutional and organisational affiliation, as well as their assigned mission and functions.<sup>38</sup>

When a disaster occurs, the authority at the respective level and place (mayor, regional governor, Council of Ministers) enacts the relevant disaster protection plan. The expectation is that the local authority and locally present organisations react first. The disaster protection plans arrange for the cooperation among the components of the Unified Rescue System (URS) and provide opportunities for gradual involvement of additional forces and means with the evolution of the crisis situation.<sup>39</sup>

The framework for managing the response is as follows:

- Leader<sup>40</sup> on the site of the disaster is the Head of the respective territorial unit of the FSCP General Directorate or another officer<sup>41</sup> assigned by him or her.<sup>42</sup>
- The coordination of the URS components is assigned to the operational centres of General Directorate “Fire Safety and Civil Protection” (see Figure 13 in section 3.1 below).
- On the request<sup>43</sup> by the leader (commander) on the site of the disaster, the mayor of the municipality or the regional governor, the operations centres organise the engagement of URS components, designated in the disaster response plans, as well as additional forces and means.<sup>44</sup>
- The leader on the site provides for the cooperation and coordination of URS components, participating in rescue and urgent recovery activities in the area of the disaster.<sup>45</sup>

The following sub-sections provide details on this policy framework.

### 1.2.1 Strategy scope and focus

A Crisis Management Concept was developed by an interagency working group at the turn of the century. It was discussed among ministries and agencies involved, but never formally endorsed. The experience was useful in clarifying strategic issues and drafting the Crisis Management Law (adopted in early 2005; repealed in May 2009).

At current, there is no document explicitly treating Bulgaria’s strategy for crisis management. It can be glimpsed by analysing other documents, in particular the law on disaster protection and the strategy for mitigating disaster risks.

The Disaster Protection Law treats the activities of prevention (chapter 2 of the Law), the response via the Unified Rescue System (Chapter 3), assistance and recovery (Chapter 6).

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<sup>38</sup> Disaster Protection Law, article 20.

<sup>39</sup> Disaster Protection Law, article 26.

<sup>40</sup> Or “manager.” The word used in Bulgarian is “rakovoditel/ ръководител.” ISO 22320 uses the term “Incident Commander.”

<sup>41</sup> Or “official.” The term used in Bulgarian is “dlajnostno litse/ длъжностно лице.”

<sup>42</sup> Disaster Protection Law, article 31(2). The exception is in cases of epidemics or epizootics, when the leader on the site is the head of the regional health inspection or of the “Food Safety” Regional Directorate. See Disaster Protection Law, article 31(3).

<sup>43</sup> It is expected that such request is made when locally available capabilities are not sufficient to cope with the disaster.

<sup>44</sup> Disaster Protection Law, article 29(2)4.

<sup>45</sup> Disaster Protection Law, article 31(1).

Resilience is a new concept, not yet fully implemented. One visible gap, for example, is in addressing *community resilience*.<sup>46</sup> Nevertheless, some conceptual elements have been addressed over the years, e.g. the planning of the territory, consideration of the risk of flooding in managing water and related infrastructure,<sup>47</sup> maintaining collective and individual protection kits, etc. Furthermore, a number of goals, in line of the Hyogo Framework for Action that aims to build resilience of nations and communities to disasters, have been reflected in the national risk mitigation strategy. One example is the stated objective to develop a national strategy for adaptation to climate change.<sup>48</sup>

The disaster risk reduction strategy declares as a strategic goal “the prevention and/or reduction of the negative consequences for human health, socio-economic activity, environment and cultural heritage in Bulgaria as a result of disasters of natural or technogenic origin.”<sup>49</sup> Four priorities are declared in the same document:

1. Developing of a sustainable national policy and provision of a stable legal and institutional framework for disaster risk reduction;
2. Identification, assessment and monitoring of disaster risks. Enhancing and maintaining effective national systems for prediction, monitoring, early warning, and disaster alerts;
3. Building a culture of disaster protection at all management levels and in society by utilising the experience, education, scientific research and innovation;
4. Reducing the key risk factors and increasing the readiness for effective response to disasters at all management levels.

On this basis one could infer that risk assessment and prevention are in the focus of Bulgaria’s disaster response strategy.<sup>50</sup>

### 1.2.2 Policy for Response

The guiding principle is that the response is initiated and led locally, and involves locally present actors, including local authorities, public organisations, companies and non-governmental organizations. Additional capabilities and resources are provided if and when necessary. The armed forces provide support to rescue and urgent emergency recovery with the permission of the defence minister on the request of the respective state body in accordance with the disaster protection plans. The main response framework is through the Unified Rescue System (URS), described in Chapter 3 of the Disaster Protection Law.

The activities under a threat or the occurrence of a disaster are:<sup>51</sup>

1. Warning;
2. Implementation of urgent measures to reduce disaster’s impact;

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<sup>46</sup> RAND defines ‘community resilience’ as “a measure of the sustained ability of a community to utilize available resources to respond to, withstand, and recover from adverse situations.” See featured topic “Community resilience,” Available at [www.rand.org/topics/community-resilience.html](http://www.rand.org/topics/community-resilience.html) (accessed 27 November 2014).

<sup>47</sup> Law on Waters, Article 10(3).

<sup>48</sup> *Strategy for Mitigating Disaster Risks 2014-2020*, p. 19.

<sup>49</sup> *Strategy for Mitigating Disaster Risks 2014-2020*, quote on p. 18, in Bulgarian.

<sup>50</sup> An inference that was confirmed in an interview with an expert from the FSCP General Directorate.

<sup>51</sup> *Ibid.*, Article 19. The law states also that in times of war, military or emergency situation the protection measures need to abide to the Geneva Conventions and the respective Additional Protocols.

3. Alert;
4. Rescue operations;
5. Delivery of urgent medical assistance;
6. Delivery of urgent psychological assistance to injured people and the rescue teams;
7. Containment and elimination of ecological incidents;
8. Protection against explosives and ammunition;
9. Search and rescue operations;
10. Radiation, chemical and biological protection in incidents and accidents with dangerous substances;
11. Containing and extinguishing fires;
12. Temporary evacuation, sheltering and delivery of means of protection;
13. Conducting urgent emergency recovery works;
14. Containing and eliminating occurring outbreaks, epidemics, and epizootics of contagious and parasitic diseases;
15. Other operations related to disaster protection.

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

In practice, Bulgarian authorities implement an approach to policy making, based on regular reviews of risks, planning, and implementation. The reviews are focused exclusively on “disaster protection” and lead to consequent five-year programmes, e.g. National Programme for Disaster Protection 2009-2013, followed by the National Programme for Disaster Protection 2014-2018. Annual reviews and updates lead to the adoption of (and are usually included in) annual plans, e.g. the *Annual Plan for 2014 for the Implementation of the National Programme for Disaster Protection 2014-2018*.

As an established practice, non-governmental organisations, e.g. volunteer organisations and research institutes are involved in the reviews and drafting the national programmes and the annual plans for their implementation.

Notwithstanding available good practice and experience, Bulgaria’s Caretaker Government (6 August-6 November 2014) assessed the policies made as inadequate and requested a peer-review of the system for disaster prevention and response and assessment of the country’s crisis management capabilities through the EU civil protection mechanism.<sup>52</sup>

#### *Scientific Support*

In the period of 2004-2007, through the Interagency Commission on Protection of the Population in Disasters, Accidents, and Catastrophes (ICPPDAC), Bulgaria implemented a rigorous research programme with the aim to identify suitable crisis management strategies, legal and organisational arrangements, and enhance its prevention and early warning capabilities.<sup>53</sup> One example is the study

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<sup>52</sup> The review is scheduled for mid-2015 and will be conducted in the framework of the EU Civil Protection mechanism.

<sup>53</sup> Shalamanov, Velizar, ed., *Security Research and Change Management in the Security Sector* (Sofia: Demetra, 2008). – in Bulgarian.



on alternative emergency management architectures, resulting in a set of recommendations on further development of the country's crisis management system.<sup>54</sup>

Since then, however, there is no dedicated research programme to support crisis management and disaster response.<sup>55</sup> Occasionally, relevant projects initiated by the research community are financed by Bulgaria's National Science Fund, or Bulgarian scientists contribute to international researcher programmes and projects.

For scientific expertise, the MOI General Directorate FSCP relies on its contacts with the following research organizations:

- Centre for National Security and Defence Research, Bulgarian Academy of Sciences (BAS), for policy studies;
- National Institute for Meteorology and Hydrology, BAS, for meteorological and hydrological studies, current information and forecasts;
- National Institute for Geophysics, Geodesy and Geography, BAS, for monitoring seismic activity and related studies;
- Institute of Information and Communication Technologies, BAS, for operational analysis, computer assisted exercises, and modelling of complex phenomena;
- Institute of Mathematics and Informatics, BAS, for mathematical modelling and decision support;
- Institute for Space and Solar-Terrestrial Research, BAS, for aerospace monitoring;
- The group of chemistry institutes of the Bulgarian Academy of Sciences, for issues of CBRN protection;
- Faculty of Geology and Geography of Sofia University "St. Kliment Ohridski," for seismic studies, remote sensing expertise, etc.

#### 1.2.4 Policy for Prevention

According to article 6(1) of the Disaster Protection Law the goal of prevention is to reduce the risk of disasters, and prevention includes:

1. Analysis and assessment of disaster risks;
2. Mapping disaster risks;
3. Categorisation of towns and villages depending on the number of people potentially affected;
4. Identification of critical infrastructures and sites and assessing respective risks;
5. Measures for protection of critical infrastructures;
6. Planning of disaster protection;
7. Adhering to the requirements of territory planning, investments design, construction and exploitation of building sites;
8. Development and maintenance of the systems for monitoring, early warning and alerts;

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<sup>54</sup> Shalamanov, Velizar, Stefan Hadjitodorov, Todor Tagarev, Nikolay Pavlov, Valentin Stoyanov, Pencho Geneshky, and Stoyan Avramov. "Civil Security: Architectural Approach in Emergency Management Transformation." *Information & Security: An International Journal* 17 (2005): 75-101, <http://dx.doi.org/10.11610/isij.1706>.

<sup>55</sup> The FSCP website has a section on "Applied scientific and expert activity," representing the in-house capacity to define fire safety requirements and support control and certification.

9. Provision of collective and individual protection means;
10. Training and practical preparedness of central and territorial bodies of the executive, response forces, volunteer formations and the population;
11. Adopting and implementing a National programme for disaster protection.

The responsible authorities for items 1 and 2 are as follows:

- for seismic and geological risks – the Minister for Regional Development;
- for the risk of nuclear and radiation accidents – the Chairman of the Nuclear Regulatory Agency;
- for the risk of forest fires – the Minister of Agriculture and Food;
- for the risk of flooding – the Minister of Environment and Water, through the directors of Basin Directorates.

The same institutions approve the methodologies for analysing and assessing the respective risk. In addition, the analysis and assessment of for the risk of nuclear and radiation accidents needs to adhere to the *Law on the Safe Use of Nuclear Energy* and related norms, while the analysis and assessment of the flooding risk need to be in line with the *Law on Waters* and the relevant norms of its implementation.

Annex 1 to the National Disaster Protection Plan (NDPP), issued in 2012, is dedicated to the protection of earthquakes. It provides analysis of the risk of earthquakes, highlighting the risk of shallow quakes (depth at less than 60 km) in three main seismic areas:

- Northeastern, including the zones of Gorna Orahovitsa, Shabla and Duloovo;
- The area of Sredna Gora, including the zones of Sofia, the Maritsa river, the Tundja river, and the sub-Balkan zone;
- The area of the Rila and Rodopi mountains, including the zones of the Struma nad Mesta rivers, and the zone in the Western Rodopi mountain around the town of Velingrad.

These seismic areas, with indication of plausible scenarios of maximum intensity according to the Medvedev–Sponheuer–Karnik-64 scale, is provided on Figure 9 below.

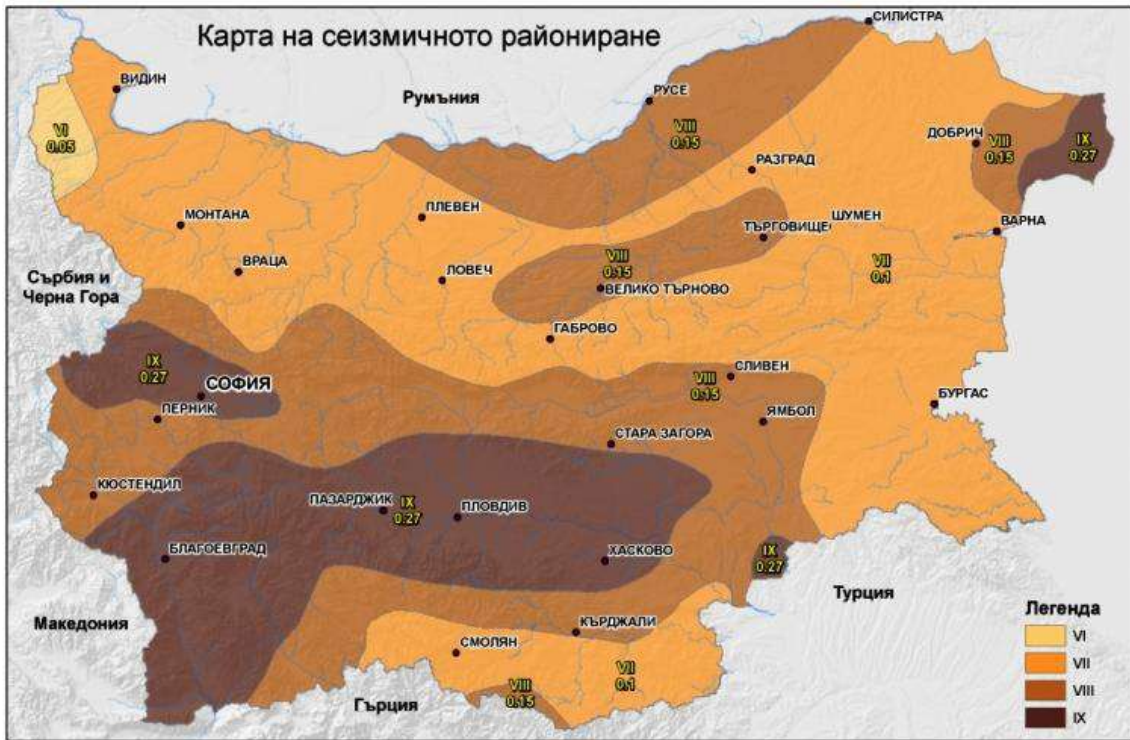


Figure 9: Map of main seismic areas in Bulgaria.

Annex 1 to NDPP details to obligations in earthquake protection of 12 ministers, the heads of the state reserves and nuclear regulation agencies, the Chairperson of the Bulgarian organization of Red Cross, two academic institutes, governors, mayors, trade companies, non-government organisations and individual citizens.

Landslides are also common, but statistically not on a scale that may cause a significant crisis. They are also subject of assessment and risk management studies.<sup>56</sup> The National Programme for Disaster Protection 2014-2018 provides an overview of landslides per region and municipality. See the map on Figure 10 for the territorial distribution of landslides by municipality.<sup>57</sup>

<sup>56</sup> See for example to project *RISK management of natural and anthropogenic landsLIDES in the Greek-Bulgarian cross-border area*, RISKLIDES, within the “European Territorial Cooperation” Operational Programme Greece - Bulgaria 2007-2013. Available at [www.clmc.bas.bg/risklides](http://www.clmc.bas.bg/risklides) (accessed 3 December 2014).

<sup>57</sup> National Programme for Disaster Protection 2014-2018, p. 29.

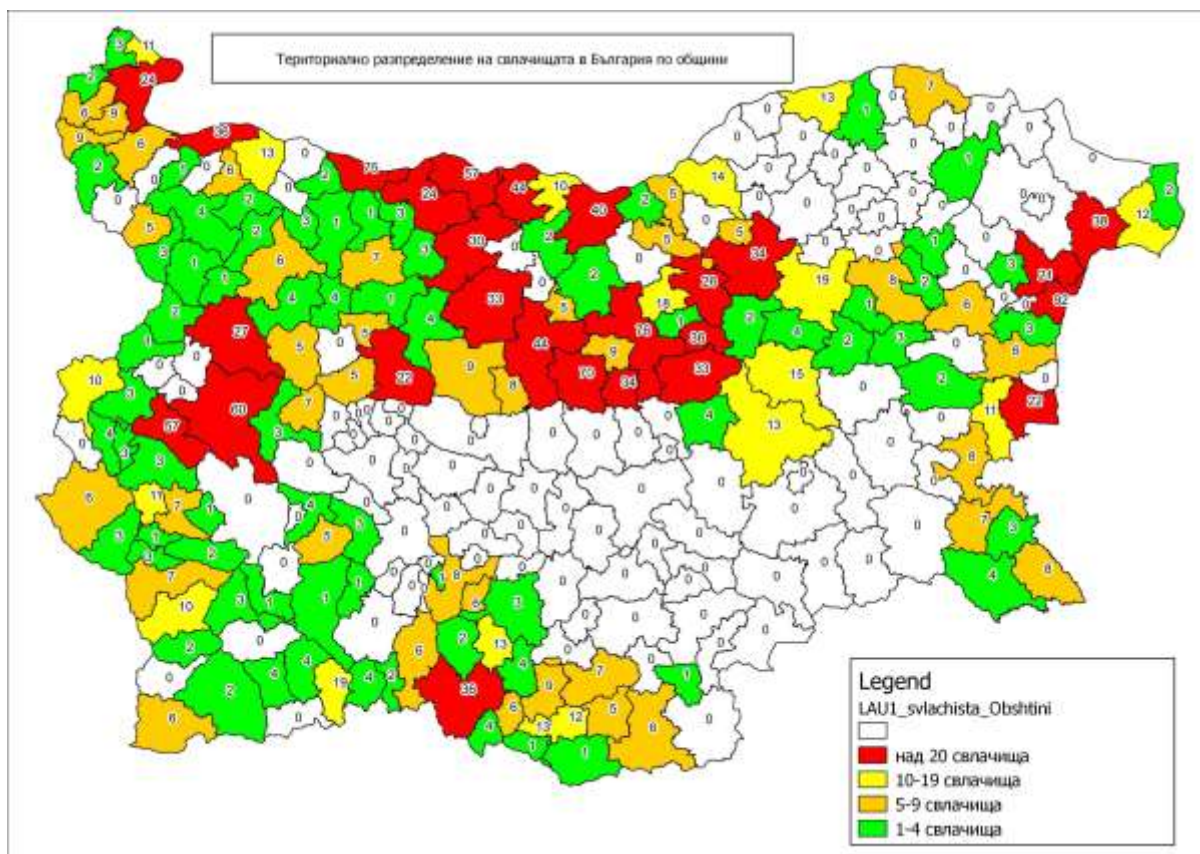


Figure 10: Territorial distribution of landslides by municipality.

The biggest potential nuclear and radiation risk with origin on the territory of Bulgaria relates to scenarios for NPP Kozloduy. Plausible scenarios, their potential impact and the response are described in great detail in Supplement 3 “External plan for accidents in Kozloduy NPP” (a 231 page document) of the standing National Disaster Protection plan. In addition, the nuclear power plant has its own plan to respond to various accidents.<sup>58</sup>

The risk of fires is addressed in NDPP, that examines large fires in industrial enterprises, sites of the critical infrastructure, forest and agricultural lands (in particular at the time of harvesting). The mountainous forests in Strandja-Sakar, Rila and Rodopi mountains, Sredna Gora and the southern slopes of the Balkan mountain are listed as particularly vulnerable, along with the regions of Haskovo, Stara Zagora, Blagoevgrad, Sofia, Pazardjik, Plovdiv, Yambol, and Burgas.

The risks of flooding is assessed as high along the rivers Danube, Maritsa, Tundja, Mesta, Iskar, Arda, Kamchia and others. The most recent experience shows, that under certain conditions, e.g. in heavy rainfalls in the summer and the fall, even small rivers can cause significant damage and human casualties. Technogenic floods, e.g. as a result of destruction of the dams Iskar, Batak, Trakiets, Ogosta, and Toplnitsa, can also have catastrophic consequences, since they could flood areas of 910 km<sup>2</sup> with 650 thousand inhabitants.<sup>59</sup>

The four regional Basin Directorates (part of the Ministry of Environment and Water) are in the process of finalizing the mapping of risks of flooding and transition to the development of respective

<sup>58</sup> See [www.kznpp.org/index.php?lang=en&p=safety&p1=emergency](http://www.kznpp.org/index.php?lang=en&p=safety&p1=emergency).

<sup>59</sup> National Disaster Protection plan (2010), p. 6.

risk management plans. One example is project BG161PO005/12/1.20/02/29 “Developing plans for management of the risk of flooding” of the basin directorate for the Danube region.<sup>60</sup>



Figure 11: Coverage of the four Basin Directorates.

In addition to these main risks, NDPP treats also the risks of trans-border radiation (e.g. in case of an accident in the Vherna Voda NPP in Romania), incidents with vehicle transporting radioactive materials, industrial accidents followed by dissemination of dangerous substance, draught, strong winds and whirlwinds, heavy snowfalls, snowstorms and icing, accidents with maritime, vessels, trains and vehicles, terrorist acts and unexploded ordnance.<sup>61</sup>

Item # 3 on the list of legally required prevention activities—categorisation of towns and villages depending on the number of people potentially affected—is defined in the law itself, categorising the population centres in six groups:

- the cities of Sofia, Plovdiv, Varna, Russe, and Burgass;
- other cities with population above 80 thousand;
- cities with population between 30 and 80 thousand
- cities and conurbations with population between 10 and 30 thousand
- conurbations with population below 10 thousand.

According to the Disaster Protection Law, the identification of critical infrastructures and sites and the assessment of respective risks is also a preventive measure. The *Regulation on the procedures, ways and competent bodies on identification of critical infrastructures and sites and the assessment of the risk for them* assigns the task of identification to the respective ministers and agency heads,

<sup>60</sup> See [www.bd-dunav.org/content/proekti-i-programi](http://www.bd-dunav.org/content/proekti-i-programi) (in Bulgarian) for details.

<sup>61</sup> NDPP, pp. 8-17.

who create standing working groups, while local authorities (governors, mayors) also collect and present relevant information.

The following set of criteria is used to assess the criticality of infrastructures and their elements:

- potential number of people killed and/or injured;
- potential economic consequences – losses, lower quality of products and services, environmental impact;
- potential societal consequences – impact on public confidence, physical suffering, disruption of everyday life, including the loss of main services.

The assessment of the risk for designated critical infrastructures<sup>62</sup> and assets is conducted by their owners or operators based on a methodology, developed by the standing working groups following the guidance of the Minister of the Interior. Every owner/operator of critical infrastructures or their elements must take measures to reduce their vulnerability to natural and technogenic dangers.<sup>63</sup>

The remaining disaster protection activities will be examined below.

Chapter 5 of the National Disaster Protection plan elaborates a number of measures aiming to prevent or mitigate the consequences of disasters, while Chapter 6 elaborates on the measures of protection of the population.

### 1.2.5 Policy for Preparedness

The policy for preparedness focuses on planning, as mandated in section II of Chapter 3 of the Disaster Protection Law, focuses in planning and training in regard to the Unified Rescue System (URS). Other texts in the law define requirements for disaster protection education in schools and universities, for planning and training of the personnel of companies, non-governmental and volunteer organizations.

The preparedness of URS components is assured by training and exercises. According to the law, trainings are aimed at assessing the status of the communication and information system and the readiness of teams to react to disasters. The planning and conducting of exercises serve to improve the cooperation and coordination among the URS components and with the executive bodies in their reaction to disasters. Trainings and exercises can be organised by the order of the minister of the interior, a regional governor, or the mayor of a municipality.<sup>64</sup>

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<sup>62</sup> Annex 2 to the Regulation on the procedures, ways and competent bodies on identification of critical infrastructures and sites and the assessment of the risk for them defines 19 sectors of critical infrastructure: energy; transport; information and communication technologies; postal and courier services; environment; agriculture and foods; health services; finance; economy; sports sites and installations; education, science and technologies; natural resources; tourism; regional development and infrastructure; defence; justice, home affairs and security; state and social governance; disaster protection; cultural heritage. The same designates a responsible ministry for each sector and sub-sector.

<sup>63</sup> Regulation on the procedures, ways and competent bodies on identification of critical infrastructures and sites and the assessment of the risk for them, article 13(3).

<sup>64</sup> Disaster Protection Law, Article 28.

### 1.2.6 Policy for Relief and Recovery

Relief and recovery include delivery of urgent and recovery assistance to the distressed people and urgent recovery works after the disaster.

The urgent assistance is organised and delivered by the mayors and includes:<sup>65</sup>

- Feeding and provision of temporary shelter to the distressed people, pets and livestock;
- Distribution of clothing and household ware to the distressed people;
- Undertaking other necessary measures.

The recovery assistance involves primarily construction measure and repairs of damaged homes. They may include also destruction of building that, as result of the disaster, have become unusable and dangerous.

The Joint Commission for Restoration and Relief is authorised to make decisions and oversee the provision of state funding for recovery (as well as for prevention and urgent assistance necessary to contain a disaster).

## 1.3 Financing

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### 1.3.1 Investing in preparedness

The main assets for crisis management and disaster response are part of the executive branch, provided for through the state budget. The FSCP General Directorate in MOI is the organisation with primary crisis/disaster management responsibilities. It is financed within the MOI budget by the programme “Fire safety and population protection in fires, disasters and emergency situations.”<sup>66</sup> The approximate amounts for this programme are:<sup>67</sup> 161.5 mln. BGN for 2013; 144 mln. for 2014; and 143 mln. BGN for 2015.<sup>68</sup>

A number of agencies with key disaster management capabilities are also financed through the state budget. Among them are the Nuclear Regulatory Agency, the Basin Directorates in the Ministry of Environment and Water, Executive Agency “Forestry,” Executive Environment Agency, the National Centre of Radiobiology and Radiation Protection (Ministry of Health) and others.<sup>69</sup>

Several research institutes of the Bulgarian Academy of Sciences, most notably National Institute for Meteorology and Hydrology and the National Institute for Geophysics, Geodesy and Geography, perform operational activities such as 24/7 monitoring, early warning, and forecasting. This type of activities are financed by the state budget through the budget of the Bulgarian Academy of Sciences.

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<sup>65</sup> Disaster Protection Law, Article 55(2).

<sup>66</sup> For 2013 the name of the programme is “Provision of state fire control, fire safety and rescue, disaster protection and early alert.”

<sup>67</sup> Draft budget for 2014 of the Ministry of the Interior and updated budget forecast for 2015 and 2016 in programme format (in Bulgarian), available at [www.mvr.bg/NR/rdonlyres/92521007-BCE9-44BB-8FBB-352156486003/0/Programen\\_format\\_budjet\\_MVR\\_2014.pdf](http://www.mvr.bg/NR/rdonlyres/92521007-BCE9-44BB-8FBB-352156486003/0/Programen_format_budjet_MVR_2014.pdf) (accessed 20 October 2014).

<sup>68</sup> The exchange rate to the Euro is fixed at 1.9558 BGN for 1 Euro.

<sup>69</sup> These agencies perform other functions as well, and it is not possible to estimate precisely the portion of their budget that supports their crisis management and disaster response capabilities.

The country allocates a budget for the creation and maintenance of “crisis stocks” of materiel and POL to provide for population protection in disasters.<sup>70</sup>

Investments in disaster preparedness and response capabilities are regularly financed by EU funds through the operational programmes, with partial national contribution from the state budget. A sample of such projects includes:

- “Technical provision of the operational units on the FSCP General Directorate of the MOI for containing and extinguishing fires,” with approximately 49 mln. Euro (15 percent national co-financing) in the Operational Programme “Environment”<sup>71</sup>;
- “Enhancing the capacity of the operational units on the FSCP General Directorate of the MOI for reaction to flooding,” project DIR 51214001-2-193 with approximately 49 mln. Euro (15 percent national co-financing) in the Operational Programme “Environment”<sup>72</sup>;

Other projects with partial support from the European Union facilitate the transfer of good practices from the EU, development of the digital communications and information system, training (including training in project management and other aspects of good governance), testing, experimentation and certification, risk assessment and mapping. A number of projects are implementation in bi-lateral frameworks and aim to establish and/or strengthen trans-border cooperation in disaster preparedness and response.

Similar investments are included in the plans for the new EU programming period 2014-2020 through the instruments addressing agriculture (in view of the forest fires), environment (e.g. for risk mitigation), territorial development (e.g. for mapping disaster risks, preparedness, etc.).

The total project-based financing of this type over the last three years is estimated at 150 mln. Euro.<sup>73</sup> The agencies and institutes with crisis management responsibilities, listed above, also implement research, capacity building and infrastructure development projects with international funding.

The Ministry of Defence occasionally invests in specific disaster management capabilities, e.g. equipping helicopters for firefighting, through the defence budget. In case of need, it is expected to provide some of its ‘dual use’ capabilities, e.g. deactivation and de-contamination capabilities.

Local authorities at municipal level are expected to finance disaster prevention, preparedness and response through the municipal budget, while trade companies should finance the sites and assets they are responsible for.<sup>74</sup> At current, however, the level of local investments is estimated as rather low compared to the financing from the state budget. Possible exceptions are the municipalities of Sofia and some of the other biggest cities, but no aggregated data is available.

Finally, in the beginning of each year, the Joint Commission for Restoration and Relief (JCRR) decides to allocate a certain portion of the contingency budget (see the next section). For 2010 and 2011 JCRR decided to dedicate 15 percent of that budget to prevention activities, and increased it to 20 percent in 2012.<sup>75</sup> However, no explicit decisions have been made for 2013 and 2014, mostly due to the numerous requests for recovery assistance after the 2012 earthquake in Pernik.

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<sup>70</sup> Disaster Protection Law, Article 59, para 8.

<sup>71</sup> See [www.nspbzn.mvr.bg/Proekti/Info+pojari.htm](http://www.nspbzn.mvr.bg/Proekti/Info+pojari.htm) (in Bulgarian).

<sup>72</sup> See [www.nspbzn.mvr.bg/Proekti/Proekt-navodnenia.htm](http://www.nspbzn.mvr.bg/Proekti/Proekt-navodnenia.htm) (in Bulgarian).

<sup>73</sup> Interview with a senior expert from the FSCP General Directorate.

<sup>74</sup> Disaster Protection Law, Article 61.

<sup>75</sup> JCRR’s Protocols and decisions, available in Bulgarian at [www.nspbzn.mvr.bg/Sprav\\_informacia/Mejduvedomstvena\\_komisija/default.htm](http://www.nspbzn.mvr.bg/Sprav_informacia/Mejduvedomstvena_komisija/default.htm).



### 1.3.2 Investing in consequence management

Typically, the Law on the State Budget, in its section on “Reserves for unforeseen and/or urgent expenditure” includes a separate line “for prevention, containment and overcoming the consequences of disasters.”<sup>76</sup> In recent years, as well as in the proposed 2015 state budget, the dedicated amount for that purpose is 70 mln. BGN

This budget is managed by the Joint Commission for Restoration and Relief, which decides on requests by line ministries—mainly for recovery of unforeseen expenses for activities in actual disasters—and local authorities – for the actual recovery of buildings and infrastructures damaged as result of a disaster or for the destruction of facilities that have become as a result unusable and dangerous. There is no formally prescribed rationale for deciding on how to distribute the available funding, or which of the numerous requests for recovery assistance to authorise. JCRR’s decisions in that regard are made ad-hoc.

When the losses as a consequence of a disaster are significant, the EU also provides recovery assistance. For example, after the floods in the summer and the autumn of 2014 the European Commission has agreed to compensate Bulgaria’s losses.<sup>77</sup> The expected assistance amounts to no less than 10.5 mln. Euro.<sup>78</sup>

Insuring companies do not play such a significant role in the recovery, since insuring property and critical assets is not legally mandatory, and the respective culture is lacking. To address this issue, a roundtable with insurers is being organised at current.<sup>79</sup>

By law, the Bulgarian Red Cross is subsidised by the state<sup>80</sup> and is authorised to use some exceptions regarding taxes and payments, as a whole and for its employees.<sup>81</sup> The subsidy for 2014 is 3.1 mln. BGN.<sup>82</sup>

To remedy the consequences to people who suffer as a result of disasters, many organizations and individuals donate money, food, bottled water, clothing and other items either directly, or through the Bulgarian Red Cross and other organisations and campaigns. The monetary value of these donations easily exceed several million lev.<sup>83</sup>

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In total, a rough estimate of the annual expenditures of public actors on prevention, preparedness and response points to 400 mln. BGN, or about 0.5 % of the GDP of the country. This amount does not include the costs of preparedness of the armed forces and sustainment costs of the “security”

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<sup>76</sup> Line 4.1.1 of the Law on the State Budget 2014.

<sup>77</sup> The agreed compensation formula is “2.5 % of the direct losses under ‘the large disaster threshold’ + 6 % of the losses above the threshold.” The threshold for Bulgaria in 2014 is 232.5 mln. Euro. See “The European Commission recognised all compensations for the floods in Bulgaria,” *Trud*, 1 December 2014, available at [www.trud.bg/Article.asp?ArticleId=4454903](http://www.trud.bg/Article.asp?ArticleId=4454903) (in Bulgarian).

<sup>78</sup> CROSS News Agency, 17 December 2014.

<sup>79</sup> Interview with a senior FSCP expert.

<sup>80</sup> Law on the Bulgaria Red Cross, Article 6(1).

<sup>81</sup> *Ibid.*, Article 7.

<sup>82</sup> Law on the State Budget of the Republic of Bulgaria for 2014, Annex 4 to Article 49, item # 1.

<sup>83</sup> Till mid-November 2014 the Bulgarian Red Cross received donations of 2 million BGN to provide assistance to people suffering from the floods. See [www.redcross.bg/floods\\_bulgaria2014.html](http://www.redcross.bg/floods_bulgaria2014.html) (in Bulgarian).

departments and officers in all line ministries, regional and municipal administrations, nor the financing needed to create and maintain crisis reserves of materials, food, fuel, etc.

## 1.4 Policy review, Evaluation & Organisational Learning

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### 1.4.1 Post-Disaster Assessment

As an established practice, each individual emergency or a disaster is followed by analysis and a formal report on reasons, consequences and recommendations. One example is the report of a working group, tasked by the Municipal Council of Varna to study the flood on 19 June 2014 that led to 13 casualties and considerable damages of the infrastructure.<sup>84</sup> The report itself is 13 pages long, while the official website of the Varna municipality provides access to 218 pages in total with the report, annexes, photos, maps and the official statements by concerned stakeholders as a reaction to the report.<sup>85</sup>

### 1.4.2 Departmental Lessons Learned systems

There are no formal departmental Lessons Learned systems in place in key stakeholder organisations, with partial exception of the Ministry of Defence.

### 1.4.3 Centralised (national) Lessons Learned system

There is no formal centralised (national) Lessons Learned system. Nevertheless, the analysis and assessment of disaster risks—key input information for the development of the national programme for disaster protection and the annual plans for its implementation—are based on past emergencies and disasters.

In the process of developing the national programme for disaster protection and the annual implementation plans stakeholders, represented in the respective working groups, exchange information on past experience—both negative and experience considered as good practice—and critical issues of common concern. FSCP General Directorate coordinates at working level the development of plans and programmes and thus facilitates the exchange of information.

Through FSCP, Bulgaria participates in the respective activities of the EU, DG ECHO and NATO's Civil Emergency Planning Committee (CEPC), Civil Protection Group (CPG), and Euro-Atlantic Disaster Response Coordination Centre (EADRCC). At this point, however, there is no formalised exchange of lessons learned information.

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<sup>84</sup> Report of the Working group, created with the objective to clarify the reasons for the tragedy on 19 June 2014 and define measures to prevent future disasters, 18 July 2014, Available in Bulgarian at the official website of Varna municipality, [www.varna.bg/bg/getfile.html/id/75a7c30fc0063c4952d7eb044a3c0897](http://www.varna.bg/bg/getfile.html/id/75a7c30fc0063c4952d7eb044a3c0897) (accessed 2 December 2014).

<sup>85</sup> Ibid.

#### 1.4.4 International exchange for Lessons Learned

Bulgaria participates in international activities aiming to evaluate the experience of crisis management and disaster response and learn from it. The main forums of exchange of lessons learned information are:

- The European Union's Civil Protection Committee (CPC) and via European Response Coordination Centre (ERCC) under DG ECHO;
- The NATO's Civil Emergency Planning Committee (CEPC), Civil Protection Group (CPG) and via Euro-Atlantic Disaster Response Coordination Centre (EADRCC).

Bulgaria provides information in the Hyogo Framework for action,<sup>86</sup> but does not exchange information through DesInventar – the disaster information management system maintained by UNISDR.

The regional and bi-lateral formats of information exchange include:

- Disaster Preparedness and Prevention Initiative in SEE (DPPI SEE);<sup>87</sup>
- Council for Civil-Military Emergency Planning in Southeast Europe (SEE CMEP Council);<sup>88</sup>
- The Organization of the Black Sea Economic Cooperation (BSEC).<sup>89</sup>

Bulgaria is active in a number of project-based regional and bi-lateral formats of information exchange, such as:

- Strategic project RISK – Joint monitoring of the risk in emergency situations in the trans-border region of the Danube river, [www.nspbzn.mvr.bg/Proekti/RISK+info.htm](http://www.nspbzn.mvr.bg/Proekti/RISK+info.htm);
- SEERISK – Joint assessment of risk of disasters and readiness in the Danube micro-region, [www.nspbzn.mvr.bg/Proekti/SEERISK.htm](http://www.nspbzn.mvr.bg/Proekti/SEERISK.htm);
- The Black Sea Earthquake Safety Net(work) – ESNET, <http://esnet.infp.ro/en>;
- CBCAID – Bulgaria-Turkey trans-border cooperation in industrial accidents, [www.nspbzn.mvr.bg/Proekti/CBCAID.htm](http://www.nspbzn.mvr.bg/Proekti/CBCAID.htm);
- Enhancing fire safety along the border between Bulgaria and Greece, [www.nspbzn.mvr.bg/Proekti/Proekt\\_BG2003\\_005-630-04.htm](http://www.nspbzn.mvr.bg/Proekti/Proekt_BG2003_005-630-04.htm), etc.

All these projects involve exchange of information and lessons learned.

#### 1.4.5 Regular policy reviews

Bulgaria has no practice, neither legally mandated requirement to conduct rigorous, comprehensive reviews of the national crisis management and disaster response policy.<sup>90</sup>

Nevertheless, the country implements a cyclic review, leading to the adoption of five-year national programmes for disaster protection (e.g. for the periods 2009-2013, and then for 2014-2018), and

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<sup>86</sup> See [www.preventionweb.net/english/countries/statistics/?cid=26](http://www.preventionweb.net/english/countries/statistics/?cid=26).

<sup>87</sup> Bulgaria is among the founders of the Initiative. See also [www.dppi.info](http://www.dppi.info).

<sup>88</sup> Bulgaria is among the countries-founders of the SEE CMEP Council and the Depositary of the Agreement.

<sup>89</sup> DG "FSCP" is the point of contact for the network liaison for BSEC member states in the field of civil protection.

<sup>90</sup> Unlike, for example, the field of defence, where every few years Bulgaria conducts a "Strategic Defence Review" (the titles may differ), followed by the adoption of White paper of defence and the armed forces, and accompanied by annual reports of the Executive to Parliament on the status of defence and the armed forces.

annual plans for implementation of the current programme. All concerned ministries, regional authorities, key non-governmental organisations and research institutes are involved in the development of the programme and the implementation plans.

Local communities, through their representatives in Municipal Councils, have the opportunity to contribute to the development of the respective standing disaster protection plans.

Bulgaria lacks however aggregated reports on implementation of these plans and programmes, and thus a basis of rigorous parliamentary and societal scrutiny.

## 1.5 Resilience

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The term resilience does not translate directly in Bulgarian,<sup>91</sup> and the concept of resilience is not well known.

Nevertheless, there are a number of activities and legal requirements in line with the concept of resilience.

First, the *Disaster Risk Reduction Strategy 2014-2020* follows the Hyogo Framework for Action with its 10-year plan to build resilience of nations and communities to disasters.<sup>92</sup> The strategy focuses on identifying, assessing, prioritizing, monitoring and mitigating disaster risks. It calls for morale responsibility and responsibility to the society of all leadership levels for mitigating disaster risks, strengthening the culture of prevention, openness, transparency, and cooperation, as well as to increase awareness and participation of the population in disaster risk reduction activities.<sup>93</sup>

Secondly, a number of regulations call for preparation and obligations of citizens and companies during disasters (to be examined in section 2 of this report). Educational programmes are in place to prepare school and university students in disaster response.

Third, key items are kept in stock for cases of disaster. That includes foodstuff, tents and blankets, iodine, vaccines, etc. Also, collective and individual protection means are maintained for cases of disaster.

Finally, ISO 22301:2012 “Business Continuity Management – Requirements” has been translated and introduced as national standard. A number of training events took place, and several consultancy companies provide training on ISO 22301:2012 in combination with the British Standard PAS 200:2011 “Crisis management – Guidance and good practice” and ISO 27001 “Information Security Management.”

## 1.6 Information sharing and data protection

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### *Data protection and information sharing*

There is no information on existing databases, e.g. with data on people with particular disabilities. Municipal social services and humanitarian organisations have respective registries, but this information is not centralised.<sup>94</sup> Hence, any requests to share personal data during crises or for crisis

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<sup>91</sup> It is often translated as “stability / устойчивост.”

<sup>92</sup> [www.unisdr.org/we/coordinate/hfa](http://www.unisdr.org/we/coordinate/hfa).

<sup>93</sup> Strategy for Mitigating Disaster Risks 2014-2020, p. 7, p. 21.

<sup>94</sup> To the extent the authors are aware.

management purposes need to be addressed to the respective social services or humanitarian organisations.

The derogation of the legislation in regard to data protection is not included among the rights that can be constraint temporarily in a disaster situation.<sup>95</sup>

However, the Law on Protection of Personal Data stipulates that personal data can be processed when “this is necessary to protect the life and health of a physical person for whom the data is about.”<sup>96</sup> The same Law states that the processing can be performed by an “Administrator of personal data”—a physical or legal entity, a body of the state power or local self-governance—who, alone or jointly with another entity, defines the purposes and means of processing personal data, when these purposes and means are constraint by law.<sup>97</sup>

The sharing of classified information—internally, within the European Union and with third states/ organisations—follows the requirements of the Classified Information Protection Act and respective sub-legal norms. The legislation related to classified information has been adapted first to NATO requirements, and is generally considered in line with corresponding EU norms.

### *Registry of volunteers*

The legal provisions for the use of volunteers and volunteer formations are fairly recent. In the short period of about three years in which they are in force, 162 formations were created, and FSCP provides public access to the respective registry.<sup>98</sup> The registry provides data on the authorised<sup>99</sup> and the actual strength of each formation by municipality. No aggregated data on particular capabilities, level of readiness and contact information is publically available.

The Registry needs to contain information on groups within the volunteer formation along types of activity,<sup>100</sup> and that information should be public, but this requirement is not yet implemented.

The work with the registry shall abide to the requirements of the Law on Personal Data Protection. Hence, while the registry contains the names and the Unified Identification Number of each volunteer, this information is not public. The main implementing agency is the State Commission on Information Security.

### *Use of social media*

At current, Bulgaria has no plans to use data gathered from social media during crises. It nevertheless envisions a role for the citizen in providing for the use of information and data, provided by an individual, via the National System for Emergency Calls 112 or otherwise, as a basis for monitoring,

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<sup>95</sup> Enumerated in Article 52 of the Disaster Protection Law.

<sup>96</sup> Law on Protection of Personal Data, Article 4(1), para 4.

<sup>97</sup> Ibid., Article 3(1) and (2).

<sup>98</sup> See [www.nspbzn.mvr.bg/Sprav\\_informacia/Registri/default.htm](http://www.nspbzn.mvr.bg/Sprav_informacia/Registri/default.htm). As of 19 December 2014 the registry can be downloaded at [www.nspbzn.mvr.bg/NR/rdonlyres/63B788EC-2181-4A3F-871D-142803766A07/0/Registar\\_DF\\_Publichen\\_19122014g.pdf](http://www.nspbzn.mvr.bg/NR/rdonlyres/63B788EC-2181-4A3F-871D-142803766A07/0/Registar_DF_Publichen_19122014g.pdf).

<sup>99</sup> As explained in a footnote in the registry, the authorised strength is based on statistical data on the population in the municipality, as related to its distance from the component parts of the Unified Rescue System. The authorised strength is defined by Decision # 327 of the Council of Ministers of 25 April 2012.

<sup>100</sup> Regulation Iz-1669 of 17 August 2012 on the order of creating and maintaining a registry on the volunteer formations for overcoming or containing disasters, fires, and emergency situations and elimination of their consequences, Article 9(1), para 8.

early warning, and alerts.<sup>101</sup> Hence, there are no legal obstacles to use other technical venues, including social networks, as a way to provide disaster related information.

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<sup>101</sup> Disaster Protection Law, Article 11(1), para 1.

## 2 Legislation

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The *Constitution of the Republic of Bulgaria* is the founding Act defining, *inter alia*, main rights and responsibilities of the citizens, authorities and cases in which they can declare war or another emergency (extraordinary) situation, as well as the citizens' rights that cannot be derogated in such cases.

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

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There is no formally approved crisis management concept. A draft document was discussed at the turn of the century, and those discussions informed the writing to the *Crisis Management Law*. Many of the stipulations in that law (repealed in 2009) are now included in the *Disaster Protection Law*.

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

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The main law regulating crisis management is the Disaster Protection Law.

In 2005 a *Crisis Management Law* was introduced. However, it was repealed in 2009 without much debate in Parliament or within the expert community. In the authors' opinion, there were two main reasons for that decision: First, the rather broad legal definition of a 'crisis,' potentially subject to various interpretations;<sup>102</sup> and second, the intentions of the new party in power<sup>103</sup> to close down the then existing *Ministry on Crisis Management*<sup>104</sup> and to transfer its functions, along with the Civil Protection Agency, to the Ministry of the Interior.

The Disaster Management Law arranges the protection of life and health of the population, the preservation of the environment and property in disasters.<sup>105</sup>

This Law provides definition of disaster;<sup>106</sup> responsible authorities and actors, and the coordination of their activities through the Unified Rescue System; the main principles and activities of disaster management (prevention, protection, recovery and assistance, resource allocation, providing and receiving aid); the contribution of citizens, volunteers and legal entities (companies); administrative measures and penalties; and legal definitions of the main terms.

The Disaster Management Law envisions implementation of certain norms introduced by other laws:

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<sup>102</sup> The Crisis Management Law existed in parallel to the Disaster Protection Law, but was cancelled in 2009 through amendments to the Law on Defence and Armed Forces.

<sup>103</sup> Prior to and after the regular parliamentary elections in the early summer of 2009, the leaders of the party coming to power declared publicly, on several occasions, this intention.

<sup>104</sup> Earlier, Ministry on Disasters and Catastrophes.

<sup>105</sup> Disaster Management Law, Article 1.

<sup>106</sup> See the opening section of Chapter 1 above.

- According to Article 9(12), the part “Flooding” of the disaster protection plans is drafted taking into account the plans for managing the risk of flooding, developed according to the requirements of the *Law on Waters*.<sup>107</sup>
- According to Article 9(14), in the initiation or approval of the detailed plans on the territory, required by the Law on Territory Planning,<sup>108</sup> the bodies responsible for the elaboration of disaster protection plans provide information on foreseen disasters, endangering the territories in the scope of the disaster protection plans, and for the necessary measures for their protection, included in the disaster protection plans.
- Owners and operators of sites and assets in the scope of Article 137, categories 1, 2, or 3 of the Law on Territory Planning (roads and other infrastructure and construction sites of significant importance and involving high complexity and risk) are obliged to develop, maintain and prepare for the implementation of an emergency plan for the respective site/asset.
- According to Article 18a(2), the information on designating certain infrastructure as European Critical Infrastructure is in accordance with the respective level of classification, defined by the Classified Information Protection Act.<sup>109</sup> According to the same Act and Article 18b(6) of the Disaster Protection Law, the operator’s plan for security of European Critical Infrastructure is considered classified information.

Additional requirements are introduced by other laws and regulations, including the Law on the Forests and Regulation # 8 on the conditions and procedures for protecting forest territories from fires, the Law on Waters and Regulation # 13 maintenance of dams and relevant facilities, the Law on the Safe Use of Nuclear Energy and Regulation on emergency planning and emergency preparedness in case of nuclear and radiation accident, and the Regulation on critical infrastructures. Among the relevant sector specific laws are also the Law on the Ministry of the Interior, the Law on Defence and Armed Forces, and the Law on State Agency “National Security.” For details refer to section 2.4 below.

## 2.3 Emergency rule

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The declaration of war, military situation or emergency (extraordinary) situation is treated in the Constitution of the Republic of Bulgaria (see above). According to Article 122(1) of the Law of Defence and Armed Forces “emergency (extraordinary) situation” is introduced on the whole or part of the territory of the country “under a danger of involving the Republic of Bulgaria in a military-political crisis or a military conflict.”<sup>110</sup>

The Disaster Protection Law stipulates that in all three cases—war, military situation or emergency (extraordinary) situation—the protection of the population is exercised in accordance with the Geneva Conventions.<sup>111</sup>

The declaration of a disaster [situation] is treated in Chapter 5 of the Disaster Protection Law.

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<sup>107</sup> Law on Waters, *State Gazette* 67 (27 July 1999), last amendment 28 November 2014.

<sup>108</sup> Law on Territory Planning, *State Gazette* 87 (29 September 1995), last amendment 14 October 2011).

<sup>109</sup> Classified Information Protection Act, *State Gazette* 45 (30 April 2002), last amendment 28 June 2014.

<sup>110</sup> Thus clearly distinguishing *emergency (extraordinary)* from a *disaster* situation as a result of a natural or technogenic nature.

<sup>111</sup> Disaster Protection Law, Article 19(2).



Disaster situation is a mode (regime), introduced in the area of the disaster by the authorities, authorised by law, that involves application of temporary measures aimed to contain the disaster and conduct rescue and urgent recovery works.<sup>112</sup> A disaster regime is declared after the implementation of the measures in the respective disaster protection plan has been initiated.

The mayor of the municipality with his or her order declares a disaster situation on the territory of the municipality or part of it, and sends a copy of the order to the regional governor and the minister of the interior.<sup>113</sup> Likewise, the governor declares a disaster situation on the territory of the region or part of it, and immediately sends a copy of the order to the minister of the interior.

The Council of Ministers, on the proposal of the minister of the interior, takes and announces a decision to declare a disaster situation of the territory of more than one region or of the whole country.<sup>114</sup>

The order (respectively, the decision) outline:

- the conditions serving as a basis for declaring a disaster situation;
- the rationale necessitating the declaration of a disaster situation;
- the borders of the territory on which the disaster situation is declared;
- the measures for containing the disaster, including the measures, temporarily undertaken, on the rights of the citizens;
- the bodies and persons responsible for the implementation of these measures;
- the initial moment of introducing the disaster situation and its duration (which cannot exceed 30 days).<sup>115</sup>

The law further defines the conditions under which the disaster situation can be extended or terminated.

Article 52 defines rights that can be temporarily limited, in the “inevitably necessary scale” during a disaster:

1. the right of inviolability of persons and homes in temporary taking people away from areas where their life and health are under immediate danger;
2. the right to use property when it is necessary to protect persons’ life, health and property, or the environment;
3. the freedom of movement or staying in a designated part of the territory, endanger or affected by the disaster;
4. the right to conduct an activity that could hamper or prevent the implementation of rescue works.

When a disaster situation is declared, the necessary measures may include:

1. temporary taking away persons, pets, and farm animals and removal of property from a designated territory;
2. prohibition of entering, staying or moving in certain sites or territory;
3. immediate construction, engineering works, terrain restructuring, or removal of constructions aimed to mitigate or prevent a threat as a result of the disaster;
4. care for children and disadvantaged people, if in the disaster situation such care cannot be exercised by the people who usually provide it;

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<sup>112</sup> Disaster Protection Law, Article 48(1).

<sup>113</sup> Disaster Protection Law, Article 49.

<sup>114</sup> Ibid., Articles 49 and 50.

<sup>115</sup> Ibid., Article 51(1).

5. supplying with priority kindergartens, social, health and medical institutions and the rescue teams;
6. evacuation and/or deconcentration.

According to Article 52(3) of the Disaster Protection Law, the conditions and procedures for conducting evacuation and deconcentration are defined in a Regulation, approved by the Council of Ministers.

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

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A number of laws and regulations treat the disaster protection responsibilities of individual departments and agencies. Key among them are the following:

- The Law on Waters and Regulation # 13 of 29 January 2004 on the conditions and procedures for technical maintenance of dams and relevant facilities describe duties and obligations of the Ministry of Environment and Waters, its subordinated executive agencies and basin directorates, as well as owners and operators dams and related infrastructure.
- The Law on the Forests defines requirements towards planning and inspections in order to prevent and protect forests from fires. In addition, Regulation # 8 on the conditions and procedures for protecting forest territories from fires tasks the Executive Director of the Executive Agency “Forestry” to collect the necessary statistical information on fires for all forest territories (and, thus, facilitate risk management).<sup>116</sup>
- The Law on the Safe Use of Nuclear Energy defines key conditions for safe exploitation of nuclear power stations and other radiation sources, and the respective obligations of the Nuclear Regulation Agency.
- The Regulation on the procedures, ways and competent bodies on identification of critical infrastructures and sites and the assessment of the risk for them stipulates responsibilities of owners and operators of critical infrastructure and assets. It also identifies the minister of the interior as the point of contact for exchange of information on European Critical Infrastructure.
- The Law on Health defines the disaster protection responsibilities of medical and other health institutions (including national and regional health inspections, the Head State Health Inspector and regional health inspectors).<sup>117</sup>
- Law on the Ministry of the Interior defines the provision of fire safety and protection in fires, disasters and emergency situations as one of the seven main activities of the ministry.<sup>118</sup> This activity is further detailed in Article 17 of the Law. In regard to crisis management, this law refers to the Disaster Protection Law.
- The Law on Defence and Armed Forces stipulates that in peacetime the armed forces maintain readiness and provide humanitarian assistance and rescue on the territory of the country and its maritime space, as well as outside the country in accordance with the national legislation and the international treaties. Units of the armed forces are trained to

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<sup>116</sup> Article 12 /3/ of Regulation # 8 on the conditions and procedures for protecting forest territories from fires.

<sup>117</sup> Law on Health, section V, Articles 114, 115.

<sup>118</sup> Law on the Ministry of the Interior, Article 6(1).

provide rescue and emergency recovery works to contain disasters and overcome their consequences. The armed forces contribute to prevention, protection, rescue and urgent recovery works in accordance with the Disaster Protection Law.<sup>119</sup>

- According to the Law on State Agency “National Security,” the Agency conducts activities aimed to protect national strategic sites and activities.<sup>120</sup>

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

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Each municipality/ region has its own, tailored disaster protection plan. The first response is local, and it is up to the mayor/ the regional governor to initiate the implementation of the respective disaster protection plan and, if necessary, to declare a disaster situation.

When the locally available capacity is (or deemed to become) overwhelmed, the mayor/ the regional governor request the activation of additional components of the Unified Rescue System and other forces and means.

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

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Chapter 4, section III of the Disaster Protection Law is dedicated to volunteer formations. It defines “volunteer” as a “person participating in a volunteer formation for preventing or containing disasters, fires, and emergency situations and elimination of their consequences”<sup>121</sup> and the requirements to volunteers in terms of age, health, etc.<sup>122</sup>

Volunteer formations are created by the mayor on a decision of the Municipal Council. The mayor sends a request to the Ministry of the Interior so that the volunteer formation is listed in a central registry.<sup>123</sup>

The current register lists 162 volunteer formations with 2 311 volunteers total.<sup>124</sup>

The mayor is responsible to:

1. sign a contract with the volunteer;<sup>125</sup>
2. provide training and equipment to the volunteer;
3. insure the volunteer for accidents as a result of or in connection with his or her contract obligations;
4. insure the volunteer for all relevant social risks.

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<sup>119</sup> Law on Defence and Armed Forces, Article 56, para 4, 5 and 6.

<sup>120</sup> Law on State Agency “National Security,” Article 4(1)9.

<sup>121</sup> Disaster Protection Law, Article 39.

<sup>122</sup> Ibid., Article 40.

<sup>123</sup> Registries of the FSCP General Directorate, [www.nspbzn.mvr.bg/Sprav\\_informacia/Registri/default.htm](http://www.nspbzn.mvr.bg/Sprav_informacia/Registri/default.htm).

<sup>124</sup> Register of the volunteer formations for disaster protection on the territory of the Republic of Bulgaria and number of volunteers by municipality, 19 December 2014, available at [www.nspbzn.mvr.bg/NR/rdonlyres/63B788EC-2181-4A3F-871D-142803766A07/0/Registar\\_DF\\_Publichen\\_19122014g.pdf](http://www.nspbzn.mvr.bg/NR/rdonlyres/63B788EC-2181-4A3F-871D-142803766A07/0/Registar_DF_Publichen_19122014g.pdf).

<sup>125</sup> When the person meets established training requirements.

The respective expenditures are covered by the state through the delegated budget.<sup>126</sup>

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

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The Disaster Protection Law envisions delivering and receiving aid in disasters, as well as certain forms of international cooperation, but does not treat Bulgaria's contribution to international rescue and/or humanitarian operations.

The Regulation on the structure and the activity of the Ministry of the Interior adds the participation in international humanitarian and/or rescue operations to the rescue activities performed according to the Law on the MOI.<sup>127</sup> Other articles in this document refer to participation in international firefighting operations, operational cooperation with the EU, NATO and other international organisations in the fields of fire safety, protection of the population, humanitarian assistance and civil-military emergency planning.<sup>128</sup>

Roles, command arrangement, and rules of engagement are not explicitly treated in laws and regulations. It can be inferred that the working assumption is for contribution with relatively small units and teams to international operations, for example organised within the EU civil protection mechanism or led by NATO.

Often, Bulgaria contributes to first response of humanitarian relief operations with military units or personnel. Armed forces' personnel and equipment sent to missions abroad are insured for several types of risks.<sup>129</sup>

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<sup>126</sup> Disaster Protection Law, Article 42(2).

<sup>127</sup> The Regulation on the structure and the activity of the Ministry of the Interior, Article 66, para 8.

<sup>128</sup> Ibid. articles 65 and 69.

<sup>129</sup> For details see the tender announcement by the MOD for insuring personnel equipment outside the territory of Bulgaria at [http://www.aop.bg/case2.php?mode=show\\_doc&doc\\_id=606574&newver=2](http://www.aop.bg/case2.php?mode=show_doc&doc_id=606574&newver=2) (in Bulgarian).

## 3 Organisation

### 3.1 Organisational chart

#### *Brief overview of the evolving organisational arrangements*

Natural disasters in Bulgaria are on the increase. From June to October 2014, on five different occasions heavy floods affected half of Bulgaria's regions and took 18 casualties. By the end of October, the total number of disasters since the start of the year exceeded 600, including train crashes and explosions in ammunition factories, the most recent one killing 15 people.

These types of challenges faced come in sharp contrast with the traditional concerns and the approach to civil protection. In 1936, Decree no. 310 of Tsar Boris III introduced the *Regulation for air defence and chemical protection of the population*, with respective tasks for the armed forces and other governmental agencies. The focus on protecting the population in times of military conflict against WMD was reaffirmed in the times of the Cold war, 1946-1989. Renamed Central Directorate of Civil Defence in 1962, the organisation was directly subordinated to the Council of Ministers. In 1971, the "Civil Defence" organisation has been included in the Ministry of Defence (MoD), with the additional tasks of *preventing and limiting the consequences of natural disasters and major industrial catastrophes*. With Governmental Ordinance no. 419 of 4 December 1991 the organisation was renamed "Civil Protection," but retained its military nature as part of the MoD. It was demilitarised in 2000, and in 2001 became *State Agency for Civil Protection* under the Council of Ministers. In 2007 it became part of the newly established Ministry for Disasters and Catastrophes (later renamed as "Ministry of the Emergency Situations," or MES). In 2009 it was included in the Ministry of the Interior (Mol; MES was closed down), and since 2010 it is part of the Mol General Directorate "Fire Safety and Civil Protection" (FSCP).

FSCP is in the focus of a multi-agency, multi-stakeholder, territorially distributed system aiming to provide disaster prevention and response.

#### *National authority for disaster management; Chain of command and high-level decision-making*

Figure 12 aims to clarify the responsibilities of various executive and consultative bodies with "crisis" management responsibilities.

As Head of State and Supreme Commander of the Armed Forces, the President leads the Supreme Command and chairs the Consultative Council on National Security.<sup>130</sup> According to the Law on the Consultative Council on National Security, it includes also the Chair of the National Assembly (Speaker of the Parliament), the Prime Minister, the ministers of defence, foreign affairs, interior, and finance, the Head of the State Agency "National Security," the Chief of Defence, and one representative of each parliamentary group. Others may be invited to take part in its meetings depending on the issues to be discussed.<sup>131</sup>

The Security Council is another consultative body, supporting the Council of Ministers on issues of national security. It is chaired by the Prime Minister, and Deputy Chair is the Vice Prime minister with the relevant portfolio. Permanent members are the ministers of foreign affairs, defence, and interior,

<sup>130</sup> Constitution of the Republic of Bulgaria, Article 100.

<sup>131</sup> Law on the Consultative Council on National Security, Article 2.

the deputy minister of finance, the MOI Head Secretary and the Chief of Defence.<sup>132</sup> The President may participate personally in the meetings of the Security Council and to designate one or more persons to represent him/her.<sup>133</sup> In practice, the focus of the Security Council is on external threats, terrorism threats and the like and, respectively, on coordinating the work of defence, security and intelligence services.

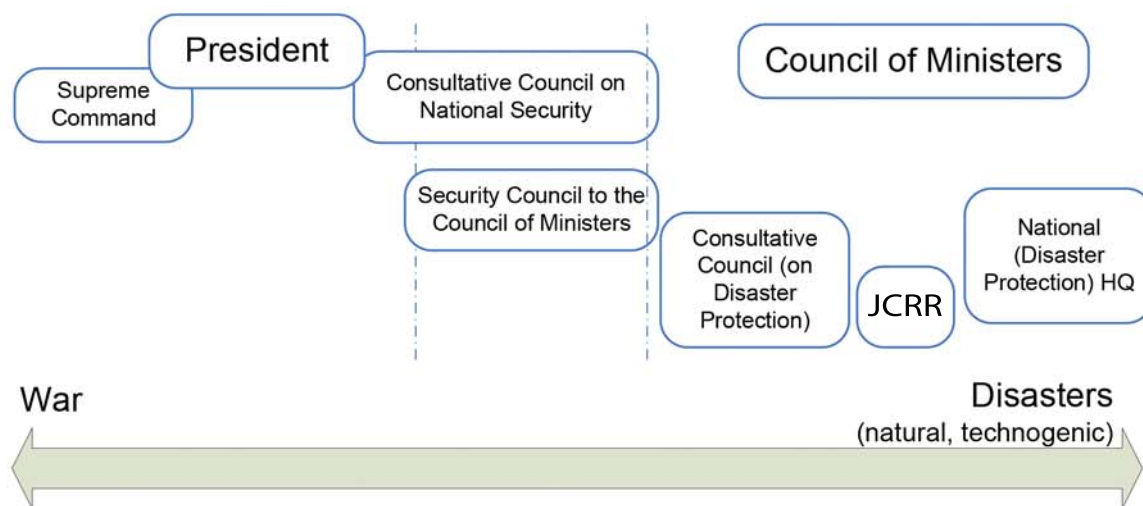


Figure 12: High-level crisis management arrangements.

In the case of crisis of natural or technogenic nature, the responsibility is clearly assigned to the Council of Ministers,<sup>134</sup> with the Minister of Interior in the lead of main operational preparedness and response activities.

The Council of Minister elaborates the state disaster protection *policy*.<sup>135</sup> On policy issues, including resource allocation, it is supported by a number of multi-stakeholder formats, as follows:

- Policy making is supported by a *Consultative Council* which is the national platform for disaster risk reduction and includes representatives of ministries, agencies, the Bulgarian Academy of Sciences, universities, research institutes, the National Association of Municipalities, and other legal entities with disaster protection responsibilities<sup>136</sup> (The MOI FSCP General Directorate has invited the Bulgarian Academy of Sciences (an organisation with 42 research institutes) and 20 universities to nominate their representatives as members of this Consultative Council<sup>137</sup>).
- The National Programme for Disaster Protection is developed by the minister of the interior, jointly with other ministries and agencies, the National Association of Municipalities, and the Bulgarian Red Cross.<sup>138</sup>

<sup>132</sup> Regulation on the functions, tasks and organization of the work of the Security Council to the Council of Ministers, Article 3.

<sup>133</sup> Ibid., Article 4.

<sup>134</sup> Disaster Protection Law, Article 62.

<sup>135</sup> Disaster Protection Law, Article 62(1).

<sup>136</sup> Disaster Protection Law, Article 62(3) and (4).

<sup>137</sup> Interview with a senior leader from the Bulgarian Academy of Sciences.

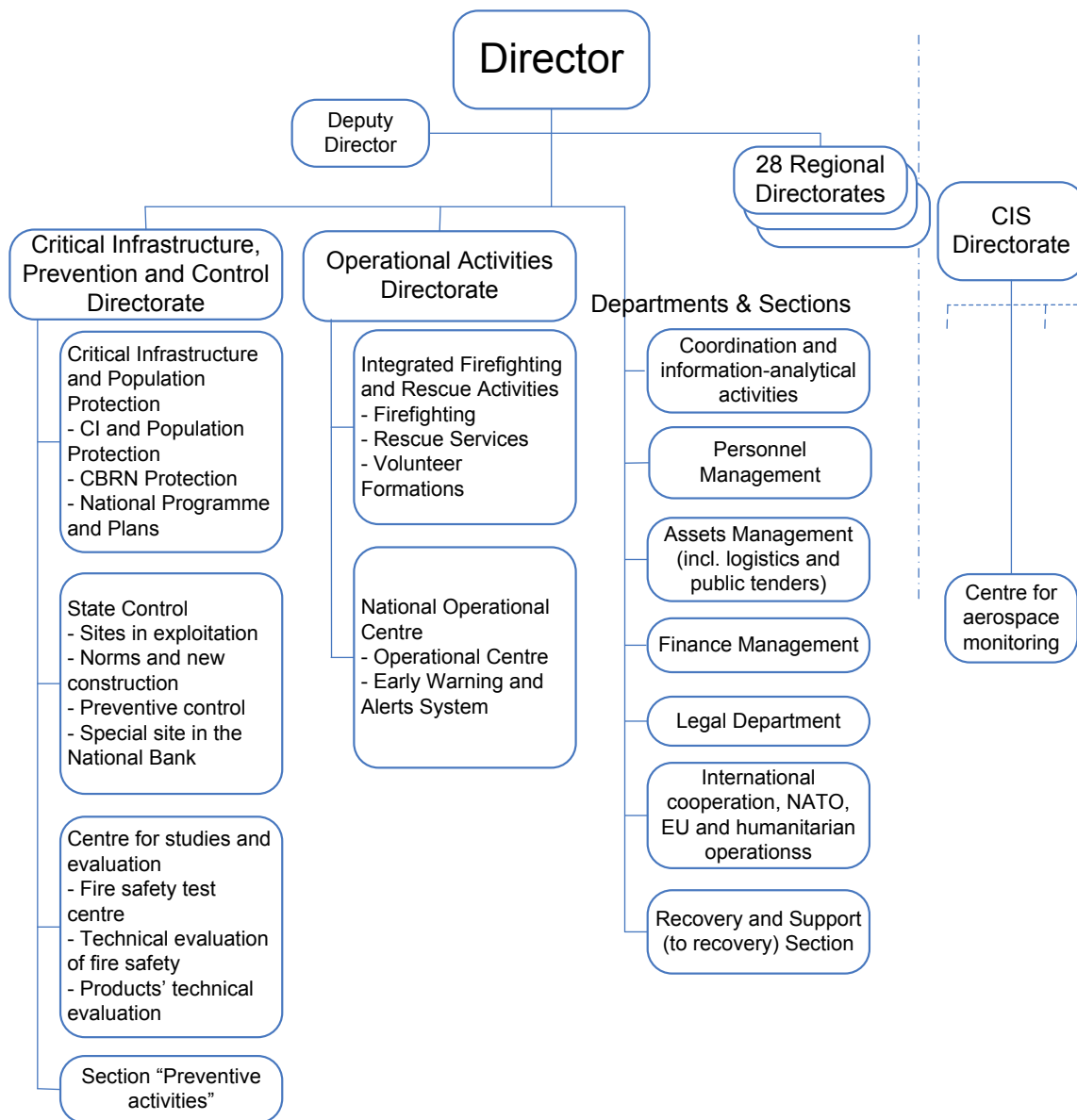
<sup>138</sup> Disaster Protection Law, Article 18(5).

- The Joint Commission for Restoration and Relief (JCRR) to the Council of Ministers is led by the Minister of the Interior and includes respective minister or deputy ministers and agency heads, and provides for contributions of the National Association of Municipalities and regional governors.<sup>139</sup> JCRR decides, among others, on financing or reimbursing urgent rescue and recovery activities and investments from the central state budget in prevention.

The operational disaster response is coordinated through the Unified Response System, with a National HQ, described in the following section.

*National permanent disaster management units*

The main executive disaster management organisation is “Fire Safety and Civil Protection” (FSCP)—a General Directorate in the Ministry of the Interior (the FSCP structure is presented on Figure 13).



**Figure 13: MOI General Directorate “Fire Safety and Civil Protection.”**

<sup>139</sup> Disaster Protection Law, Article 54.

FSCP includes two directorates, several stand-alone departments and sections, including the national operational centre and the early warning and alert system. In implementation of EU Directive 114/2008, FSCP is designated as the national point of contact for protection of European critical infrastructure. Closely related is the Centre for Aerospace Monitoring, supported by the MOI Communications and Information Systems (CIS) directorate.<sup>140</sup>

The FSCP General Directorate includes 28 regional FSCP directorates – one in each region of the country. They have some common administrative elements, but the first responder units are tailored to the disasters typical for the respective regions.

The current total ceiling for FSCP personnel is 8 848; employing at current around 8 000 personnel.<sup>141</sup>

According to the 2012 FSCP Modernisation Programme, the FSCP Table of Organisation and Equipment (TOE) calls for 201 rescue vehicles (183 available, including 119 rescue, 41 chemical, 14 alpine, 9 for divers), 17 lifting gear, 17 medical vehicles, 399 support vehicles, 49 engineering vehicles, 43 armoured vehicles, and 489 transport vehicles. The document itself states that a significant number of this equipment is not functioning.<sup>142</sup>

#### *Anticipated use of specialised military assets*

The involvement of military capabilities and assets is formally seen as last resort, only in cases when the available civilian capacity is overwhelmed. In practice, however, the military are called to support disaster response fairly often, e.g. for aerial surveillance and reconnaissance, search and rescue from the air (see for example Figure 14<sup>143</sup>), provision of heavy transport vehicles in snow storms and heavy icing, etc.

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<sup>140</sup> The 112 system is supported by another directorate of the Ministry of the Interior.

<sup>141</sup> Reference on the personnel positions and unfilled positions in the Ministry of the Interior as of 31 May 2014.

<sup>142</sup> Programme for modernisation and provision of technical resources of the territorial units for fire safety and protection of the population in the Republic of Bulgaria, 2012.

<sup>143</sup> Servicemen from the Bulgarian Army provide help in areas affected by floods, *MOD News section*, Available at [www.mod.bg/bg/news\\_archive.php?fn\\_month=9&fn\\_year=2014#!pP](http://www.mod.bg/bg/news_archive.php?fn_month=9&fn_year=2014#!pP) (accessed 12 December 2014).





**Figure 14: Military aerial search and rescue during the floods in September 2014.**

Annual national plans provide further details. For example, the 2013 plan provides information on the financing necessary to fully equip units and formations of the armed forces for:<sup>144</sup>

- managing the consequences in an accident at Kozloduy NPP;
- response to industrial accidents;
- response to fires;
- response to floods;
- response to earthquakes;
- activities in heavy winter conditions;
- identifying and destroying unexploded ordnance;
- a rapid reaction military medical team of the Military Medical Academy.

The Ministry of Defence, as well as other ministries maintain operational centres and specific crisis response capabilities.

The 2013 National Disaster Protection Plan provides details on the capabilities maintained by the Ministry of Defence and the Armed Forces:<sup>145</sup>

- The “Operations and Training” Directorate is the MOD structure organising the activities of the defence establishment aimed at protecting the population in disasters;
- The Military Medical Academy and its subordinate military hospitals maintain specialised teams, transport vehicles and consulting rooms as follows:
  - a Rapid Reaction Military Medical Team (RRMMT) – Sofia with 15 teams (4 – surgery; 2 – resuscitation; 2 – therapeutic; 1 – toxicological; 1 – obstetrics- gynaecological; 1 – epidemiological; 2 – for infectious diseases; 2 – resuscitation teams for aerial medical evacuation<sup>146</sup>); the respective specialised transport vehicles (4 ambulances; 1 mobile

<sup>144</sup> The 2013 Plan for Implementation of National Disaster Protection Programme, p. 32.

<sup>145</sup> The 2013 Plan for Implementation of National Disaster Protection Programme, pp. 6-7.

<sup>146</sup> When air transport is provided by other military units or companies.

- treatment cabinet /therapeutic room/; 1 mobile paediatric room; 1 mobile obstetrics- gynaecological room; 1 mobile surgery room; 1 mobile resuscitation room; 1 mobile dressing vehicle; 1 bus for sanitary evacuation);
- RRMMT-Plovdiv, Varna, and Pleven each maintain 3 teams (surgery; resuscitation; therapeutic) with the respective specialised vehicles;
- “Military Police” maintains a team of 76 military staff and 28 vehicles in readiness to perform protection, traffic management, and escort;
- With a staff of 355, Executive Agency “Military Clubs and Recreation” maintain 2 800 beds and can host affected groups of the population;
- The Bulgarian Army maintains 95 formations available for containing and overcoming the consequences of disasters, as follows:
  - for managing the consequences of an accident at Kozloduy NPP – 6;
  - for managing the consequences of industrial accidents – 7;
  - for extinguishing fires – 20;
  - for managing the consequences of earthquakes – 9;
  - for activities in heavy winter conditions – 23;
  - for identifying and destroying unexploded ordnance – 16.

#### *Other national organisations with crisis management responsibilities*

Numerous executive, research, and non-governmental organisations, in addition to the Ministry of the Interior, have disaster protection responsibilities. The National Disaster Protection Programme 2014-2018 lists in particular the responsibilities of:

- The Ministry of Foreign Affairs
- The Ministry of Regional Development
- The Ministry of Health
- The Ministry of Defence
- The Ministry of Transport, Information Technologies, and Communications
- The Ministry of Economy and Energy<sup>147</sup>
- The Ministry of Environment and Waters
- The Ministry of Labour and Social Policy
- The Ministry of Agriculture and Foods
- The Ministry of Culture
- The Ministry of Education and Science
- State Agency “State Reserves and Wartime Stocks”
- The Bulgarian Red Cross
- The Nuclear Regulation Agency
- The Research Institute on Geophysics, Geodesy and Geography at the Bulgarian Academy of Sciences
- National Institute of Meteorology and Hydrology at the Bulgarian Academy of Sciences.

Most of these ministries and agencies maintain general purpose or specialised disaster protection units, described in respective annexes to the National Disaster Protection Plan.

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<sup>147</sup> Split in November 2014 in ministries of economy, energy, and tourism.

### *Local emergency management arrangements*

The regional governor and the mayor are the lead authorities respectively at regional and municipal level, supported by the head of the local FSCP unit.

Regional administrations, as well as the administration of big municipalities, have “Security Directorates” with the functions, *inter alia*, to protect the population in “disasters, accidents, incidents, and other emergency situations,” planning and coordination of disaster protection, budgeting the creation of stocks of individual protection means, PR activities related to disaster protection, creating and equipping one or more volunteer formations, etc.<sup>148</sup>

Smaller municipalities maintain sections or individual employees with disaster protection responsibilities.

### *Volunteers and volunteer organisations; specialised NGOs*

Since 2011, the Disaster Protection Law regulates the contribution of volunteers and the functioning of volunteer formations.<sup>149</sup>

According to Article 47 of the Law, the FSCP General Directorate maintains a registry of the Disaster Protection Law. A current list of 162 units at municipal level, with 2311 volunteers, is available at the FSCP page on the MOI website.<sup>150</sup>

The amendment to the Disaster Protection Law was followed by the adoption of a *Strategy for developing volunteer formations for protection in disasters, fires, and other emergency situations in Republic of Bulgaria 2012-2020*.<sup>151</sup>

The Bulgarian Red Cross<sup>152</sup> is the foremost non-governmental organisation with disaster protection capabilities and key node in a network of specialised organisations:

- Bulgarian Red Cross Youth, <http://youth.redcross.bg>
- Mountain Rescue Service, [www.pss.bg](http://www.pss.bg)
- Water Life Saving Service, <http://en.redcross.bg/activities/activities3.html>
- Refugee-Migrant Service, <http://en.redcross.bg/activities/activities8.html>

The list of relevant NGOs and associations includes also:

- National Association of the Volunteers in Republic of Bulgaria<sup>153</sup>
- National Syndicate of Firefighters and Rescue Workers “Firefighter.” The syndicate has 92 sections at city/municipal level
- Association “Club Active Security,” [www.aktivnasigurnost.org/en/home](http://www.aktivnasigurnost.org/en/home)
- Humanitarian NGOs, such as Caritas, <http://caritas.bg>
- NGOs dedicated to environmental protection, such as WWF, [www.wwf.bg](http://www.wwf.bg).

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<sup>148</sup> See, for example, “Security Directorate,” General Administration, Mayor of the Sofia Municipality, available in Bulgarian at [www.sofia.bg/tu1.asp?napr=1574](http://www.sofia.bg/tu1.asp?napr=1574) (accessed 5 December 2014).

<sup>149</sup> Disaster Protection Law, Articles 39-47.

<sup>150</sup> Available in Bulgarian at [http://www.nspbzn.mvr.bg/NR/rdonlyres/63B788EC-2181-4A3F-871D-142803766A07/0/Registar\\_DF\\_Publichen\\_19092014g.pdf](http://www.nspbzn.mvr.bg/NR/rdonlyres/63B788EC-2181-4A3F-871D-142803766A07/0/Registar_DF_Publichen_19092014g.pdf).

<sup>151</sup> Available at [http://www.nspbzn.mvr.bg/NR/rdonlyres/07BFA9E-CBA4-4C10-91F0-ACC720FFAE57/0/01\\_STRATEGIYA\\_DF\\_15\\_10\\_2012.pdf](http://www.nspbzn.mvr.bg/NR/rdonlyres/07BFA9E-CBA4-4C10-91F0-ACC720FFAE57/0/01_STRATEGIYA_DF_15_10_2012.pdf), in Bulgarian.

<sup>152</sup> Bulgarian Red Cross, <http://en.redcross.bg>.

<sup>153</sup> Established at the end of August 2014; the official registration is still pending.

### *Private businesses and public-private partnerships*

The Disaster Protection Law provides for the involvement in legal entities, including private commercial companies, in disaster prevention, preparedness and response activities. Three types of companies are treated explicitly in the law:

- owners/ operators of critical infrastructure, especially assets designated as European critical infrastructure;
- operators of radio and television programmes;
- providers of electronic communications.

In addition, according to a general clause in the Disaster Protection Law, all legal entities and trade companies registered as physical persons, that are included in a disaster protection law, are obliged to provide the planned assistance upon request.<sup>154</sup>

During the floods of 2014, private enthusiasts demonstrated the aerial surveillance capabilities of both ultralight piloted aircraft and remotely piloted aerial vehicles.

Attempts have been made to establish public-private partnerships aiming to provide helicopters for rescue and transportation of injured and other people in need to major hospitals.<sup>155</sup>

## 3.2 Organisational cooperation

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### *Operational cooperation*

Although FSCP is the organisation with main responsibilities for disaster management and protection of the population, it is not expected to provide disaster protection all by itself. All activities for protection of the population in a disaster (or pending disaster) are performed by the Unified Rescue System, which incorporates structures of ministries and agencies, municipalities, trade companies, hospitals and other health centres.<sup>156</sup>

The underlying principle is that the response is local and, when necessary, it is enhanced by provision by additional capabilities and assets. The request for assistance is processed through the URF.

The main URF components are:

- General Directorate “Fire Safety and Civil Protection” of the Ministry of the Interior;
- The MOI regional Directorates;
- The Centres for Emergency Medical Care.<sup>157</sup>

Figure 15 presents the information flows in operational coordination in crisis management and disaster response. With slight variations, such visualisation is included in annexes to the 2010

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<sup>154</sup> Disaster Protection Law, Article 37.

<sup>155</sup> See for example “The Ministry of Health will pursue a public-private partnership for the sanitary aviation,” available in Bulgarian at [www.investor.bg/ikonomika-i-politika/332/a/mz-shte-tyrsi-publichno-chastno-partniorstvo-za-sanitarnata-aviaciia-166328](http://www.investor.bg/ikonomika-i-politika/332/a/mz-shte-tyrsi-publichno-chastno-partniorstvo-za-sanitarnata-aviaciia-166328) (accessed 5 December 2014).

<sup>156</sup> Disaster Protection Law, Article 20. All these structure preserve their institutional or organisational affiliation, roles and functions.

<sup>157</sup> Disaster Protection Law, Article 22(1).

National Disaster Protection Plan<sup>158</sup> describing the coordination of the URF components in the following scenarios:<sup>159</sup>

- Annex # 67 – in case of an earthquake;
- Annex # 68 – in cases of floods;
- Annex # 69 – in cases of industrial accidents involving release of dangerous substances;
- Annex # 70 – in large and complex forest fires;
- Annex # 71 – in cases of heavy snowfalls, snowstorms, and icing;
- Annex # 72 – in the case of road, railroad, and aviation catastrophes;
- Annex # 73 – disasters and accidents as results of a terrorist act.

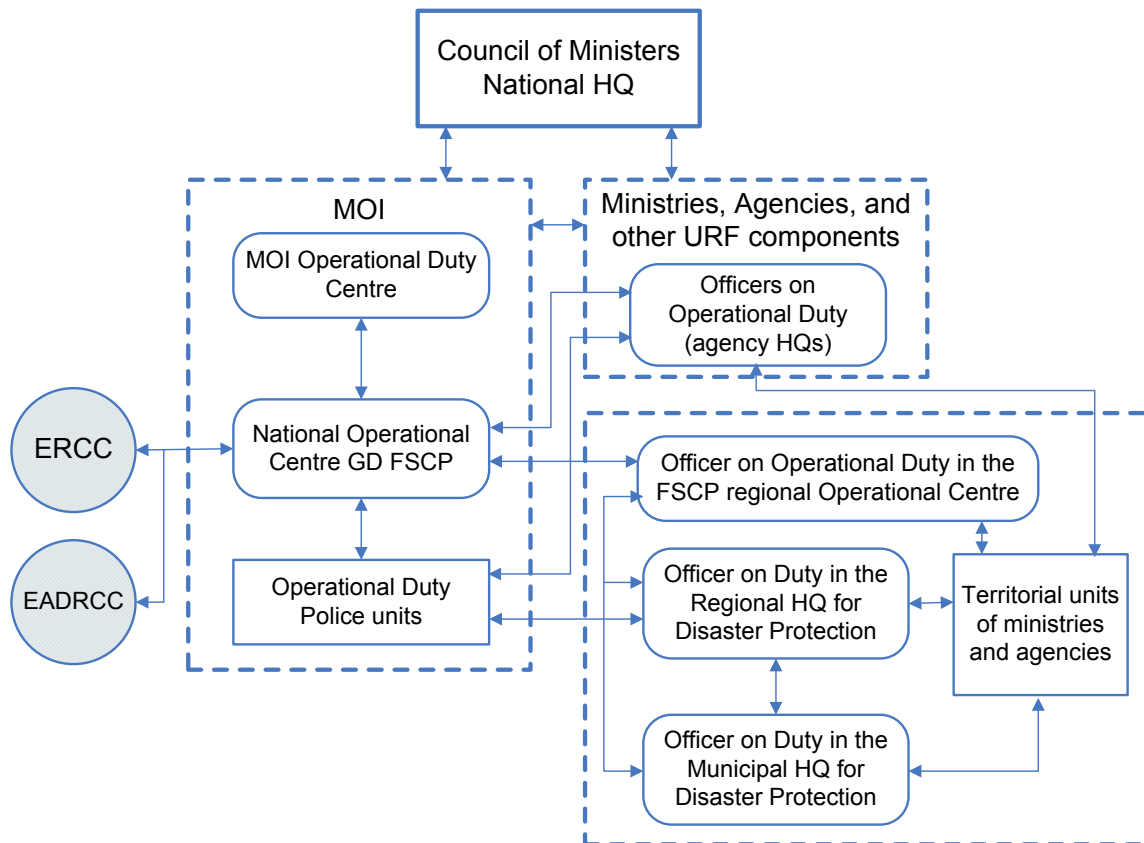


Figure 15: Operational Coordination in Crisis Management and Disaster Response.

At national level, there is a National HQ for cases of disasters. The National HQ is created by an order of the Prime Minister along with the introduction of the National Plan for Disaster Protection. This order lists the names of the members of the National HQ – ministers, deputy ministers, agency heads and their deputies, and other representatives of organisations with responsibilities for the implementation of the National Plan for Disaster Protection.<sup>160</sup>

The activity of the National HQ is supported in terms of logistics, communications and administrative matters by the FSCP General Directorate and, depending on the type of disaster, by other competent ministries, agencies, or institutions. It is supported also by thematic working groups and an

<sup>158</sup> The currently standing plan.

<sup>159</sup> Operational coordination in radiation accidents, epidemics, and epizootics is organised in specific ways.

<sup>160</sup> Disaster Protection Law, Article 62a(2).

“information working group.” All respective members are included on “alert lists,” maintained within the national early warning and alert system.

The National HQ conducts the following activities:<sup>161</sup>

1. Analysis and assessment of the disaster situation;
2. Decision making on the necessary quantities and resource allocation to rescue and urgent recovery works for prevention, containment and overcoming the consequences and assisting the affected population;
3. Organisation and coordination of the actions of ministers, agency heads, regional governors, mayor of municipalities, and legal entities (companies) with responsibilities for disaster protection;
4. Exercises control over the implementation of the tasks and the measures for containing the disaster;
5. Through the media, informs the population for the evolution of the disaster, for the measures for its mitigation and containment, and for the necessary precautions;
6. Reports to the prime minister, the President of the Republic of Bulgaria, and the speaker of Parliament for the way of conducted protective activities.

There is no formal mechanism for assigning priorities in the case of simultaneous occurrence of two or more events. It could be inferred that the guiding principles are:

1. to provide protection of the life and health of the population, the environment and the property (as Article 1 of the Disaster Protection Law defines its purpose); and
2. giving a priority (advantage) to saving human life among all protection activities.

Hence, the expectation is that, in a number of simultaneous disasters, the available resources and capabilities will be managed in a way that minimises human casualties.

International cooperation in responding to a disaster is managed via the National Operational Centre at FSCP (the national point of contact in disasters with the EU, NATO and other international organisations<sup>162</sup>; see Figure 15). That includes:

- cross-border collaboration on a bi-lateral or another regional basis;
- cooperation with the EU via the Emergency Response Coordination Centre (ERCC);
- cooperation with NATO via the Euro-Atlantic Disaster Response Coordination Centre (EADRCC).

In national disaster situations, the FSCP Operational Centre notifies DG ECHO and EADRCC according to approved standard operating procedures and using approved notification forms.<sup>163</sup> The request briefly describes the situation and the impact of the disaster.

In a nuclear or radiation accident, the Nuclear Regulatory Agency notifies the International Atomic Energy Agency (IAEA) and the European Union through the system ECURIE, as well as the regulatory bodies of the countries with which Bulgaria has signed bi-lateral notification agreement. The regulatory bodies of other countries that could be affected by the accident are also notified.

A request for assistance to the EU is sent by the FSCP Operational Centre to ERCC via the CECIS network. Approved forms are used to describe both a request and a proposal to provide assistance.<sup>164</sup>

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<sup>161</sup> Disaster Protection Law, article 62a(6).

<sup>162</sup> National Disaster Protection Plan 2010, section 6.2, pp. 24-25.

<sup>163</sup> Annexes 13 and 14 of the National Disaster Protection Plan 2010.

A particularly detailed procedure is in place for requesting from EU Member States (through CECIS of the Union Civil Protection Mechanism) (within its Civil Protection mechanisms) or another state a module for fighting forest fires through aerial means.<sup>165</sup>

In the framework of NATO, request for assistance are sent to EADRCC via Internet, fax and/or phone. Approved forms are used to describe both a request and a proposal to provide assistance.<sup>166</sup>

In a nuclear or radiation accident the request for or the provision of assistance follow the procedures described in the *External Plan for Accidents in Kozloduy NPP*.

During the disaster, the FSCP Operational Centre regularly sends brief situational reports to ERCC and EADRCC, describing the status and the evolution of the situation, using approved forms.<sup>167</sup>

Requests for disaster assistance from countries that are not members of the European Union or NATO and with which Bulgaria has no bilateral agreement for disaster relief are sent through Bulgaria's Ministry of foreign Affairs, by verbal notes through Bulgaria's embassies in the respective countries, or through their diplomatic missions in Bulgaria.

#### *Cooperation and coordination in CM capability development*

The coordinated use of resources within an individual ministry or agency towards crisis preparedness and response is usually guaranteed. Of particular importance are the requirements of the EU civil protection mechanism and the development of a European Emergency Response Capacity (EERC).<sup>168</sup>

Also, section 7 of the National Disaster Protection Plan details the responsibilities of officials (i.e. ministers, agency heads, regional governors, mayors) in terms of disaster protection, including their coordination roles.<sup>169</sup>

There are some legally defined priorities. Among the protection measures, the Disaster Protection Law declares that prevention has a priority.<sup>170</sup> However, the examination of the distribution of the budget managed by the Joint Commission for Restoration and Relief (JCRR) shows that in the last two years, i.e. since the earthquake in Pernik, practically no funding have been provided by JCRR for preventive activities. The Law defines as a priority also the measures for protection of critical infrastructures.<sup>171</sup>

The five-year national disaster protection programme defines other priorities for the development and resource allocation to the Unified Rescue System.<sup>172</sup>

However, crisis management capability planning<sup>173</sup> has not been introduced, with the possible exception of the planning within the defence ministry.

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<sup>164</sup> Annexes 15 and 16 of the National Disaster Protection Plan 2010.

<sup>165</sup> Annex 12 of the National Disaster Protection Plan 2010, pp. 142-159.

<sup>166</sup> Annexes 17 and 18 of the National Disaster Protection Plan 2010.

<sup>167</sup> Annexes 19 and 20 of the National Disaster Protection Plan 2010.

<sup>168</sup> Decision No 1313/2013/EU of the European Parliament and of the Council of 17 December 2013 on a Union Civil Protection Mechanism.

<sup>169</sup> National Disaster Protection Plan 2010, pp. 26-40.

<sup>170</sup> Disaster Protection Law, Article 4, para 4.

<sup>171</sup> Disaster Protection Law, Article 8a(3).

<sup>172</sup> Disaster Protection Law, Article 18(2), para 5.

<sup>173</sup> See, for example, Todor Tagarev, "Capabilities-Based Planning for Security Sector Transformation," *Information & Security: An International Journal* 24 (2009): 27-35, <http://dx.doi.org/10.11610/isij.2404>.

There is no nationally centralized process of capability planning. There is a process of centralised planning in place for the development of the national disaster protection programme and the annual plans for its implementation, but it lacks major features of the planning for capabilities. For example, it does not seek most efficient national solutions, while the planning of the state budget strictly follows organisational boundaries and tends to preserve institutional stovepipes.

Nevertheless, Bulgarian executive authorities are gaining some knowledge on the planning principles and processes, primarily through the participation in multi-national, EU-funded projects. Examples of international cooperation in the development of capabilities, related to crisis management, are provided in the next section of this report.



## 4 Procedures

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### 4.1 Standing Operating Procedures (SOPs) and Guidelines

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The publically available National Disaster Protection Plan (NDPP) includes descriptions of standard operating procedures (SOPs) for a number of disaster scenarios. The SOPs prescribe the way the activities of URF components are coordinated, as follows:

- SOP # 01, in case of an earthquake (Annex # 67 to NDPP);
- SOP # 02, in cases of flooding (Annex # 68 to NDPP)
- SOP # 03, in cases of nuclear and radiation accidents (Annex # 51 to Complement 3 to NDPP)
- SOP # 04, in large and complex forest fires (Annex # 70 to NDPP)
- SOP # 05, in cases of heavy snowfalls, snowstorms, and icing (Annex # 71 to NDPP)
- SOP # 06, in cases of industrial accidents involving release of dangerous substances (Annex # 69 to NDPP)
- SOP # 07, in the case of road, railroad, and aviation catastrophes (Annex # 72 to NDPP)
- SOP # 08, disasters and accidents as results of a terrorist act (Annex # 73 to NDPP).

As part of the National Disaster Protection Plan, each SOP is publically available, and typically includes:

1. Purpose and normative basis;
2. Area of application of the procedure;
3. Alerting from the URF and the management bodies;
4. Organisation of the interaction among the operational duty centres of the Unified Rescue System (see as an example the information flows on [Figure 15](#))
5. Designation of the coordinating authority on the site of the disaster and its responsibilities
6. Responsibilities of the URF components involved in disaster management (in terms of alerting, implementation of urgent measures, rescue operations, evacuation /if applicable/, urgent recovery works, other operations)
7. Points of 24/7 contacts for implementation of the procedure
8. Conditions for terminating the application of the procedure.

All stakeholders are aware of the SOPs. Procedures are considered to be understood and accepted by contributing parties. Disaster management exercises are used to test, among others, the standard operating procedures.

### 4.2 Operations planning

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Bulgaria has in place a standing National Disaster Protection Plan. The current version was approved in 2010, and has three major supplements as follows:

- Supplement 1, issued in 2012, is dedicated to the protection in earthquakes;
- Supplement 2, also issued in 2012, treats the protection in floods;

- Supplement 3 is the External plan for accidents in Kozloduy NPP, issued in 2012 and amended in July 2014.

The minister of the interior develops the National Disaster Protection Plan (NDPP) jointly with representatives of other ministries, agencies, the Bulgarian Red Cross, and local authorities.<sup>174</sup> The NDPP is adopted by the Council of Ministers.<sup>175</sup>

Ministers and agency heads develop disaster protection plans aimed at implementing their obligations in accordance with the National Disaster Protection Plan. These plans are authorised by the respective minister or agency head, after being countersigned by the minister of the interior.<sup>176</sup>

The regional governor organises the development of a disaster protection plan for the region, jointly with the local structures of the central executive power and the mayors of municipalities. The regional disaster protection plan is authorised by the governor, after being countersigned by the minister of the interior.<sup>177</sup>

The mayor develops a disaster protection plan for the municipality, jointly with representatives of agencies and legal entities (e.g. companies) relevant for disaster protection on the territory of the municipality. The municipal disaster protection plan is adopted by the Municipal Council.<sup>178</sup>

The operational planning process follows a practically established procedure. It is not clear to what extent to follows international best practice and standards.

In the last two years a number of relevant international standards have been adopted as national standards, including:

- ISO 22320:2011 "Societal security -- Emergency management -- Requirements for incident response";
- ISO 22301:2012 "Societal security -- Business continuity management systems – Requirements";
- ISO 22313:2012 "Societal security -- Business continuity management systems – Guidance."

With time these standards may be implemented by first responders and other organisations with crisis management responsibilities.

### 4.3 Logistics support in crises

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According to the Disaster Protection Law, legal entities, including commercial companies "are obliged to deliver upon request the planned assistance"<sup>179</sup> and to plan and protect the personnel and the facilities they own or operate.<sup>180</sup> There is no evidence on planning for logistics services to be provided by private companies. That happens in practice on ad-hoc basis, and the companies are reimbursed at a later stage.

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<sup>174</sup> Disaster Protection Law, Article 9(4).

<sup>175</sup> Ibid., Article 9(5).

<sup>176</sup> Ibid., Article 9 (6) and (7).

<sup>177</sup> Ibid., Article 9 (8) and (9).

<sup>178</sup> Ibid., Article 9 (10) and (11).

<sup>179</sup> Disaster Protection Law, Article 37.

<sup>180</sup> Ibid., Articles 35 and 36.

The Ministry of Defence plans to provide accommodation to people, affected by a disaster, through the Executive Agency “Military Clubs and Recreation.” There have been cases with the floods in 2014 when the armed forces were providing hot food in the field to affected population. The MOD can provide also transportation and other logistics services on an ad-hoc basis.

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

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Establishing and maintaining systems for monitoring, early warning and alerts is seen as one of the main disaster prevention measures.<sup>181</sup>

Each disaster protection plan describes the procedure for early warning and alerts to the executive bodies, the component parts of the Unified Rescue System, and the population.<sup>182</sup>

Monitoring, early warning and alerts are based on information provided by citizens, organisations and institutions, including information provided through the 112 National system for emergency calls, as well as on information and data provided by technical monitoring systems (meteorological, hydrological, seismological, chemical, biological, radiological, nuclear, ecological, etc.) and the international exchange of information and data.<sup>183</sup>

Alerting the relevant officials, organisations, and the population is the core activity of the Unified Rescue System, performed through the operational centres of the FSCP General Directorate.<sup>184</sup> The owners or operators of critical infrastructure establish and maintain local alert systems.

The law mandates also the establishment of a National System for Early Warning and Alerts (NSEWA) of the executive bodies and the population in disasters.<sup>185</sup> The conditions and procedures for the functioning of the NSEWA in disasters and air threats are regulated by the Council of Ministers.<sup>186</sup>

NSEWA has two component parts for early warning and alerting respectively:

- the executive bodies and the URF components;
- the population.

NSEWA provides information and coordination at national, regional and municipal levels through two national control nodes (main and alternative ones) of the national operational centre of FSCP, regional control nodes and municipal control boards, as well as integrated local alert systems in critical sites and facilities.

NSEWA uses the Unified Communications System of the state administration, the communications networks and services of the MOI (owned or outsourced) and the frequency spectrum allotted to the Ministry of the Interior.

Early warnings and alerts are issued on the decision of:

- the Prime Minister, the minister of the interior or the MOI Main Secretary – at national level;

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<sup>181</sup> Disaster Protection Law, Article 6(1), para 8.

<sup>182</sup> Ibid., Article 9(3), para 7.

<sup>183</sup> Ibid., Article 11. For the technical systems in use see section 5 below.

<sup>184</sup> Ibid., Article 29(2), para 3.

<sup>185</sup> Ibid., Article 62(2), para 5.

<sup>186</sup> Regulations of the conditions and procedures for the functioning of the National System for Early Warning and Alerts to the executive bodies and the population in disasters and air threats.

- the regional governor and/or the mayor, on the proposal of the director of the FSCP General Directorate of the director of the FSCP regional directorate – at regional and municipal level.<sup>187</sup>

In addition to warnings and alerts, NSEWA provides opportunities for urgent or planned conference calls with executive bodies and URS components.

The Regulation on NSEWA defines also the conditions for issuing alerts, the groups of officials to be alerted and the order of priority for alerting them, etc.

Acoustic signals and preliminary recorded voice messages are used to warn or alert the population on a pending or occurring disaster. Follow-up live voice messages provide information on the nature and parameters of the disaster and guidance on the behaviour and actions of the population.

In a pending or occurring disaster encompassing the whole or part of the territory of a region, early warning and alerts are issued on the decision of the governor or the director of the FSCP regional directorate, while the mayor or the officer on duty may trigger the alerts for the municipality.

A distinct acoustic signal and voice messages are issued to note the end of the threat of a disaster.

The FSCP webpage at the MOD website provides detailed description of the signals and what they mean.<sup>188</sup>

Different NSEWA signals and voice messages are tested once or twice a year, and the population is informed by popular media on the forthcoming tests.

Media is also used to disseminate warning and alerts. The officials who have decided on issuing early warning and alerts provide written information to the electronic media on the danger of or the occurring disaster. The media air this information immediately, free of charge, and without alteration with as many repetitions as necessary.

At current, it is not envisioned to use commercial GSM communications of social networks to issue warnings or alerts to the population.

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<sup>187</sup> Ibid., Article 7(1).

<sup>188</sup> See [www.nspbzn.mvr.bg/Pravila\\_povedenie/signali.htm/](http://www.nspbzn.mvr.bg/Pravila_povedenie/signali.htm/)

# 5 Capabilities

## 5.1 Human resources

### *Permanent emergency and disaster management personnel*

The main executive disaster management organisation—the MOI General Directorate “Fire Safety and Civil Protection” (FSCP)—has an authorised personnel strength of 8 848, of which about 90 percent, or 8 000 currently staffed.

The FSCP General Directorate includes 28 regional FSCP directorates – one in each region of the country. They have some common administrative elements, while the first responder units are structured with account of disasters typical for the respective regions.

Other ministries, agencies, regional and some city administrations have “Crisis Management” directorates or departments, all with disaster protection responsibilities.

A number of ministries and agencies (e.g. the ministries of defence; environment and waters; agriculture and health; transport, information technologies, and communications; energy; the Nuclear regulatory Agency), as well as the Bulgarian Red Cross maintain specific disaster protection formations/ teams, described in respective annexes to the National Disaster Protection Plan.

There is no publically available information on a capacity to mobilise additional personnel. It could be assumed that, when the locally available capacity is overwhelmed, the reliance is on involving additional components of the Unified Rescue System, including formations of the armed forces, volunteer formations, trade companies and, if necessary, international assistance.

### *Involvement of volunteers, volunteer organisations, and specialised NGO personnel*

Since 2011 the Disaster Protection Law regulates the involvement of volunteers in disaster protection through the creation of municipality-based volunteer formations. As of December 2014 the Registry of volunteer formations, maintained by the FSCP General Directorate, lists 162 formations with an authorised strength of approximately 4 000 positions of which volunteers have been assigned to 2 311 positions.

The main non-governmental organisation with disaster protection capabilities is the Bulgarian Red Cross, including a number of specialised organisations:

- Bulgarian Red Cross Youth
- Mountain Rescue Service
- Water Life Saving Service
- Refugee-Migrant Service.

Over 19 000 volunteers are involved in the activities of the Bulgarian Red Cross. In 2013, 4 917 of them had basic volunteer training and 5 602 – specialised training in volunteer programmes.<sup>189</sup>

### *Involvement of private businesses*

Several groups of private actors play important roles in disaster protection:

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<sup>189</sup> Facts and figures for the activity of the Bulgarian Red Cross 2013, available in Bulgarian at [www.redcross.bg/uploads/19794.file/Facts%26Figures\\_2013\\_bul.pdf](http://www.redcross.bg/uploads/19794.file/Facts%26Figures_2013_bul.pdf) (accessed 19 December 2014).

- Owners/operators of critical infrastructures, including transport and energy infrastructure, dams, chemical plants, etc.;
- Owners/operators of electronic communications networks, e.g. GSM operators;
- Media, in particular electronic media;
- Private hospitals and providers of other health services;
- Companies, providing general transport and construction services.

### *National educational programmes*

The education is considered an important component of disaster prevention, readiness and adequate response. The Disaster Protection Law stipulates that students at interim school (5<sup>th</sup> to 7<sup>th</sup> grade) need to get the basic knowledge on disaster risks and the respective ways of behaviour and action, while high-school and university students need to have knowledge on disaster protection corresponding to their educational profile and specialty.<sup>190</sup> In addition, the minister of education and science, in coordination with the minister of the interior, approves educational programmes, materials and tools for kindergartens and schools, as well as plans for disaster protection training of the teachers.<sup>191</sup>

In October and November 2014, the “G.S. Rakovski” Defence Academy in Sofia conducted a pilot course on disaster prevention for teachers.<sup>192</sup>

Relevant educational programmes are provided by several universities, including:

- The “G.S. Rakovski” Defence Academy in Sofia has a masters’ programme in “Protecting the population and the critical infrastructure”<sup>193</sup>
- The National Military University, Veliko Tarnovo, has a masters’ programme in “Protecting the population in disasters, accidents and catastrophes”<sup>194</sup>
- The Technical University of Varna provides a bachelor’s degree in “Protecting the population in disasters and accidents”<sup>195</sup>
- The Agriculture University in Plovdiv provides a masters’ degree for environmental experts in “Protecting the population and the environment in natural disasters and accidents”<sup>196</sup>
- The University of Shumen provides a masters’ programme for pedagogues in “Competences and skills in disasters and accidents”<sup>197</sup>

## 5.2 Materiel (non-financial) resources

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The material component of the first response, provided by FSCP, and the planned use military assets are described in section 3.1 above. Additional, more specific military assets used in disaster response

<sup>190</sup> Disaster Protection Law, Article 16(2).

<sup>191</sup> Disaster Protection Law, Article 16(3).

<sup>192</sup> See [www.mon.bg/?go=news&p=detail&newsId=852](http://www.mon.bg/?go=news&p=detail&newsId=852) (in Bulgarian).

<sup>193</sup> See [http://rnda.armf.bg/wp-content/uploads/000s/Pr\\_ZNKI2009\\_MAGspec.php](http://rnda.armf.bg/wp-content/uploads/000s/Pr_ZNKI2009_MAGspec.php).

<sup>194</sup> See [www.nvu.bg/node/314](http://www.nvu.bg/node/314). The programme is coordinated with General Directorate FSCP.

<sup>195</sup> See [www.tu-varna.bg/tu-varnaumo/images/stories/uchebni\\_planove/bak\\_mag\\_sled\\_sredno/znba\\_rb.pdf](http://www.tu-varna.bg/tu-varnaumo/images/stories/uchebni_planove/bak_mag_sled_sredno/znba_rb.pdf).

<sup>196</sup> See [www.au-plovdiv.bg/cntnr/CMD/2012/anotacia/33.pdf](http://www.au-plovdiv.bg/cntnr/CMD/2012/anotacia/33.pdf).

<sup>197</sup> See <http://shu-bg.net/faculties/pf/spec>.

involve primarily the use of helicopters for aerial reconnaissance, search and rescue, and fire-fighting.

The State Agency “State Reserve and Wartime Stocks” maintains stocks of fuel, chemicals, food, metals, spare parts, wooden materials and paper, hospital and sanitary materials, medicines, tents, blankets, etc. Ministries and agencies, as well as companies also maintain a certain level of reserve material.

Bulgaria maintains a number of organisational and technical systems in place to monitor various hazards and risks and, when necessary, issue warnings and alerts. The key systems and services are briefly presented below.

The National Seismological Service has a network of 14 stations and observatories and two local networks – “Provadia” and “Kozlodui” (see Figure 16<sup>198</sup>). The Seismic Centre in Sofia collects, processes, analyses and interprets the information. This allows to determine in real time parameters of earthquakes in the country and the neighbouring areas.

A computing centre at the National Institute of Geophysics, Geodesy and Geography facilitates the collection, processing and analysis of data from national and local accelerometric networks. That allows to evaluate and identify the dynamic characteristics of the seismic influences in environment, building and equipment for the needs of the earthquake engineering, prevention and mitigation of the seismic risk.<sup>199</sup>

A number of collaborative arrangements are in place to support these aims. At current, NIGGG represent Bulgaria in a project to establish “Black Sea Earthquake Safety Net(work) - ESNET” with partner institutes from Romania, Moldova, and Turkey.<sup>200</sup>

Among the other technical systems, briefly presented above, are:

- The system for radiological monitoring;
- The radio-communication system TETRA<sup>201</sup>
- The Unified Communications System of the state administration, etc.

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<sup>198</sup> “Operational Research Activity,” presentation of the National Institute of Geophysics, Geodesy and Geography, Bulgarian Academy of Sciences, available at [www.niggg.bas.bg/wp-content/uploads/2014/02/operat\\_en.ppt](http://www.niggg.bas.bg/wp-content/uploads/2014/02/operat_en.ppt) (accessed 3 November 2014).

<sup>199</sup> Ibid., slide # 16.

<sup>200</sup> Black Sea Earthquake Safety Net(work) – ESNET, available at [www.niggg.bas.bg/projects\\_bg/esnet](http://www.niggg.bas.bg/projects_bg/esnet) (accesses 3 November 2014).

<sup>201</sup> See project PHARE BG 2006/018 – 343.07.08, [http://www.nspbzn.mvr.bg/Proekti/proekt\\_tetra.htm](http://www.nspbzn.mvr.bg/Proekti/proekt_tetra.htm).



Figure 16: The network of seismic stations of the national seismological service.

### 5.3 Training

FSCP conducts regular training and exercises for its own personnel, as well as representatives of other components of the Unified Response System, volunteer formations and NGO personnel.

Specialists are usually trained “on-the-job.” Training requirements depend on the specific position of an individual in the organisation.

The regular tests of the early warning and alert system are used also for training of the personnel involved.

Field, and in particular computer assisted exercises, serve (among others) to increase the awareness and enhance the decision-making capacity of high-level decision makers.

FSCP maintains and regularly uses its training range in the town of Montana for training first responders (both regular and volunteers), as well as to train decision-makers, e.g. mayors, for rapid reaction in disasters. It is used as well for international exercises, in particular within NATO’s CBRN training programme.<sup>202</sup>

<sup>202</sup> See for example <http://bnr.bg/radiobulgaria/post/100231264/mejdunaroden-uceben-centyr-v-montana-podgotvya-spasiteli>.



## 5.4 Procurement

### 5.4.1 Procurement regulations

The Bulgarian Law on Public Tenders provides for implementation of the main European directives regulating respectively:

- procurement of goods and services, including energy, water, transport and postal goods and services;
- procurement in the field of defence and security.

For the former, the Law on Public Tenders defines thresholds for conducting a public tender, small public tender or just soliciting three from independent contractors. Table 5 presents these thresholds that are further distinguish construction and project design from other types of services, as well as the place for delivering the goods or services – on or outside the territory of Bulgaria.

**Table 5. Procurement of goods and services, thresholds and types of tenders**

Type of procurement	The service is provided in or outside the country	Thresholds in thousand BGN <sup>203</sup> (excluding VAT)	Tender
<b>Goods and services</b>	in the country	below 15	no tender is necessary
		b/n 15 and 50	3 offers
		b/n 50 and 180 (for goods) or 110 (for services)	'small' public tender
		above 180 (for goods) or 110 (for services)	public tender
<b>Project design</b>	outside the country	below 50	no tender is necessary
		b/n 50 and 100	3 offers
		b/n 100 and 250	'small' public tender
		above 250	public tender
<b>Construction</b>	in the country	b/n 30 and 110	'small' public tender
		below 45	no tender is necessary
		b/n 45 and 200	3 offers
		b/n 200 and 2 150	'small' public tender
	outside the country	above 2 150	public tender
		below 500	no tender is necessary
		b/n 500 and 1 500	3 offers
		b/n 1 500 and 6 000	'small' public tender
		above 6 000	public tender

<sup>203</sup> The exchange rate of the BGN to the Euro is fixed at 1 Euro = 1.9558 BGN.

Procurement for the General Directorate “Fire Safety and Civil Protection” (FSCP) is managed by the FSCP directorate through its section on “Public Tenders” and in accordance with the Law on Public Tenders.

FSCP procures goods and services, including construction, maintenance and training services.

Procurement cases are announced on the webpage of the FSCP General Directorate.<sup>204</sup> The administration of the Council of Ministers maintains an electronic database – a Registry of Public Tenders.<sup>205</sup> Tenders are announced publically on the e-Procurement portal of the Public Procurement Agency.<sup>206</sup>

As a rule, multinational procurement is part of bi-lateral or regional projects with financing from the European Union, and the respective procurement rules apply.

#### 5.4.2 Procurement procedures

Bulgaria’s legislation on public procurement is generally considered to be in line with respective norms of the European Union.

The FSCP General Directorate utilises the procedures of:

- “public tenders”
- “public invitations”<sup>207</sup>
- limited procedure or procedure for negotiation with announcement, in cases of procurement of special (military or dual use) equipment and services, including construction.<sup>208</sup>

All these procedures are described in detail in Law on the Public Tenders.

The same norms and procedures apply when the procurement case is part of a project within the operational programmes, partially financed by the European Union.

## 5.5 Niche capabilities

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Bulgaria has some crisis management capabilities of potential interest to the EU and individual Member States, such as:

- medium search and rescue units for urban environments;
- medium CBRN units;
- land units for fighting forest fires;
- high capacity pumping modules.

Bulgaria has registered the modules of these types in the framework of the Community Civil Protection Mechanism.

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<sup>204</sup> For the two main types of procedures see [www.nspbzn.mvr.bg/Obst\\_porachki/ZOP/default.htm](http://www.nspbzn.mvr.bg/Obst_porachki/ZOP/default.htm) and [www.nspbzn.mvr.bg/Obst\\_porachki/Pokani/default.htm](http://www.nspbzn.mvr.bg/Obst_porachki/Pokani/default.htm), both in Bulgarian.

<sup>205</sup> Regulation on managing the Registry of Public Tenders, Article 7.

<sup>206</sup> See [http://rop3-app1.aop.bg:7778/portal/page?\\_pageid=173,1&\\_dad=portal&\\_schema=PORTAL](http://rop3-app1.aop.bg:7778/portal/page?_pageid=173,1&_dad=portal&_schema=PORTAL) for the English language version of the portal.

<sup>207</sup> Law on Public Tenders, Chapter 8a.

<sup>208</sup> Law on Public Tenders, Article 3(2) and those referring to it.

Possibly of interest is the training range of the FSCP General Directorate, located in the town of Montana.

Disaster protection capabilities of the defence ministry are also of value for international partners, in particular mobile medical teams of the Military Medical Academy, which are regularly deployed abroad in disaster response operations.

Finally, at the time of writing of this report, a Centre for Crisis Management and Disaster Response in Sofia, pending the accreditation from the North-Atlantic Council, will be declared a NATO Centre of Excellence.

# Resources

## Legislative acts

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Constitution of the Republic of Bulgaria, *State Gazette* 56 of 13 July 1991; last amendment *State Gazette* 12, 6 February 2007.

Classified Information Protection Act, *State Gazette* 45 (30 April 2002), last amendment *State Gazette* 53 (28 June 2014).

Crisis Management Law, *State Gazette* 19 (2005), cancelled in 2009 through amendments to the Law on Defence and Armed Forces.

Disaster Protection Law, *State Gazette* 112 (19 December 2006), last amendment *State Gazette* 53 (27 June 2014).

Environmental Protection Law, *State Gazette* 91 (25 September 2002), last amendment *State Gazette* 98 (28 November 2014).

Law on Biological Diversity, *State Gazette* 77 (9 August 2002), last amendment *State Gazette* 98 (28 November 2014).

Law on Defence and the Armed Forces, *State Gazette* 35 (12 May 2009), last amendment *State Gazette* 98 (28 November 2014).

Law on Health, *State Gazette* 70 (10 August 2004), last amendment *State Gazette* 98 (28 November 2014).

Law on Personal Data Protection, *State Gazette* 1 (4 January 2002), last amendment *State Gazette* 15 (15 February 2013).

Law on Public Tenders, *State Gazette* 28 (6 April 2004), last amendment *State Gazette* 40 (13 May 2014).

Law on Territory Planning, *State Gazette* 1 (2 January 2001), last amendment *State Gazette* 105 (19 December 2014).

Law on the Bulgaria Red Cross, *State Gazette* 87 (29 September 1995), last amendment *State Gazette* 80 (14 October 2011).

Law on the Consultative Council on National Security, *State Gazette* 13 (11 February 1994), last amendment *State Gazette* 35 (12 May 2009).

Law on the Forests, *State Gazette* 19 (8 March 2011), last amendment *State Gazette* 98 (28 November 2014).

Law on the Ministry of the Interior, *State Gazette* 53 (27 June 2014), last amendment *State Gazette* 98 (28 November 2014).

Law on the Safe Use of Nuclear Energy, *State Gazette* 63 (28 June 2002), last amendment *State Gazette* 98 (28 November 2014).

Law on the Safe Use of Nuclear Energy, *State Gazette* 63 (28 June 2002), last amendment *State Gazette* 98 (28 November 2014).

Law on the State Agency "National Security," *State Gazette* 109 (20 December 2007), last amendment *State Gazette* 57 (27 June 2014).

Law on the State Budget of the Republic of Bulgaria for 2014, *State Gazette* 109 (20 December 2013).

Law on Waters, *State Gazette* 67 (27 July 1999), last amendment *State Gazette* 98 (28 November 2014).

## Other normative acts

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### *National normative documents*

Regulation # 8 on the conditions and procedures for protecting forest territories from fires, *State Gazette* 38 (18 May 2012).

Regulation of the conditions, procedures, and bodies for conducting analysis, assessment and mapping of disaster risks, *State Gazette* 84 (2 November 2012), as amended in *State Gazette* 9 (31 January 2014).

Regulation on Emergency Planning and Emergency Preparedness in Case of Nuclear and Radiation accident, *State Gazette* 94 (29 November 2011).

Regulation on managing the Registry of Public Tenders, *State Gazette* 89 (31 October 2000).

Regulation on the functions, tasks and organization of the work of the Security Council to the Council of Ministers, *State Gazette* 116 (7 October 1998), last amendment *State Gazette* 81 (30 September 2014).

Regulation on the procedures, ways and competent bodies on identification of critical infrastructures and sites and the assessment of the risk for them, *State Gazette* 81 (23 October 2012), as amended in *State Gazette* 19 (26 February 2013).

Regulation on the structure and the activity of the Ministry of the Interior, *State Gazette* 60 (22 July 2014).

Regulations of the conditions and procedures for the functioning of the National System for Early Warning and Alerts to the executive bodies and the population in disasters and air threats, *State Gazette* 20 (9 March 2012), amended *State Gazette* 60 (22 July 2014).

Regulation # 13 of 29 January 2004 on the conditions and procedures for technical maintenance of dams and relevant facilities, *State Gazette* 17 (28 March 2004).

Regulation Iz-1669 of 17 August 2012 on the order of creating and maintaining a registry on the volunteer formations for overcoming or containing disasters, fires, and emergency situations and elimination of their consequences, Ministry of the Interior, *State Gazette* 67 (31 August 2012).

Instruction # 8121z 915 of 1 December 2014 on the conditions and procedures for performing operational protection during floods, *State Gazette* 101 (9 December 2014).

### *European Directives*

Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances, <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:31996L0082> (to be repealed and replaced in 2015 by Directive 2012/18/EU)

Decision No 1313/2013/EU of the European Parliament and of the Council of 17 December 2013 on a Union Civil Protection Mechanism, L 347/924 (12 December 2013), <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013D1313>.

Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE), <http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32007L0002&from=EN>

Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks (Text with EEA relevance), <http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32007L0060&from=EN>

Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012 on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC, <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012L0018>

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

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Annual National Plan 2014 for implementation of the National Programme for Disaster Protection 2014-2018, Available at <http://www.nspbzn.mvr.bg/NR/rdonlyres/D44BADE6-3F81-4672-824F-A9F3F153ACBF/0/Godplan2014.pdf> (accessed 7 October 2014).

International Organization for Standardization, ISO 22301:2012 Societal security — Business continuity management systems — Requirements, First edition, May 2012.

International Organization for Standardization, ISO 22320:2011 Societal security — Emergency management — Requirements for incident response, First edition, November 2011.

National Plan for Disaster Protection, approved by Decision 973 of the Council of Ministers of 29 December 2010, amended with Decision 1004 of 12 December 2012 by adding Supplement 1 “Protection in Earthquakes” and Supplement 2 “Protection in Flooding”; amended with Decision 767 of 14 September 2012 by adding Supplement 3 “External plan for accidents in Kozloduy NPP”; amended with Decision 509 of 17 July 2014 (consolidated version was published). – 412 pp (the Plan), 33 pp. (Supplement 1), 30 pp. (Supplement 2), 231 pp. (Supplement 3). – all in Bulgarian.

National Programme for Disaster Protection 2009-2013, Adopted with a Decision of the Council of Ministers, Protocol 21 of 28 May 2009. – 55 pp., in Bulgarian. Available at [www.nspbzn.mvr.bg/NR/rdonlyres/9A624639-C96C-4614-A73A-2E2C19EB1F25/0/NPZB.pdf](http://www.nspbzn.mvr.bg/NR/rdonlyres/9A624639-C96C-4614-A73A-2E2C19EB1F25/0/NPZB.pdf) (accessed 7 October 2014).

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Programme for modernisation and provision of technical resources of the territorial units for fire safety and protection of the population in the Republic of Bulgaria, Sofia, 2012. Available at [www.nspbzn.mvr.bg/NR/rdonlyres/4554D475-E2E3-43DF-8779-B4C9B99B4DE9/0/PROGRAMA2015\\_15102012.pdf](http://www.nspbzn.mvr.bg/NR/rdonlyres/4554D475-E2E3-43DF-8779-B4C9B99B4DE9/0/PROGRAMA2015_15102012.pdf) (accessed 7 November 2014).

Reference on the personnel positions and unfilled positions in the Ministry of the Interior as of 31 May 2014, available at [www.mvr.bg/NR/rdonlyres/F495EF46-4F26-43C3-AEB5-A850191CB558/0/Obshta\\_chislenost\\_31052014.pdf](http://www.mvr.bg/NR/rdonlyres/F495EF46-4F26-43C3-AEB5-A850191CB558/0/Obshta_chislenost_31052014.pdf) (accessed 9 December 2014).

Strategy for developing volunteer formations for protection in disasters, fires, and other emergency situations in Republic of Bulgaria 2012-2020, available at [www.nspbzn.mvr.bg/NR/rdonlyres/](http://www.nspbzn.mvr.bg/NR/rdonlyres/)

[407BFA9E-CBA4-4C10-91F0-ACC720FFAE57/0/01\\_STRATEGIYA\\_DF\\_15\\_10\\_2012.pdf](#) (in Bulgarian), Accessed 26 October 2014.

*Strategy for Mitigating Disaster Risks 2014-2020*, Council of Ministers of the Republic of Bulgaria (2014), available at [www.strategy.bg/StrategicDocuments/View.aspx?lang=bg-BG&Id=894](http://www.strategy.bg/StrategicDocuments/View.aspx?lang=bg-BG&Id=894) (in Bulgarian), Accessed 26 October 2014.

## Online resources

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### *Governmental websites*

Executive Agency “Forestry,” [www.nug.bg/lang/2/index](http://www.nug.bg/lang/2/index)

Executive Environment Agency, <http://eea.government.bg/en>

Ministry of Agriculture and Food, [www.mzh.government.bg/mzh/en/Home.aspx](http://www.mzh.government.bg/mzh/en/Home.aspx)

Ministry of Environment and Water, [www.moew.government.bg](http://www.moew.government.bg)

Ministry of Regional Development, <http://www.mrrb.government.bg>

National Audit Office, [www.bulnao.government.bg/en](http://www.bulnao.government.bg/en)

National Centre of Radiobiology and Radiation Protection to the Ministry of Health, [www.ncrrp.org/new/en](http://www.ncrrp.org/new/en)

National Statistical Institute, [www.nsi.bg/en](http://www.nsi.bg/en)

Nuclear Regulatory Agency, <http://www.bnra.bg/en>

Public Procurement Agency, [www.aop.bg](http://www.aop.bg)

State Agency “State Reserve and Wartime Stocks,” <http://www.statereserve.bg>

State Commission on Information Security, <http://www.dksi.bg/en/>

### *Relevant associations, international organisations, initiatives and projects*

Black Sea Earthquake Safety Net(work) – ESNET, <http://esnet.infp.ro/en>

Crisis Management and Disaster Response Centre of Excellence, <http://cmdrcoe.org/>

Disaster Preparedness and Prevention Initiative for South Eastern Europe, [www.dppi.info](http://www.dppi.info)

Hyogo Framework for Action, [www.unisdr.org/we/coordinate/hfa](http://www.unisdr.org/we/coordinate/hfa)

National Association of Municipalities of the Republic of Bulgaria, <http://projects-namrb.org/index.php/en/>

Registry of the volunteer formations for disaster protection on the territory of the Republic of Bulgaria and number of volunteers by municipality, 19 December 2014, available at [www.nspbzn.mvr.bg/Sprav\\_informacia/Registri/default.htm](http://www.nspbzn.mvr.bg/Sprav_informacia/Registri/default.htm).

### *Websites of non-governmental and academic organisations*

Bulgarian Red Cross, [www.redcross.bg](http://www.redcross.bg)

Centre for National Security and Defence Research, Bulgarian Academy of Sciences, [www.cnsdr.bas.bg](http://www.cnsdr.bas.bg)

Faculty of Geology and Geography of Sofia University “St. Kliment Ohridski,” [www.uni-sofia.bg/index.php/eng/the\\_university/faculties/faculty\\_of\\_geology\\_and\\_geography](http://www.uni-sofia.bg/index.php/eng/the_university/faculties/faculty_of_geology_and_geography)

Institute for Nuclear Research and Nuclear Energy, [www.inrne.bas.bg](http://www.inrne.bas.bg)  
Institute for Space and Solar-Terrestrial Research, <http://www.space.bas.bg>  
Institute of Information and Communication Technologies, [www.iict.bas.bg/EN/index.html](http://www.iict.bas.bg/EN/index.html)  
Institute of Mathematics and Informatics, <http://math.bas.bg/index.php/en>  
Kozloduy Nuclear Power Plant, [www.kznpp.org/index.php?lang=en](http://www.kznpp.org/index.php?lang=en)  
National Institute for Geophysics, Geodesy and Geography, [www.niggg.bas.bg/en](http://www.niggg.bas.bg/en)  
National Institute for Meteorology and Hydrology, [www.meteo.bg](http://www.meteo.bg)

## Publications

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### *Official reports*

- Audit Report # 0300002413 on "Prevention and Response to Forest Fires" for the period 1 January 2011 – 31 December 2013, Bulgarian National Audit Office (15 October 2014), in Bulgarian, available at [www.bulnao.government.bg/bg/articles/download/7612/doklad-pojari-151014.doc](http://www.bulnao.government.bg/bg/articles/download/7612/doklad-pojari-151014.doc) (accessed 8 December 2014).
- Draft budget for 2014 of the Ministry of the Interior and updated budget forecast for 2015 and 2016 in programme format (in Bulgarian), available at [www.mvr.bg/NR/rdonlyres/92521007-BCE9-44BB-8FBB-352156486003/0/Programen\\_format\\_budjet\\_MVR\\_2014.pdf](http://www.mvr.bg/NR/rdonlyres/92521007-BCE9-44BB-8FBB-352156486003/0/Programen_format_budjet_MVR_2014.pdf) (accessed 20 October 2014).
- Report of the Working group, created with the objective to clarify the reasons for the tragedy on 19 June 2014 and define measures to prevent future disasters, Varna municipality, 18 July 2014, Available at [www.varna.bg/bg/getfile.html/id/75a7c30fc0063c4952d7eb044a3c0897](http://www.varna.bg/bg/getfile.html/id/75a7c30fc0063c4952d7eb044a3c0897).
- The United Nations Office for Disaster Risk Reduction, *Global Assessment Report on Disaster Risk Reduction 2013*, available at [www.unisdr.org/we/inform/disaster-statistics](http://www.unisdr.org/we/inform/disaster-statistics).
- Vranovska, Maria. *Bulgaria: National progress report on the implementation of the Hyogo Framework for Action, 2007-2009* (2009), available at [www.preventionweb.net/files/9804\\_Bulgaria.pdf](http://www.preventionweb.net/files/9804_Bulgaria.pdf) (accessed 7 November 2014).

### *Academic publications*

- Bayliss, Thomas J. and Paul W. Burton. "Seismic hazard across Bulgaria and neighbouring areas: regional and site-specific maximum credible magnitudes and earthquake perceptibility." *Natural Hazards* 68, no. 2 (September 2013): 271-319, <http://dx.doi.org/10.1007/s11069-013-0621-2>.
- Nikolova, M., S. Nedkov, V. Nikolov, I. Zuzdrov, M. Genev, T. Kotsev, R. Vatsseva, and J. Krumova. "Implementation of the "KINEROS" Model for Estimation of the Flood Prone Territories in the Malki Iskar River Basin." *Information & Security: An International Journal* 24 (2009): 76-88, <http://dx.doi.org/10.11610/isij.2408>.
- Nizamska, Marina. "Analysis of the Reasons for Incidents with Radioactive Sources in Bulgaria and Preventive Measures." *Information & Security: An International Journal* 24 (2009): 115-124, <http://dx.doi.org/10.11610/isij.2411>.
- Palazov, Atanas, and Hristo Stanchev. "Risks for the Population along the Bulgarian Black Sea Coast from Flooding Caused by Extreme Rise of Sea Level." *Information & Security: An International Journal* 24 (2009): 65-75, <http://dx.doi.org/10.11610/isij.2407>.



- Sadovski, Alexander. "Spatial Analysis of Earthquakes in Bulgaria and Neighboring Areas," *Ecological Engineering and Environment Protection* 14, no. 2 (2014): 13-21. – in Bulgarian.
- Shalamanov, Velizar, ed., *Security Research and Change Management in the Security Sector* (Sofia: Demetra, 2008). – in Bulgarian.
- Shalamanov, Velizar, Stefan Hadjitodorov, Todor Tagarev, Nikolay Pavlov, Valentin Stoyanov, Pencho Geneshky, and Stoyan Avramov. "Civil Security: Architectural Approach in Emergency Management Transformation." *Information & Security: An International Journal* 17 (2005): 75-101, <http://dx.doi.org/10.11610/isij.1706>.
- Tagarev, Todor. "Capabilities-Based Planning for Security Sector Transformation," *Information & Security: An International Journal* 24 (2009): 27-35, <http://dx.doi.org/10.11610/isij.2404>.
- Tzenov, Liudmil, and Emil Botev. "On the Earthquake Hazard and the Management of Seismic Risk in Bulgaria." *Information & Security: An International Journal* 24 (2009): 39-50, <http://dx.doi.org/10.11610/isij.2405>.

## Expert interviews

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- General Directorate "Fire Safety and Civil Protection," Ministry of the Interior
- Centre for National Security and Defence Research, Bulgarian Academy of Sciences