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**A CATALYST FOR CHANGE:  
HOW THE HYOGO FRAMEWORK  
FOR ACTION HAS PROMOTED  
DISASTER RISK REDUCTION  
IN SOUTH EAST EUROPE**



THE WORLD BANK



**GFDRR**

Global Facility for Disaster Reduction and Recovery



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The United Nations Office for Disaster Risk Reduction

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## Preface

This report celebrates some of the many achievements made in the SEE region in the context of the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters (HFA)<sup>1</sup>, and suggests areas for further development and improvement.

There have been substantial gains in the efforts to establish a culture of safety and resilience and make countries in the South East Europe (SEE) region safer from the threats posed by natural hazards in the nine years since the launch of the HFA. Over this period, SEE countries have increasingly transformed from their traditional approach of responding to and recovering from emergencies towards the adoption of 'pro-active' disaster risk reduction and climate change adaptation. The catalyst for this change has been the HFA and the willingness with which the countries of SEE have adopted it and embedded its principles within national development plans.

## Background

The United Nations General Assembly adopted the HFA to guide governments world-wide in reducing the impact of disasters. From its inception, the HFA has contributed to building a culture of safety and resilience. By promoting the inclusion of disaster risk reduction (DRR) and climate change adaptation (CCA) into national development plans, the HFA is the first plan to detail the work required from all relevant sectors and actors to reduce the loss of lives and social, economic and environmental assets when disasters strike.

In the context of the HFA, the South Eastern Europe Disaster Risk Mitigation and Adaptation Programme (SEEDRMAP) was started in 2008 to encourage partnerships among the South Eastern Europe (SEE) countries of Albania, Bosnia and Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, Moldova, Montenegro, Serbia and Turkey in line with the strategic priorities of the HFA. SEEDRMAP was started by the World Bank and the United Nations Office for Disaster Risk Reduction (UNISDR) Europe Regional Office, through the support of the Global Facility for Disaster Reduction and Recovery (GFDRR) Track 1.

SEEDRMAP has been developed in cooperation with a number of partners, including the European Commission (EC), the European and Mediterranean Major Hazards Agreement (EUR-OPA) of the Council of Europe, the Disaster Preparedness and Prevention Initiative for South Eastern Europe (DPPI-SEE), the Regional Cooperation Council for South Eastern Europe (RCC SEE), the World Meteorological Organization (WMO) – which is a key partner in the hydro-meteorological component of the programme – the United Nations Development Programme (UNDP) and others.

The 10 years of HFA implementation will be reviewed at the Third United Nations World Conference on Disaster Risk Reduction (WCDRR) in March 2015 in Japan, taking stock of the experience gained so far. Regional and national strategies and programmes for disaster risk reduction will be considered, and commitment gained from all stakeholders to implement a post-2015 framework for disaster risk reduction.

## Purpose and methodology

This report outlines the results and impact of the HFA implementation in SEE. It is set in the context of SEEDRMAP and aims to present some evidence-based elements of success and key regional achievements in addressing the HFA, as well as highlighting areas for further work at regional and national level. The results of this review will also contribute to the celebrations due to take place on the occasion of the 2015 WCDRR.

The review process included the study of documentation and consultations with key actors in the SEE countries (HFA Focal Points and National Platform Coordinators). The literature review involved a range of resource material, including National and Regional HFA Progress Reports, United Nations (UN) Country Team Reports on disaster risk reduction-related topics, World Bank national project reports, SEEDRMAP study reviews, national legislation, strategies and action plans related to disaster risk reduction, National Disaster Risk Reduction Needs Assessments conducted under the UNDP/WMO 'Regional Project on Disaster Risk Reduction in SEE', and other information shared by informants. Consultation with key actors helped to further appreciate how countries have been addressing disaster risk reduction issues in the HFA.

## Highlights

It is clear throughout the SEE region that broad HFA implementation has progressively contributed to the building of a culture of safety and resilience and promotion of pro-active disaster risk reduction.

By following the goals laid out in the HFA, SEE countries have increasingly engaged in a long-term process to address risk prevention. This has involved upgrading risk governance systems and operational mechanisms for disaster risk management,

<sup>1</sup> <http://www.unisdr.org/we/coordinate/hfa>

mainstreaming disaster risk reduction and climate change adaptation into national development plans and regulations, and promoting National Platforms for disaster risk reduction.

There have been meaningful achievements in developing risk identification and early warning systems (EWS), both at the national level and regional level through cooperation. This has involved the establishment of a strong institutional basis and improved regulatory environment to enhance cooperation among disaster risk management authorities and technical agencies.

Capacities have been strengthened to conduct national hazard analyses and risk assessments with unified national methodologies. Progress has also been made towards developing systems to communicate hazard knowledge and risk education to targeted sectors. Regional technical and institutional capacities for response preparedness have been improved.

Disaster risk reduction and climate change adaptation has been integrated in environmental protection policies and sustainable management of natural resources. Furthermore, risk reduction has been mainstreamed in physical and land-use planning. This includes retrofitting facilities and improved building safety. Highly innovative mechanisms for catastrophe risk-sharing have also been promoted. Global initiatives including the UNISDR 'Making Cities Resilient: My City is Getting Ready!' campaign have made key contributions to building resilience at the local community level.

Reducing disaster risk is a complicated process that involves long-term concerted efforts. The report identifies the following areas where continued work on a regional basis will promote further comprehensive resilience building:

- Expanding networks and collaboration among key national stakeholders;
- Mainstreaming climate change adaptation and pursuing reinforced synergies between climate change adaptation and disaster risk reduction;
- Empowering local risk governance and improving coordination between national and local levels;
- Improving countrywide risk assessment to support risk mitigation measures;
- Enhancing the timely flow of information between researchers and disaster risk management practitioners and policy-makers to support disaster risk reduction actions and evidence-based decision-making;
- Raising public awareness and understanding of risk reduction to affect a further shift from response to mitigation.

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## List of abbreviations

<b>CCA</b>	Climate Change Adaptation
<b>CMC</b>	Crisis Management Centre, the former Yugoslav Republic of Macedonia
<b>DPPI-SEE</b>	Disaster Preparedness and Prevention Initiative for South-Eastern Europe
<b>DRR</b>	Disaster Risk Reduction
<b>EC</b>	European Commission
<b>EFDRR</b>	European Forum for Disaster Risk Reduction
<b>EU</b>	European Union
<b>EUR-OPA</b>	European and Mediterranean Major Hazards Agreement of the Council of Europe
<b>EWS</b>	Early Warning System(s)
<b>HE</b>	His Excellency
<b>HFA</b>	Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters
<b>GFDRR</b>	Global Facility for Disaster Reduction and Recovery
<b>NEMH</b>	National Emergency Management Headquarters, Serbia
<b>NMHS</b>	National Meteorological and Hydrological Service
<b>NPRD</b>	National Protection and Rescue Directorate, Croatia
<b>RCC SEE</b>	Regional Cooperation Council for South Eastern Europe
<b>RFMC</b>	Regional Fire Monitoring Centre of the former Yugoslav Republic of Macedonia
<b>Risk RED</b>	Risk Reduction Education for Disasters
<b>SEE</b>	South Eastern Europe
<b>SEECP</b>	South-East European Cooperation Process
<b>SEEDRMAP</b>	South Eastern Europe Disaster Risk Mitigation and Adaptation Programme
<b>SEEC CRIF</b>	South East Europe and Caucasus Catastrophe Risk Insurance Facility
<b>SEESAC</b>	South Eastern and Eastern Europe Clearinghouse for the Control of Small Arms and Light Weapons
<b>SEM</b>	Sector for Emergency Management of the Ministry of Interior of Serbia
<b>UN</b>	United Nations
<b>UNCT</b>	United Nations Country Team
<b>UNDP</b>	United Nations Development Programme
<b>UNICEF</b>	United Nations Children's Fund
<b>UNISDR</b>	United Nations Office for Disaster Risk Reduction
<b>WCDRR</b>	World Conference on Disaster Risk Reduction
<b>WMO</b>	World Meteorological Organization

## 1. Introduction

### 1.1 Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters

The Hyogo Framework for Action was adopted in 2005 by UN Member States to help nations substantially reduce losses from disasters. It was a response to the changing focus globally from post-disaster response towards prevention and broader disaster risk reduction and climate change adaptation. It was the first global plan of action to outline the work required from all sectors and actors to build the resilience of nations and communities to disasters.

The HFA offers guiding principles and practical ways to achieve disaster resilience – including the responsibilities of implementing agencies and indicators of progress. At its core are five priorities for action. They are: 1) Making disaster risk reduction a priority; 2) Improving risk information and early warning; 3) Building a culture of safety and resilience; 4) Reducing the risks in key sectors; 5) Strengthening preparedness for response.

### 1.2 South Eastern Europe

In common with the traditional mindset which viewed disasters as ‘natural’ events, the historic concern in SEE was with ‘response and recovery’ (responding to events and recovering from them) rather than innovative risk reduction (pro-active action to reduce the risks hazards pose). The wealth of experience of disaster risk management practitioners, mostly in the field of emergency management, determined their understanding of disaster risk reduction. However, over the past few years the increased impact of major disasters, along with emerging risk patterns, has led governments and organizations to re-examine their priorities. Increasingly, resources have been committed to better understanding the underlying causes and effects of disasters. This has prompted a gradual shift in focus from ‘reactive’ disaster response and recovery to ‘pro-active’ disaster risk reduction, community resilience and adaptation to climate change.

The World Bank and UNISDR, with support from the GFDRR Track 1<sup>2</sup> portfolio and in collaboration with a number of international, regional and national partners, initiated SEEDRMAP in 2008 in line with the HFA. The aim was to contribute to reducing human, economic and financial losses from disasters caused by natural and technological hazards in SEE countries by applying disaster risk reduction mechanisms across boundaries.

SEEDRMAP has complemented existing cooperation initiatives in SEE under the European Union (EU), Council of Europe, UNCTs, DPPI-SEE, RCC SEE, WMO, UNDP and others. It

has made best use of the efficiencies that can be achieved by designing regional disaster risk reduction initiatives.

In particular, SEEDRMAP has been designed to mobilize resources in three focus areas: 1) Hydro-meteorological forecasting, data sharing and early warning; 2) Coordination of disaster mitigation, preparedness and response, 3) Financing of disaster losses, reconstruction and recovery, and of disaster risk transfer (disaster insurance).

In light of the range of activities eligible for support, SEEDRMAP has taken place in two phases: Phase I: financing to soft (non-structural) measures to help SEE countries build their capacities to reduce risks, and prepare for and respond efficiently to disasters<sup>3</sup>; and Phase II: financing to structural investments to reduce the vulnerabilities of populations to disasters caused by the impact of natural hazards<sup>4</sup>. The components of SEEDRMAP constitute a menu of options from which SEE countries can select activities relevant to their specific contexts.

During the first programme phase a number of analyses were carried out across sectors to highlight gaps and provide recommendations for improved disaster risk reduction in the region. This involved proposals for organizational and legislative improvements and priority investments in disaster risk reduction<sup>5</sup>. The outcomes of the surveys have provided the basis for both engaging other partners in the region (EC, bilateral donors), and developing national disaster risk reduction programmes in SEE countries through World Bank support (loans)<sup>6</sup>.

<sup>2</sup> The component of the facility dedicated to promoting DRR at regional level.

<sup>3</sup> Measures include weather forecasting and EWSs, disaster insurance schemes, equipment and systems for strengthened disaster response capacities, land-use planning and building code enforcement, DRR and adaptation strategies.

<sup>4</sup> Disaster risk mitigation measures, e.g. flood control, retrofitting of buildings and infrastructure and relocating of communities living in flood plains; adaptation measures, e.g. power grid enhancement and coastal zone management.

<sup>5</sup> Risk Assessment for South Eastern Europe Desk Study Review (2008); Strengthening the Hydro-meteorological Services in South Eastern Europe (2008); Mitigating the Adverse Financial Effects of Natural Hazards on the Economies of South Eastern Europe (2008); The Structure, Role and Mandate of Civil Protection in Disaster Risk Reduction for South Eastern Europe (2008).

<sup>6</sup> This has allowed SEEDRMAP to contribute to fully addressing the mandate of the donor facility GFDRR Track 1 and served as well the needs of GFDRR Track 2 (the part of the facility addressed to the national level).



## 2. What has been achieved in South Eastern Europe?

### HFA Priority 1: Making DRR a priority

Since the adoption of the HFA, there has been significant progress in strengthening national disaster risk management strategies in the SEE region, with a stronger focus on mitigation and preparedness. Most governments have shown a genuine will to upgrade governance systems and operational mechanisms for disaster risk reduction; gradually disaster risk reduction is being incorporated into national development plans and regulatory provisions across sectors.

Overall, the remarkable work on revising and scaling-up legislation has been aimed at promoting a common understanding of risk reduction, emphasizing the need for prevention at all levels of governance (central, regional and local), and in the private sector as well. Competencies among relevant agencies have been clarified, and capacities decentralized to manage priority risks at all levels of administration.

*There has been significant progress in strengthening national disaster risk management strategies in the SEE region*

In line with the growing global commitment towards risk reduction, existing legal frameworks have been upgraded to include more elements of disaster risk reduction and standardized disaster risk reduction terminology. Furthermore, the

where they were not yet established.

In parallel with the pro-active updating of national legislations, countries in the region have also taken action to revise disaster risk management processes. This has included improving the way coordination mechanisms operate across sectors, such as among disaster risk management organizations, local administrations, civil society and the private sector; the adoption of appropriate institutional arrangements at all governance levels; and the incorporation of disaster risk reduction in national spatial and environmental planning.

In this context, most SEE countries have officially formed, or are in the process of forming, National Platforms to promote the adoption of disaster risk reduction at all levels and facilitate the interaction of key players around the national disaster risk reduction agenda. National Platforms in some countries have made remarkable gains in terms of expanding their reach and broader stakeholder participation beyond government ministries.

### Multi-sector presence in SEE National Platforms

The implementation of SEEDRMAP and other initiatives has helped enhance disaster risk reduction focus and institutional capacity building. This has been achieved through a number of means, including recommendations for organizational improvements, national adaptation strategies and priority investments in disaster risk reduction, as well as through the considerable contribution that SEE countries have made to European networks such as the European Forum for Disaster Risk Reduction (EFDRR).

Country	NGOs	Private sector	Media	Research/ Academia
Bosnia and Herzegovina				
Croatia	X			X
Serbia	X	X	X	X
The former Yugoslav Republic of Macedonia	X	X		X
Turkey	X	X	X	X

Source: 'Overview of National Platforms in Europe', UNISDR Europe Office (updated August 2013) and author's review.

mandates and responsibilities of national disaster authorities have been reinforced by merging different state bodies – such as in Turkey – while the role of state administrations and public companies with a role in the disaster risk management process (prevention, response and recovery) has been strengthened. Overall, the revised legal frameworks have allowed for greater public participation, and more money from budgets for local government levels and improved compliance of national emergency management systems with the HFA. This has stimulated partnerships across sectors and paved the way for the establishment of National Platforms

### HFA Priority 2: Improving risk information and early warning

There have been remarkable accomplishments throughout SEE in the areas of risk identification and early warning systems, both at the national level and through regional cooperation. Achievements include:

- Improved institutional and regulatory environment to enhance cooperation among disaster risk management authorities and specialized agencies such as the

<sup>7</sup> E.g. 'Law on Emergency Situations', adopted in **Serbia** in 2009 and upgraded in 2011 with support from UNISDR Europe to reflect DRR considerations and the development of the National Platform for DRR; 'Law on Protection and Rescue', enacted in **Croatia** in 2004 and amended in 2007 and 2009; new 'Law on Civil Protection', prepared by the General Directorate of Civil Emergencies in **Albania** and under review by relevant line ministries.

<sup>8</sup> Disaster and Emergency Management Presidency – AFAD created in Turkey in 2009 within the Prime Minister's Office, by merging the General Directorate of Disaster Affairs under the Ministry of Public Works and Settlement, the General Directorate of Civil Defense under the Ministry of Interior and the Turkish Emergency Management Directorate.

<sup>9</sup> E.g. National 'Earthquake Strategy and Action Plan 2012-2023', published in **Turkey** in line with the HFA with sound disaster resilience approach; 'National Protection and Rescue Strategy', developed in **the former Yugoslav Republic of Macedonia** in 2009 to bring about improved risk assessment, extended monitoring and forecasting and warning communication, and improved regional and sub-regional information sharing; 'National Disaster Risk Management Strategy', developed in **Moldova** with UNDP support (2013) to guide concerted efforts of state and non-state actors towards disaster resilience and facilitate fulfillment of relevant international conventions (e.g. HFA, UN Framework Convention on Climate Change); 'National Strategy for Emergency Situations', developed in multi-sector participatory process and adopted in **Montenegro** in 2006, including mitigation and preparedness and emphasis on hazard monitoring and integrated DRR approach.

<sup>10</sup> **Bosnia and Herzegovina** (2013), **Croatia** (2009), **the former Yugoslav Republic of Macedonia** (2009, revised in 2011 and 2012), **Serbia** (2013), **Turkey** (2011).

National Meteorological and Hydrological Services (NMHSs), including through standardized operating procedures for real-time data exchange for effective early warning systems.

- Specific provisions for early warning have been incorporated in the revised national disaster risk reduction legislation<sup>11</sup> and warnings to the public have been expanded to cover a broader range of hazards.
- Capacities have been strengthened to conduct national hazard analyses and risk assessments to support decision-making in key sectors. This includes unified national methodologies in line with EU standards<sup>12</sup>, and with support from international organizations.
- Natural hazard risk maps (for forest fires, floods, landslides, earthquakes, droughts, etc.) have been integrated in national spatial plans.
- Standardized national disaster losses databases have been built in order to: ensure accurate recording of past disasters (and in particular detailing associated human, physical and economic losses); contribute to strengthening institutional capacities for more in-depth analyses of risk trends and risk information management; allow for the development of evidence-based governmental investment planning in cost-effective disaster risk reduction and climate change adaptation measures; and monitor the performance and evolution of preparedness measures and measure the progress towards resilience<sup>13, 14</sup>.
- Human capacities at NMHSs have been strengthened. Hydro-meteorological forecasting and early warning operations have been upgraded to support disaster risk reduction through the integration of cutting-edge methods in line with WMO standards, including through a cooperation framework among neighbouring countries. Progress has also been achieved in designing a regional multi-hazard early warning system composed of 'harmonized' national systems<sup>15</sup>.
- Frameworks and competencies have been developed to allow risk information to be collected and disseminated at other government entities and technical institutions linked with the single emergency call number 112 systems. This makes it possible to support national decision-making authorities by integrating risk reduction measures into development planning<sup>16</sup>.

- Dense national earthquake observation networks and reliable earthquake prediction systems have been developed in particularly disaster-prone regions<sup>17</sup>, including with a regional perspective. Furthermore, advances towards the regional harmonization of seismic hazard maps have been secured<sup>18</sup>.

### **HFA Priority 3: Building a culture of safety and resilience**

In line with the guiding principles of the HFA, there have been significant efforts to more effectively communicate hazard awareness and further develop risk reduction education. This has included a closer dialogue among scientific communities and disaster risk reduction practitioners. In this context:

- Public disaster risk reduction awareness has been raised by implementing outreach programmes, both country-wide and focused on risk-prone communities, coordinated by national disaster risk management authorities. The aim is to help all levels of civil society to reduce hazard exposure in everyday lives and contribute to improving the implementation of risk mitigation policies<sup>19</sup>.

This has implied developing appropriate legislative provisions<sup>20</sup>, determining effective communication channels and designing programmes with a clear understanding of the perspectives and requirements of targeted groups (decision makers, educators, professionals and members of the public).

- Considerable efforts have been made to gradually mainstream elements of disaster risk reduction into existing education systems and contribute to reinforcing disaster risk reduction as a 'public value' and improving the safety of society by educating agents of change.

This has involved, among other things, forming committees and working groups tasked with analyzing existing programmes at different levels of education (from elementary school to university) to determine how disaster risk reduction could be best addressed, and providing training to teachers and school officials.

- Key sectors have been trained, including as part of regional cooperation initiatives, to equip policymakers, development practitioners and disaster managers with knowledge and skills to integrate disaster risk reduction into their work. This is contributing to increasing the ability of communities to secure their safety against hazards.

<sup>11</sup> 'Law on Emergency Situations', **Serbia**.

<sup>12</sup> 'Risk Assessment and Mapping Guidelines for Disaster Management' (2010) ([http://ec.europa.eu/echo/civil\\_protection/civil/pdffdocs/prevention/COMM\\_PDF\\_SEC\\_2010\\_1626\\_F\\_staff\\_working\\_document\\_en.pdf](http://ec.europa.eu/echo/civil_protection/civil/pdffdocs/prevention/COMM_PDF_SEC_2010_1626_F_staff_working_document_en.pdf))

<sup>13</sup> E.g. **Croatia, Albania**, DesInventar, with support from UNISDR Europe and the Italian Civil Protection Department; **Serbia**, pilot project 'Disaster Loss Database Establishment in the Republic of **Serbia**', with the aim of establishing DesInventar, with support from UNISDR, UNDP and South Eastern and Eastern Europe Clearinghouse for the Control of Small Arms and Light Weapons (SEESAC).

<sup>14</sup> DesInventar was finalized in March 2014. The database contains disaster impact data extracted from national archives since the 1850s. Turkey's disaster loss database was officially launched in May 2014.

<sup>15</sup> UNISDR/WMO Project 'Building Resilience to Disasters in Western Balkans and Turkey'.

<sup>16</sup> E.g. **Croatia, Serbia**.

<sup>17</sup> **Turkey**.

<sup>18</sup> DPPI-SEE Project 'Harmonization of Seismic Hazard Maps in the Western Balkans and Turkey'.

<sup>19</sup> In particular in **Croatia, the former Yugoslav Republic of Macedonia** ('Citizens' Handbook on Crisis Management, developed with UNDP support, 2009), **Montenegro** (natural hazards' prevention education campaigns targeted to schools, implemented in 2012 under the EU-funded 'Euromed Programme on Prevention, Preparedness and Response to Natural and Man-made Disasters - PPRD South'), **Serbia** ('Family Guide for Emergency Preparedness and Response', developed in 2011 in cooperation with the Organization for Security and Cooperation in Europe - OSCE, and awareness campaigns on disaster prevention run in elementary schools), and **Turkey**, where extensive public education on disaster preparedness and mitigation has been implemented, including through dissemination of basic disaster awareness toolkits for community outreach.

<sup>20</sup> E.g. sections on 'Education and Training' and 'Public Information' within the new draft 'Law on Civil Protection' in **Albania**.

- Knowledge of urban disaster risk and local resilience building has been promoted through capacity building of local government representatives, in particular through the world disaster risk reduction campaign ‘Making Cities Resilient: My City is Getting Ready!’<sup>21</sup>. To date, 65 municipalities in SEE have signed up to the campaign, thus ensuring the provision of a comprehensive framework for risk governance to mayors, governors and other local government leaders<sup>22, 23</sup>.

#### **HFA Priority 4: Reducing the risks in key sectors**

Governments can implement a number of measures in response to HFA Priority 4. They include: integrating disaster risk reduction and climate change adaptation into environmental protection policies and sustainable natural resources management; incorporating risk reduction in physical and land-use planning, including retrofitting facilities (schools and hospitals) and improving building safety; facilitating private-sector involvement in disaster risk reduction to ensure that economic developments include measures to reduce community vulnerability and promote risk-sharing through disaster insurance.

In cooperation with international organizations such as UNDP, UNISDR and WMO, countries throughout SEE have made significant progress in developing strategies and programmes to reduce risks from unsustainable natural resource use, while at the same time protecting the environment. This has involved creating task forces to encourage synergies among disaster risk reduction practitioners, risk reduction experts (particularly from NMHSs) and representatives from environmental groups and agencies active nationally<sup>24</sup>. It has also involved joint trainings to promote collaboration on existing environmental and disaster risk reduction activities, such as drought prevention and flood risk management<sup>25</sup>.

Countries have shown awareness of the need to bring together different sectors and use their abilities to ensure effective environmental and climate change adaptation planning for disaster risk reduction. This has included, among other things, administrative measures on land, forestry and industry, integrating climate change adaptation in social and economic policies, and reducing the costs of overlapping initiatives. SEE countries have signed international climate risk management and environmental agreements, including the

UN Framework Convention on Climate Change, and implemented relevant EU Directives into national legislation<sup>26</sup>.

A valuable contribution has been made by the UNISDR ‘Making Cities Resilient: My City is Getting Ready!’ campaign, through which local actors have been engaged in resilience building, in part through appropriate and safer urban planning.

Notable progress has also been achieved by introducing provisions for safe settlement planning and building construction, improving safety of housing and other buildings through enforcement of building codes and protection of critical public infrastructures<sup>27</sup>, and developing measures for disaster risk impact and environmental assessments of major infrastructure development projects<sup>28</sup>.

A number of countries in the region have promoted innovative ways to ensure that the private sector can also play a key role with governments in contributing to effective disaster risk reduction, including both risk mitigation and disaster insurance<sup>29</sup>. A key contribution to progress in this area has been the development of the World Bank ‘South East Europe and Caucasus Catastrophe Risk Insurance Facility’ (SEEC CRIF) project, to facilitate the growth of catastrophe risk insurance markets in SEE and give homeowners, farmers and businesses access to highly innovative risk-sharing schemes and financial protection from losses caused by hazards.

Most recently the SEEC CRIF, in collaboration with Europa Re, provided training on state-of-the-art disaster insurance tools to insurance agents and regulators in Albania and the former Yugoslav Republic of Macedonia.

#### **HFA Priority 5: Strengthening preparedness for response**

The remarkable achievements of SEE countries under HFA Priorities 1 to 4 (i.e. strengthened institutional structures and legal frameworks, risk identification and early warning, public knowledge and identification of underlying risk factors) have built the foundations for better disaster preparedness across the region. The improvement of regional disaster preparedness capacities, development of links between ongoing disaster risk reduction activities, and enhanced operational

<sup>21</sup> <http://www.unisdr.org/campaign/resilientcities/>

<sup>22</sup> Two in **Albania**, two in **Bosnia and Herzegovina**, five in **Croatia**, one in **the former Yugoslav Republic of Macedonia**, two in **Montenegro**, 50 in **Serbia** and three in **Turkey**.

<sup>23</sup> Most recently, high-visibility events celebrating the joining of the UNISDR Making Cities Resilient campaign were conducted in Tirana (Albania), Gaziantep (Turkey) and Cetinje (Montenegro).

<sup>24</sup> E.g. As part of the National Platform for DRR in **the former Yugoslav Republic of Macedonia** the following platforms and working groups are established: Specialized Platform on Environmental Risks, under the leadership of the Ministry of Environment and Physical Planning (incorporating national agencies in the field of air, water and soil pollution, bio-diversity, climate change, industrial facilities, etc.), Thematic Working Group on CCA, led by National Committee for Climate Change, and Specialized Platform on Risks in the Domain of Agriculture, Forestry and Waters, under the coordination of the Ministry of Agriculture, Forestry and Water Management.

<sup>25</sup> E.g. Advanced training on ‘Integrated Flood Management and Flood Forecasting’ and development of a regional Multi-Hazard EWS composed of harmonized national EWSs with focus on priority hazards in the region (forest fires, severe storms, floods and droughts) under the UNISDR/WMO Project ‘Building Resilience to Disasters in Western Balkans and Turkey’.

<sup>26</sup> EU SEVESO II Directive and European Flood Directive integrated in national legislation in **Croatia** and overall DRR framework improved.

<sup>27</sup> Guidelines for Adoption of EU Building Codes, and Eurocode 8 in particular, providing guidance on the introduction of seismically resilient construction standards developed and published and relevant training implemented in **Albania** under the Albania Disaster Risk Mitigation and Adaptation Programme (AL-DRMAP) in 2012; European Directive on Protection of Critical Infrastructure integrated in national legislation in **Croatia**; legal framework for construction standards and building codes improved in **the former Yugoslav Republic of Macedonia** and Specialized Platform on Risks to Infrastructures created within the National Platform for DRR under the coordination by the Ministry of Transport and Communications; implementation of new European standards (e.g. construction) and monitoring of construction norms compliance in progress in **Moldova**; national building codes established in **Montenegro**; laws on planning and infrastructure construction and on investment maintenance of residential buildings respectively enacted in **Serbia** and chapter on natural and technological disasters included in the National Spatial Plan (covering landslides, fires, earthquakes and floods); whole range of legislation developed in **Turkey** in line with international standards, including comprehensive land-use planning and regulatory provisions for building codes and construction supervision, and necessary institutional arrangements. A ‘Strategic Disaster Management in Urban Areas’ programme developed also, to move forward from emergency response to DRR by covering emergency management, infrastructures and lifelines, legal issues and training. World Bank ‘Marmara Earthquake Emergency Reconstruction Project’ completed in 2007, to help restore living conditions of communities affected by the 1999 earthquake through reconstruction of urban and rural housing built to higher construction standards, development of building retrofitting code, revision to the urban development law, etc. Among other initiatives, the ‘Istanbul Seismic Risk Mitigation Project’ (ISMEP), developed with support from the World Bank and the European Investment Bank (revised closing date December 2014) as a significant attempt to implement effective disaster preparedness through enhanced institutional and technical capacities for DM, strengthening of priority buildings and critical facilities, and improved enforcement of building code.

<sup>28</sup> E.g. **Turkey** (for pipelines, dams, highways’ construction projects).

abilities for more effective emergency management (HFA Priority 5) have resulted in the following:

- National technical and institutional capacities for disaster risk management have been strengthened overall, and disaster risk reduction elements have been incorporated into national programmes for disaster preparedness, including through legal frameworks covering protection and rescue.
- Disaster preparedness and emergency plans and programmes have been progressively updated and regularly exercised at all levels of administration. This has included the involvement of various stakeholders<sup>30</sup>.
- Emergency response units have been equipped and capacities of first responders have been enhanced.
- Protection and rescue systems have been decentralized to address a wide range of priority hazards. This has included rapid resource mobilization through public and private sectors and civil society.
- Information exchange and coordination have been improved and regularly tested and operating procedures standardized. This has allowed multiple stakeholders to take part and contribute their abilities during hazardous events.
- Emergency and rescue funding mechanisms have been developed and distributed between national and local levels to support effective response and recovery.
- Communications have improved through the setting up of operations centres and the adoption of the single emergency call number 112. This has made it easier to both collect and communicate hazard information and report on risks. It has also made it easier to alert citizens, rescue services and the administration when needed (where not yet established, 112 systems will be soon functional across the region).
- Preparedness for cross-border hazards has been strengthened through regional cooperation initiatives, including through table-top and field exercises<sup>31</sup>.
- Training material on disaster risk management and specialized national training centres have been developed, also in cooperation with international organizations (UNDP)<sup>32</sup>.

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<sup>29</sup> **Albania**: first country to join Europa Re SEEC CRIF in 2010 under the 'Albania Disaster Risk Mitigation and Adaptation Programme (AL-DRMAP)' and SEEDRMAP Focus Area III 'Financing of disaster losses and disaster risk transfer'; earthquake and flood insurance packages developed to offer high-credit quality coverage to homeowners and small/medium enterprises, and tools for consumer awareness/education developed (under AL-DRMAP and UNISDR/WMO Project 'Building Resilience to Disasters in Western Balkans and Turkey', 2013); law on disaster insurance drafted and submitted to approval process; insurance and reinsurance products for disaster risk transfer promoted in **Bosnia and Herzegovina** and **Montenegro** (UNISDR/WMO Project 'Building Resilience to Disasters in Western Balkans and Turkey', 2013); membership of Europa Re SEEC CRIF established for **the former Yugoslav Republic of Macedonia** in 2012 (under SEEDRMAP Focus Area III); a system of crop insurance established in **Moldova**; membership of Europa Re SEEC CRIF established for **Serbia** in 2012 (under SEEDRMAP Focus Area III); catastrophe insurance market comprehensively developed and compulsory residential earthquake insurance enforced since 2000 in **Turkey**. New law on disaster insurance enacted in 2012, and state-supported agricultural insurance developed since 2006.

<sup>30</sup> E.g. 'Municipal Disaster Preparedness' programme implemented in cooperation between Serbian Red Cross (60,000 volunteers) and Sector for Emergency Management.

<sup>31</sup> Under DPP1-SEE and the EU-funded 'IPA Programme on Civil Protection Cooperation for the Candidate Countries and Potential Candidates' (2011 and 2012).

<sup>32</sup> National Emergency and Command Control and Training Centre established in **Albania** under the 'Albania Disaster Risk Mitigation and Adaptation Programme (AL-DRMAP)' to improve coordination in emergency response.

### 3. Selected highlights on HFA implementation in SEE

This section presents an overview of selected key initiatives in SEE in line with the HFA priorities for action. It presents evidence-based elements of success in disaster risk reduction implementation in SEE and highlights the many efforts that have been conducted under the HFA umbrella at both regional and national levels.

#### HFA Priority 1: Making DRR a priority

##### Regional focus on DRR

##### SEE plays leading role in European DRR agenda

The stronger focus on disaster risk reduction has been continuously supported in SEE – including through SEEDRMAP – by promoting countries' integration in major European networks and events<sup>33</sup>.

The key role of SEE countries in the European disaster risk reduction agenda was further reaffirmed when they were given a leading role in the 2011 and 2012 EFDRR meetings to promote a coordinated approach to HFA implementation in Europe<sup>34</sup>.

There is today a high-level commitment to coordinated efforts throughout Europe for effective disaster risk reduction, with an emphasis on the importance of regional consultations. In this respect, the participation of two key actors has been of the utmost significance: His Excellency Dr. Gjorge Ivanov, President of the former Yugoslav Republic of Macedonia, in the Second Meeting of the EFDRR (October 2011), and Mr. Ranko Ostojić, Minister of Interior of Croatia (and by representatives from the Croatian Ministry of Foreign and European Affairs), in the Third EFDRR Meeting (October 2012).

##### SEE committed and engaged in DRR and CCA

Government leaders in SEE have recognized the utmost importance of disaster risk reduction and climate change adaptation and have committed to strengthening joint efforts to build resilience through a number of channels, including the following regional and international events:

- 'Ministerial and Experts Meeting on Disaster and Emergency Management of the South-East European Cooperation Process (SEECP)', co-organized by the Government of Turkey (12-13 May 2010, Antalya);
- 'Ministerial Conference on the Harmonization of the Regional Activities in Prevention of Natural and Man-made Disasters', organized by the Serbian Ministry of Interior (18 November 2011, Belgrade);
- Statement by the President of the former Yugoslav Republic of Macedonia, H.E. Dr. Gjorge Ivanov, on the occasion of the opening ceremony of the Third Session of the Global Platform for DRR (May 2011, Geneva);

- 'Formal Meeting of the Ministers of Foreign Affairs of the SEECP', under the Chairmanship-in-Office of the former Yugoslav Republic of Macedonia (31 May 2013, Ohrid);



Source: South Eastern and Eastern Europe Clearinghouse for the Control of Small Arms and Light Weapons – SEESAC website ([www.seesac.org](http://www.seesac.org)). Ms. Margareta Wahlström and Serbian Minister of Interior Mr. Ivica Đaćić talk of the importance of prevention in disaster risk reduction efforts.

#### DRR is key to safer future

"We cannot stop earthquakes, hurricanes or tsunamis. But we can help our communities and nations in Europe and beyond to be more prepared. We can strengthen our institutions with the knowledge, capacities and resources necessary for effective and efficient prevention, response and mitigation. We can and we must be ready for the future risks, both predictable and unpredictable, in order to deliver a safer future for our posterity. This is what disaster risk reduction is all about", said H.E. Dr. Gjorge Ivanov, President of the former Yugoslav Republic of Macedonia, on the occasion of the opening ceremony of the Second Meeting of the EFDRR under the country's Chairmanship (2011).



Source: Chairmanship with the EFDRR, Second Annual Meeting 2011 ([www.macedfrr.gov.mk](http://www.macedfrr.gov.mk)). President Dr. Gjorge Ivanov giving his opening speech at the meeting.

<sup>33</sup> Events include the European HFA Focal Points meeting for the HFA Mid-Term Review (Switzerland, 2010), the disaster risk reduction media and communication training (Belgium, 2010), and the launch of the HFA Mid-Term Review (Italy, 2011).

<sup>34</sup> National Platform for DRR of the former Yugoslav Republic of Macedonia nominated co-chair of the EFDRR to work in close cooperation with the Swedish Civil Contingencies Agency (MSB) in developing the First Meeting of the EFDRR (Sweden, October 2010). Second Meeting of the EFDRR (October 2011) hosted and chaired by the former Yugoslav Republic of Macedonia National Platform for DRR (25 countries, 50 participants, 27 National Platforms for DRR). Third EFDRR Meeting (October 2012) hosted and chaired by the National Protection and Rescue Directorate of Croatia (27 countries, 60 participants, 21 National Platforms for DRR). Dedicated to provide inputs to the Post-HFA consultations and increasing local-level engagement in reducing vulnerability to disasters, including through the creation of the 'Damir Čemerin Award for Local Change' for citizens' engagement in building disaster resilience). The former Yugoslav Republic of Macedonia member in the working group for CCA/DRR to assist with planning of the Third EFDRR Meeting in Croatia.

## Establishing National Platforms for Disaster Risk Reduction



### Bosnia and Herzegovina

Bosnia and Herzegovina launched its National Platform in March 2013. The establishment of the National Platform represents the outstanding result of a challenging process which started in 2012 when the Council of Ministers officially tasked the Protection and Rescue Sector of the Ministry of Security to promote a permanent forum for cooperation among stakeholders contributing to disaster risk reduction. Bosnia and Herzegovina now joins 25 countries in Europe that are working to integrate disaster risk reduction into national development policies and programmes through their National Platforms.

At the launching event, former Minister of Security Mr. Fahrudin Radončić stated: “Damage caused by flood, fire, earthquake or disaster due to human factor is measured in hundreds of billions of dollars and the fate of hundreds of millions of people has been altered in a negative sense. An attempt to reduce this damage is something that all states and communities should work on.”

The UN Special Representative of the Secretary-General for Disaster Risk Reduction, Ms. Margareta Wahlström, said: “The engagement of Bosnia and Herzegovina to work together in a coordinated approach in reducing risk to disasters at the local and national level through its National Platforms is a strong step toward building citizens’ resilience to disasters. The establishment of this National Platform is the culmination of many positive actions that have taken place since 2008 when the Parliamentary Assembly adopted the Framework Law on the Protection and Rescue of People and Property in the Event of Disasters in Bosnia and Herzegovina.”

During the launch event, the Municipality of Sarajevo Centar joined the global ‘Making Cities Resilient: My City is Getting Ready!’ campaign.



### Croatia

The Croatian Government founded the Committee of the National Platform for Disaster Risk Reduction in 2009, following a proposal by the National Protection and Rescue Directorate (NPRD). The Committee, which includes members from relevant ministries and other state bodies, calls upon a number of actors and stakeholders. They include representatives of the Croatian Academy of Sciences and Arts, large economic entities, public companies, and NGOs dealing with protection and rescue – including the Croatian Red Cross, Croatian Mountain Rescue Service and Croatian Firefighting Organization – as well as representatives of religious communities. NPRD was tasked to act as a secretariat for the National Platform.



Source: Croatian National Platform website ([www.platforma.hr](http://www.platforma.hr)). At the fifth conference of the National Platform.

Since 2009, the National Platform has held five conferences to highlight the coordinated disaster risk reduction work in Croatia. The Platform functions as a multi-sectoral and interdisciplinary body involving all interested parties in the country. It aims to be further active in the coming years and implement the recommendations from its annual conference in the daily work of all involved parties.

The Croatian National Platform actively participates as well in the EFDRR. Croatia co-chaired the meeting of the EFDRR in 2011 and chaired it in 2012.



### Serbia

The Serbian Government’s announcement of its National Platform in January 2013 was the culmination of a long-term effort. It followed the formation of the National Emergency Management Headquarters (NEMH) in 2011, which was set up to coordinate protection and rescue in emergencies and mainstream disaster risk reduction policies in the country, as well as to act as the National Platform. Members of the NEMH include, among others, the Sector for Emergency Management of the Ministry of Interior of the Republic of Serbia (SEM) and representatives from line-ministries, Serbian Army, Serbian Red Cross, governmental organizations responsible for seismology, hydrology, meteorology, water management and forestry, public companies, business associations, media, citizen associations and other institutions which may be part of the protection and rescue system in case of emergency.



Source: South Eastern and Eastern Europe Clearinghouse for the Control of Small Arms and Light Weapons (SEESAC) website ([www.seesac.org](http://www.seesac.org)). Participants at the workshop on the development of a National Platform in Serbia, organized in 2011 under the UNDP/WMO ‘Regional Project on DRR in SEE’.



### **The former Yugoslav Republic of Macedonia**

The former Yugoslav Republic of Macedonia emerged as an outstanding example in SEE when in 2009 it became the 11th European country to form a National Platform. The foundations of the National Platform lie in key national documents, especially the ‘National Conception for Security and Defense’, the ‘National Security Strategy’ and the ‘Law on Crisis Management’, which established the national Crisis Management System.

The process of establishing the National Platform began in 2007 with the initial networking of stakeholders dealing with prevention and disaster risk management. Since 2009, political drive has been ensured to secure the Platform’s leadership of the national disaster risk reduction process.

Intensive activities and the summing-up of experiences led to progressive National Platform reviews in 2009, 2011 (with UNDP support) and 2012. The reform involved, among other measures, enforcing the principle of inclusion and promoting further the harmonization of disaster risk reduction concepts and terminology. The principle of inclusion is implemented through the Council of the National Platform, where representatives from the public administration, academic and business communities, religious organizations, NGOs, the media and other relevant actors exchange knowledge and achievements in the area of disaster risk reduction.

Active engagement of the National Platform continued with the chairmanship and hosting in 2011 of the 2nd Annual EF-DRR meeting in Skopje.

Most recently, the former Yugoslav Republic of Macedonia and Turkey enhanced the institutional capacities within their National Platforms through an exchange of experts with Finland and Italy, respectively. The results of this exchange were captured in a report presented to the beneficiary countries and the European Commission on the occasion of the DP-PI-SEE Regional Meeting organized in Pržno, Montenegro, in April 2014



Source: Chairmanship with the EFDRR, Second Annual Meeting 2011 ([www.macedfrr.gov.mk](http://www.macedfrr.gov.mk)).

### **Improving frameworks for comprehensive Disaster Risk Management**

#### **National Disaster Risk Management Strategy, Moldova**

The Government of Moldova recognizes the importance of disaster risk reduction to a country which is highly exposed to climate variability and natural hazards and has incorporated it in its national Activity Program.

Work on the ‘National Disaster Risk Management Strategy’ was begun in 2012 by the Ministry of Interior’s Civil Protection and Emergency Situations Service, with the support of UNDP under the ‘Moldova Disaster and Climate Risk Reduction Project’. The goal of the Strategy is to increase the country’s resilience to various types of disasters by providing a more comprehensive framework for action in civil protection and disaster risk management in the priority areas of prevention, preparedness, response and recovery.

Two rounds of extensive consultations with major national stakeholders have already been held and a draft document produced for approval in 2014 to become the basis for improved disaster risk management on the national level.



Source: UNDP Moldova. Participants at the stakeholder consultations in February, 2013

### **HFA Priority 2: Improving risk information and early warning**

#### **Disaster losses data accounting and analysis**

##### **Strengthened DRR planning through improved disaster losses analysis in Albania**

Albania has taken firm action to improve capacities for the management of risk information and evidence-based investment planning in risk mitigation, disaster risk reduction and climate change adaptation through the successful implementation of the DesInventar database (with support from UNISDR Europe and the Italian Civil Protection Department/CIMA Research Foundation<sup>35</sup>).

A workshop was hosted by the Albanian General Directorate of Civil Emergencies in Tirana in early 2013, with support from UNISDR Europe and the CIMA Research Foundation, to increase understanding by relevant stakeholders of the benefits of the implementation of DesInventar. The aim of the work-

<sup>35</sup> DesInventar is a UNISDR-supported methodological tool designed to develop databases of historical records of disasters’ occurrences and losses – including their analysis and graphic representation – and support governments with identifying national disaster risk patterns and drivers at the national and local levels.



Source: 'Recording Disaster Losses – Recommendations for a European Approach' – EC Joint Research Centre, 2013 (<http://publications.jrc.ec.europa.eu/repository/bitstream/111111111/29296/1/lbna2611enn.pdf>).

shop was to illustrate the system's operational procedures to national- and local-level emergency officers and representatives from line-ministries, rescue services, prefectures, and hydro-meteorological and geological services.



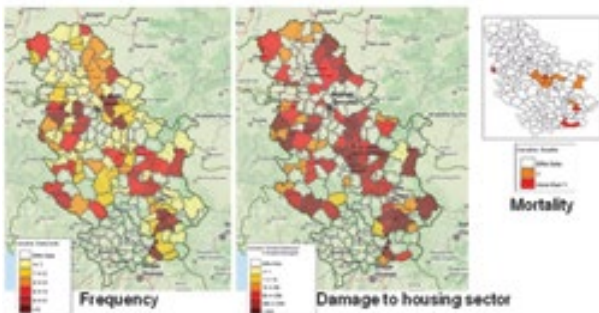
Source: Albanian Civil Protection website ([www.mbrojtjacivile.al](http://www.mbrojtjacivile.al)). Participants at the workshop on DesInventar.

The implementation of DesInventar represents a crucial step in Albania towards the goal of compiling and organizing risk information in line with the civil protection strategy and the HFA priorities for action.

### Disaster losses analysis in Serbia

Progress is under way in Serbia to develop DesInventar and support the Government's efforts to strengthen the country's overall disaster risk reduction and recovery system. In February 2013, the pilot project 'Disaster Loss Database Establishment in the Republic of Serbia' was launched jointly by UNISDR and UNDP/South Eastern and Eastern Europe Clearinghouse for the Control of Small Arms and Light Weapons (SEESAC). UNISDR, UNDP and the Statistical Office of the Republic of Serbia are working in partnership with the Sector for Emergency Management of the Ministry of Interior of Serbia to develop a national historical disaster losses database using official data provided by the Government of Serbia and other relevant institutions.

#### HISTORICAL RISK PATTERNS: FLOOD



Source: South Eastern and Eastern Europe Clearinghouse for the Control of Small Arms and Light Weapons (SEESAC) website ([www.seaac.org](http://www.seaac.org)). Historical flood risk patterns, Serbia.

SEM and the Statistical Office of the Republic of Serbia have taken on the leading role in collecting and analyzing data.

After more than six months of project implementation and two months of extensive research, the project research team has collected information on 1,485 disaster events that have taken place in Serbia during the 27-years from 1986 to the present. The amount and quality of data collected represents a great start for the database development in Serbia as well as a significant success at global level. Developing DesInventar is contributing also to efforts to make a gender perspective a key part of the disaster risk reduction system in Serbia for the first time.

The database is intended to serve all parties involved in analyzing risk patterns and broad risk information management – including local municipalities, policy-makers, the academia and the general public – and will provide a solid basis for considered and prioritized disaster risk reduction and climate change adaptation investment planning. It will also provide critical insight into the relationship between risk and development, and a means to monitor progress in societal resilience building.



Source: UNDP in Serbia - 'Why do we need disaster loss database? An answer comes from Serbia', 24.10.2013 - (<http://www.undp.org/content/serbia/en/home/ourperspective/ourperspectivearticles/2013/10/24/why-do-we-need-disaster-loss-database-an-answer-comes-from-serbia.html#>).

### Improving risk information

#### Unified risk assessment in Bosnia and Herzegovina

The first national disaster risk assessment with a unified national-level methodology in line with EU standards was carried out in 2012 by the Protection and Rescue Sector of the Ministry of Security of Bosnia and Herzegovina. The national risk assessment includes hazard identification covering the whole territory<sup>36</sup>, vulnerability assessments for the public, property and critical infrastructures, and the quantifying of risks, their likelihood, causes and impacts (expressed in terms of human, material and financial losses).



For the implementation of the national risk assessment, the Council of Ministers formed an inter-departmental working group coordinated by the Ministry of Security. The working group was divided into sub-groups based on types of hazard, and was made up of representatives from state and entity ministries, the Public Safety Department of Brčko District, and experts from various fields of the governmental and non-governmental sector and civil society.

The national risk assessment will enable the preparation of the national 'Plan of Protection and Rescue' and the national 'Protection and Rescue Capacity Development Programme'.

### **Forest Fires Information System of the former Yugoslav Republic of Macedonia**

The Crisis Management Centre presented in 2013 the 'Forest Fires Information System of the former Yugoslav Republic of Macedonia as an innovative tool to contribute to reducing the risk of forest fires in the country. The system was developed in the framework of the 'Integrated system of prevention and early warning of forest fires' project, implemented in cooperation with the Japan International Cooperation Agency (JICA) and with the participation of relevant state institutions (among others, the Ministry of Agriculture, Forestry and Water Management, NMHS, Faculty of Forestry, the Fire Union, Regional Fire Monitoring Centre [RFMC]). The new system is now being tested before being made available for public access on the CMC website. It will provide relevant institutions with an integrated approach for rapid communication and information sharing in line with the standards of the European Forest Fire Information System (EFFIS).



Source: Regional Fire Monitoring Centre (RFMC) website ([www.rfmc.mk](http://www.rfmc.mk)). Participants at the MKFFIS presentation.

### **HFA Priority 3: Building a culture of safety and resilience**

#### **Making the public aware of risks and mitigation measures**

##### **Raising public awareness on preparedness for seismic hazards in Montenegro**

A pilot risk awareness and education campaign focusing on seismic hazard protection was designed and successfully implemented in 2012. The campaign, which targeting about 5,000 sixth-grade students in 62 schools across 21 municipalities, was the work of the Sector for Emergency Management of Montenegro, with support from the EU-funded 'Euromed Programme on Prevention, Preparedness and Response to Natural and Man-made Disasters (PPRD South)' and in cooperation with the Ministry of Education and Science.

The initiative involved lessons in schools, study-visits to local fire brigade stations, classroom follow-up activities as well as distribution of educational/awareness material (including 5,000 t-shirts and 70 posters, etc.). The initiative was extended to also engage the public through a media campaign including press conferences, about 80 TV and 160 radio spots, and the publishing of news items in the country's main daily newspapers.

The implementation of this initiative has been brought forward by the Sector for Emergency Management to mark a further step towards gradually incorporating risk reduction elements in the national elementary school curriculum in the country.



Source: Sector for Emergency Management of Montenegro. - Some of the educational material (above), while children visit their local fire brigade (below).

<sup>38</sup> Hazards are geological: earthquakes, landslides, ground erosion, etc.; ecological: air pollution, ground water contamination, soil degradation; hydro-meteorological: floods, droughts, storm winds, etc.; chemical bacteriological radiological and nuclear hazards; outbreaks of infectious diseases; industrial hazards; fires; terrorism and armed conflicts.

### **Increasing public readiness in the former Yugoslav Republic of Macedonia**

A handbook for local authorities on crisis preparedness was published in 2009 to raise public awareness of the things people can do to prevent accidents and disasters and reduce risks. The Citizens' Handbook on Crisis Management was developed in the framework of the UNDP-supported 'Strengthening Capacities of the Crisis Management Centre' in the former Yugoslav Republic of Macedonia. Besides presenting the general functions of the national crisis management system, the handbook lays out the rights and obligations of citizens and local communities as a broad base on which the system's mechanisms are built.

As part of the project's awareness-raising component, evacuation drills were organized involving about 1,600 high-school students and about 150 teachers in three municipalities. Additional training drills were carried out in six elementary schools involving more than 2,000 students and teachers. An interactive educational computer game and other disaster risk reduction educational material have been developed, including the translation of the UNISDR 2009 DRR Terminology into the local language

### **SEE regional workshop on HFA Priority 3, Montenegro**

A workshop to exchange knowledge and experiences of disaster risk reduction among government representatives in SEE was held in Montenegro in October 2013. The event, hosted by the Directorate for Emergency Situations of Montenegro, focused on the implementation of the strategic goals under HFA Priority 3 'Use knowledge, innovation and education to build a culture of safety and resilience at all levels'.

The workshop was organized in cooperation with the DPPI-SEE Secretariat, United Nations Children's Fund (UNICEF) Regional Office for Central and Eastern Europe and Commonwealth of Independent States (CEE/CIS) and UNISDR Europe Regional Office.

Participants included representatives from disaster risk management authorities, education sectors, school directors and local governments.



Source: DPPI-SEE website ([www.dppi.info](http://www.dppi.info)).  
Participants at the workshop on HFA Priority 3 in Montenegro.

### **Addressing issues of local governance and urban risk**

#### **Huge response in Serbia to global campaign 'Making Cities Resilient: My City is Getting Ready!'**

Serbia has taken major steps towards strong municipal involvement in reducing vulnerability to disasters and promot-

ing urban disaster resilience in a systematic way. To date, 50 municipalities across Serbia have joined the world disaster risk reduction 'Making Cities Resilient' campaign, setting a fine example for other countries in SEE to follow.



Source: UNISDR 'Making Cities Resilient: My City is Getting Ready!' Campaign website ([www.unisdr.org/campaign/resilientcities](http://www.unisdr.org/campaign/resilientcities)).  
Representatives from 30 municipalities and cities with their certificates of commitment.

Serbian Assistant Minister of Interior and Head of SEM Mr. Predrag Maric said the response demonstrated that Serbia was a leading country in the promotion of emergency response education at the local level. He said: "Serbia is recognized by the UN to be at the forefront of EU countries in education of local government leaders in emergency response. The Mayor's training today builds modern capacity of disaster risk management teams and gives new authority on the local level as a result of the new Law on Emergency Situations." Mr. Maric made the statement on the occasion of the 2011 visit to Serbia by Ms. Margareta Wahlström, who awarded certificates of commitment to disaster resilience and participation in the campaign to representatives from 30 municipalities and cities across the country.

The City of Nis, in particular, has become the first in Serbia to develop a comprehensive strategy with the vision of an 'economically, socially and environmentally safe municipality'. "DRR should be the concern of each individual citizen", said Nis Mayor Zoran Perišić, taking advantage of the 2013 UN Day to showcase the importance of reducing disaster risk. "Local governments together with national governments, international, regional and civil society organizations, donors, private sector, academia as well as every citizen need to be engaged in reducing their risk to disasters."

### **School-based disaster risk management and community-based DRR**

#### **School drills and family disaster preparedness in Turkey**

Turkey is working to reduce disaster risk through regular school drills and a community-driven 'Family Disaster Plan'. The plan – developed in 2005 by Bogazici University in cooperation with GeoHazards International (GHI)<sup>37</sup> and Risk Reduction Education for Disasters (Risk RED)<sup>38</sup> – is designed for distribution to primary- and secondary-school students, parents and teachers and aims to improve community-driven disaster risk reduction by addressing three key areas: 'assessment and planning', 'physical and environmental protection' and 'response capacity development'. School evacuation drills are called for regularly by the Turkish Ministry of Edu-

<sup>37</sup> <http://geohaz.org>

<sup>38</sup> [www.riskred.org](http://www.riskred.org)

cation, with support from provincial or district disaster risk management officers.



**Family Disaster Plan**

Check as completed.

**ASSESSMENT & PLANNING**

We hold a family disaster planning meeting every 6 months (household, extended family, or family of one). We use this checklist for our planning.

We have learned which hazards may affect us and identified our risks and the particular vulnerabilities of the building and neighborhood, and of family members (incl. pets). We know about local community resources.

We have identified the safest places in the house and in each room in case of disasters we face (eg. earthquake: away from windows, large and heavy objects that can fall, and objects like heaters that can cause fire).

We identified exits and alternative exits from our house and building.

We researched for and identified hazards in our home (eg. furniture or equipment that can fall or slide during earthquake or flood) and our environment (eg. hazardous materials sites).

We know our out-of-area contact person(s) and phone number(s) (diality cell phone for text messaging) if it's \_\_\_\_\_.

We know that we will only use the telephone in case of physical emergency after a disaster. We will use radio and television for information. We keep cell phone batteries charged for emergency use.

We know where to reunite, and where to evacuate to for safe shelter.

Inside the house: \_\_\_\_\_

Outside the house: \_\_\_\_\_

Outside the neighborhood: \_\_\_\_\_

and we have a secret message drop location outside our house.

We made our copies of important documents, and key addresses and phone numbers. We have one set with our out-of-area contact and/or we keep one in our disaster evacuation bag.

We have insurance coverage to minimize our financial risks.

We have made plans with child care providers in case of emergency or disaster.

We are spreading the word to everyone we know.

We participate in emergency planning with our community.

We make our expectations known to local, regional and national policy-makers.

Source: [www.preventionweb.net](http://www.preventionweb.net).  
The 'Family Disaster Plan' template.

In 2009-2011, the Ministry of Education, with support from Risk RED and the American Red Cross, scaled up disaster prevention education through a project involving every one of Turkey's 30,000 schools. The 'Disaster Reduction Education Learning Support System (DREAMS)' project included two e-learning modules for teachers throughout Turkey's school system: 'Individual and Family Disaster Preparedness' and 'School Disaster Management'. By the end of 2011, more than 10,000 teachers had completed the courses. A School Disaster and Emergency Management Handbook has also been developed to guide school disaster risk management committees in their planning work and provide standard operating procedures for emergencies and disasters. The handbook includes a 'Comprehensive School Safety Checklist' for implementation at school level.

Building on its commitment to safe schools, most recently Turkey has agreed to host the first-ever 'School Safety Country Leaders' meeting, by the end of 2014, to provide technical support to five countries on school safety and share good practice and experience on the subject.



Source: [www.riskred.org](http://www.riskred.org).  
'Get involved in disaster risk reduction education!' Using hands-on models to teach school safety in Bodrum, Turkey.

## Preparedness training for students and teachers in Montenegro

Training teachers, students and community representatives on how to act to reduce the impact of disasters caused by natural hazards is the aim of a project launched in 2012 by the Montenegrin Ministry of Interior, Sector for Emergency Management, in cooperation with the Ministry of Education and with support from UNICEF. As part of the 'Preparedness for Emergency Response and DRR' project, earthquake risk assessments and protection and rescue plans for five elementary schools in the country were also developed.



Source: Ministry of Interior, Sector for Emergency Management of Montenegro.  
Training for teachers and students has been provided through the 'Preparedness for Emergency Response and DRR' project.

"Emergency situations in Montenegro are most often related to earthquakes, landslides, floods, snow avalanches, fires and other natural disasters. The aim of the education for response to emergency situations is for the students to learn about certain contents and develop necessary skills for adequate response in emergency situations," said Deputy Director of the Montenegrin Ministry of Education, Mr. Radoslav Milosevic Atos.

## Integrating DRR in school curricula

### DRR in the national curriculum in Croatia

Some 95,000 children in primary schools and kindergartens throughout Croatia have benefitted from an education programme on response preparedness. The programme, developed by the National Protection and Rescue Directorate, has both theoretical and practical parts and has been developed for children in the country's 871 primary schools and 623 kindergartens. It has been recommended for implementation by the Education and Teacher Training Agency and the Ministry of Science, Education and Sports.

Further efforts to mainstream risk reduction elements in the national education system are planned through the establishment of a Curriculum Revision Working Group.

In the meantime, the National Protection and Rescue Directorate is gradually developing disaster risk reduction-related elements in school curricula and is contributing to raising disaster awareness by implementing a number of projects. They include a competition involving art, literature and video and photo work for children and young adults on the topic of disasters and search and rescue forces. The competition aims to encourage children and young adults, and their teachers and parents, to ask themselves questions about their sur-

roundings and potential threats, with the aim to gradually effect a change in their usual behaviour (GFDRR/UNISDR/UNICEF, 2011).



Source: Croatian National Protection and Rescue Directorate website ([www.duzs.hr](http://www.duzs.hr)). Risk reduction education in schools.



### Cross-cutting DRR dimension in school education in Turkey

Turkey offers a particularly well-developed example in SEE of a structured approach to school education with a ‘cross-cutting’ element of disaster risk reduction and systematic approach to teachers’ training. Basic disaster awareness is included in the national education curriculum of primary schools (aged 6 to 14) and secondary schools (14 to 17), with the goal of helping students identify the reasons for disasters and the actions to mitigate disaster risks and help communities to be better prepared for emergency response.

A three-year school-based disaster education project was launched in a number of pilot regions in the country by the Ministry of Education, in cooperation with the Japan International Cooperation Agency in 2010. The project aims to increase disaster education capacities of teachers and school administrators to ‘create the foundations’ for further disaster training and improved disaster risk management in schools.

#### ‘Damir Čemerin Award for Local Change’

A local educator who has specialized in elementary education for children with learning disabilities and has dedicated considerable efforts to include more disaster risk reduction topics in the school curriculum, especially in lessons targeting most vulnerable groups, was honoured with the first ‘Damir Čemerin Award for Local Change’.

Ms. Sunčana Jokić was presented with the award during the Third EFDRR Meeting in Dubrovnik, Croatia, on 1-3 October, 2012. The award encourages citizens’ engagement in building disaster resilience, either individually or as groups.

The Croatian National Protection and Rescue Directorate, which now includes children with special needs in their outreach activities at community level, stated that: “without Ms. Jokić, the inclusion or adaptation of protection and rescue activities in the community of children and young people, who belong to vulnerable groups, would be virtually impossible”.

*“Remember – if you are working with one child you are working with a whole family and a small part of the community.”*  
(Sunčana Jokić)



Source: Croatian National Protection and Rescue Directorate website ([www.duzs.hr](http://www.duzs.hr)). Croatian educator Sunčana Jokić is presented with the award by Special Representative of the UN Secretary-General for Disaster Risk Reduction, Margareta Wahlström.

### HFA Priority 4: Reducing the risks in key sectors

#### Risk mitigation for priority public facilities

##### School retrofitting/reconstruction in Turkey

Following the 1999 Kocaeli earthquake, schools within a 60-km radius of Istanbul were assessed: 820 of 1,651 schools were found to have sustained some damage. Of the total, 13 were initially identified for replacement – although a further 22 schools were added to this number when the cost of retrofitting proved to be prohibitive. In all, 59 schools were ‘strengthened’ and 59 were repaired.

Between 2007 and 2008, 250 schools were retrofitted and a further 36 were reconstructed as part of the ‘Istanbul Seismic Risk Mitigation and Emergency Preparedness Project’ (ISMEP) (implemented in 2005-2011 with loans from the World Bank and the European Investment Bank). As part of the project, under the component on ‘Seismic Risk Mitigation for Public Facilities’, assessment and feasibility studies were carried out on a further 600 schools. In 2009, an additional 450 schools were identified for retrofitting.

The schools retrofitted and reconstructed under the project serve about one million students and employ over 33,300 teachers.

#### High-credit disaster risk transfer schemes

##### Albania is first SEE member of Europa Re (SEEC CRIF)

In 2010, Albania became the first country in SEE to join Europa Reinsurance Facility Ltd. (Europa Re)<sup>39</sup>, the catastrophe and weather risk insurance and reinsurance company. Europa Re was created in 2008 with support from the World Bank, the Global Environment Facility, the Swiss Secretariat for Economic Affairs and UNISDR Europe to implement the SEEC CRIF. It aims to give homeowners, farmers, enter-

<sup>39</sup> SEEDMAP Focus Area III ‘Financing of disaster losses and disaster risk transfer’.

prises and government organizations access to affordable and high-credit financial coverage against the risk of floods, earthquakes and weather-related disasters. As the first shareholder, Albania is providing cooperation on the further development of Europa Re and the SEEC CRIF in the region. The mechanism is expected to reduce countries' significant fiscal exposure to disasters.



Source: Albanian General Directorate of Civil Emergencies.

As part of an overall effort towards improved disaster risk management, the Albanian Government is also building the capacities of insurance regulators and raising public awareness of the benefits of disaster insurance schemes. "The level of disaster insurance is expected to rise significantly in the coming years," said Mr. Ertust Brahja, from the Sector for Coordination of Civil Protection, General Directorate of Civil Emergencies. "The approach seeks to offer high-quality and affordable earthquake insurance to property owners that will guarantee the full payment of insured claims arising from highly devastating disasters such as earthquakes and floods. Government-owned assets at central and local level, including schools and hospitals that are concentrated in risk-prone areas, will be included in the National Earthquake Insurance Programme and as such should reduce government fiscal exposure to losses caused by natural disasters by inclusion. The scheme also seeks to develop proper weather insurance for the agriculture sector where recent developments have brought to the fore the importance of this for farmers."

### **Membership in Europa Re (SEEC CRIF) of Serbia and the former Yugoslav Republic of Macedonia**

Serbia and the former Yugoslav Republic of Macedonia also became members of Europa Re in 2012, thus contributing to the further development of a regional market in innovative insurance and reinsurance products covering catastrophes and weather risk.

### **Promoting the economic perspective of disasters in Turkey**

A seminar aiming to highlight the importance of viewing disasters from an economic perspective was organized by the Disaster and Emergency Management Presidency of the Republic of Turkey (AFAD) in April 2013. The event, organized in cooperation with the Economic Cooperation Organization (ECO) and DPPI-SEE, offered a key opportunity to address the economic effects of disasters. It also helped raise awareness

on both the range of funds that stakeholders can benefit from during the disaster risk management process – especially for disaster risk reduction projects and emergency relief operations – and the importance of pre-disaster finance.



Source: DPPI-SEE website ([www.dppi.info](http://www.dppi.info)).  
Participants at the 2013 symposium on disaster economics in Turkey.

A rich international audience took part in the event, with disaster risk management experts and economists from 20 countries participating, as well as academics and representatives from a wide range of international organizations, including: UNDP, UNISDR, UN Office for the Coordination of Humanitarian Affairs (UNOCHA), World Bank, European Union and the Islamic Development Bank, as well as from the public and private sector and civil society organizations.

### **Building-code enforcement**

#### **Retrofitting code developed and enforcement advanced in Turkey**

A building retrofitting code has been developed in Turkey to facilitate a more uniform and technically solid approach to the efforts by the Government and private sector to strengthen the existing vulnerable building stock. The code has been developed through activities supported by the World Bank 'Marmara Earthquake Reconstruction Project' and implemented by the Ministry of Public Works and Settlements.

The project also supported the regulatory framework and formulation of the 'Development Law' to ensure that risks and vulnerabilities in given areas are taken into consideration during urban planning and development activities. Building code enforcement has also been strengthened by establishing provincial laboratories for testing construction materials and modernization of the computerized building code inspection system.



Source: World Bank website ([www.worldbank.org](http://www.worldbank.org)).

## ***HFA Priority 5: Strengthening preparedness for response***

### ***Improving disaster preparedness***

#### ***Improving emergency response capacities in Moldova***

Moldova is taking steps towards improving national emergency response capacities. Under the World Bank 'Disaster and Climate Risk Management Project' (MD-DCRMP), the design and construction of the Emergency and Command Centre is in progress. The new Emergency and Command Centre will ensure improved capacities to manage emergencies and reinforced coordination for response to disasters caused by natural hazards among relevant government agencies in the country.

## 4. Areas where further gains can be made

It is clear throughout SEE that broad HFA implementation is making a significant contribution to building a culture of safety and resilience through pro-active disaster risk reduction. To further consolidate and build on these achievements there are – given the complexity of disaster risk reduction and the concerted efforts required for its effective implementation – a number of areas where further gains can be made through a regional perspective.

### **Improving networks and coalition-building**

Despite regional diversities, cooperation in disaster risk reduction already exists between different government offices and non-state actors in SEE countries. It is a long-term effort to build networks among state institutions and promote an effective team approach among different professional fields.

If appropriately promoted beyond the ‘windows of opportunity’ created by major disasters, structured dialogue and teamwork among key national stakeholders contribute to addressing disaster risk reduction complexities by bringing together partners and capacities to develop a common vision. They can also strengthen countries’ coordinated efforts towards disaster resilience.

Gathering multiple actors around the national disaster risk reduction agenda helps to build a national consensus on priorities for risk reduction. It helps also to identify who does what and to raise public understanding of existing risks and mitigation measures. By promoting information sharing and the transfer of knowledge, it may also empower local governments, private entities and civil society to take action. Closer dialogue may in time develop into nationally-owned systematic platforms for coordinated governance on disaster risk reduction.

### **Need to adapt to climatic change and reinforce synergies between CCA and DRR**

For UNISDR, disaster risk reduction is a means to adapt to the impact of climate change rather than an entirely separate field. Reducing the risks of natural hazards is in fact a long-term form of adaptation. Disaster risk reduction is to be seen as an approach to help cope with the emerging risks related to climate change<sup>40</sup>.

Traditionally, environmental agencies have responsibility for climate change adaptation whereas disaster risk management authorities typically deal with disaster risk reduction. This model needs to be overturned in light of the cross-sectoral nature of climate change adaptation and disaster risk reduction and of the need to incorporate both in the policies of all sectors.

This ‘overturned’ approach offers a key opportunity to regions where countries’ economic performance is highly exposed to the impacts of climate-related hazards, and where

climatic hazards (e.g. floods, droughts, etc.) cause most of the economic losses.

Climate change adaptation and disaster risk reduction require long-term strategies, including prioritized investments, to properly prepare for and mitigate future disaster risk. Both climate change adaptation and disaster risk reduction focus on taking pro-active steps towards reducing risk and adapting, instead of simply responding, to hazardous events. It is therefore crucial to further ensure that disaster risk reduction policies and programmes operate in synergy with climate change adaptation strategies from the regional to the national and local level.

In this respect, it is positive that several regional initiatives (including the UNISDR/WMO Project ‘Building Resilience to Disasters in Western Balkans and Turkey’, the Environment and Security Initiative (ENVSEC)<sup>41</sup>, SEE Virtual Climate Change Centre<sup>42</sup> and the European Environmental Agency (EEA) have included an integrated approach that implements risk reduction in adaptation to a changing climate.

### **Empowering local risk governance and improving coordination**

Decentralizing disaster risk reduction-related measures to the local level is key to resilience. Some disaster risk reduction tasks are best centralized. Others are best undertaken when they are specific to local needs and are locally owned and managed.

Progress in devolving power to the local government level has been achieved at the regional level. However, in some cases groups at different ‘vertical’ governance levels still work independently from one another and are unaware of each others’ actions. This causes fragmentation, making it harder to promote change and sustainability.

To achieve effective decentralization requires more attention to the promotion of disaster risk reduction understanding within local government institutions. Depending on the context, it involves strengthening institutional mechanisms to empower local governments to act effectively in reducing their risks, and improving communication to help bridge gaps among groups working on common issues at national and local levels. It also involves building local capacities to allow better planning in the integration of disaster risk reduction in local actions. This calls for further efforts to promote community participation in disaster risk reduction through the adoption of specific policies, including the promotion of networking, the attribution of roles and responsibilities, and the provision of the necessary authority and resources.

### **Better risk identification to support DRR investments**

Countries may find it difficult to generate political and economic support for disaster risk reduction actions when they are unable to effectively identify, assess and monitor existing risks. When governments are able to understand national risk profiles and emerging risk patterns, and quantify the poten-

<sup>40</sup> Ref: ‘Climate Change Adaptation and Disaster Risk Reduction in Europe’ (UNISDR, 2011).

<sup>41</sup> [www.envsec.org/index.php?lang=en](http://www.envsec.org/index.php?lang=en)

<sup>42</sup> <http://www.seevccc.rs/?p=668>

tial impact of risks, they are more able to prioritize vulnerability and risk reduction.

National risk assessments – which are also being supported by initiatives at the regional level – help identifying hazards to which countries are exposed and their vulnerabilities. This enables the better understanding of the geographical distribution of risks and their impact on different sectors. Comprehensive hazard analyses and risk assessments – especially if carried out with unified national methodologies – are necessary steps to develop risk mitigation policies and measures through evidence. They also help in the prioritizing of investments for both structural and non-structural preparations for disaster prevention and response. To achieve this involves more participation based on effective cooperation in data sharing and management among responsible government agencies and actors concerned.

### ***More timely information to support decision-making***

Making decisions when there is uncertainty can be an issue among disaster risk management agencies and policymakers. Effective decision-making requires accessible and up-to-date information flows. Scientific data and processes play an important role in policy development by creating the conditions for evidence-based feasibility studies and prioritization of investments in risk reduction.

When disaster risk management actors and policymakers have better access to capacity building and gain a greater understanding of research findings – such as climate data and forecasts – they can more effectively implement evidence-based disaster risk reduction actions. Furthermore, they can develop disaster risk reduction policy options that are supported by science.

This creates an opportunity for researchers and specialized technical institutions from different disciplines, such as climatology, hydrology and urban planning etc., as the analysis field for disaster risk reduction and climate change adaptation extends beyond the collection of data and forecasts and includes as well qualitative analysis and providing recommendations on good practices and advice for timely decision-making<sup>43</sup>.

### ***Increasing public access to risk reduction information***

To bring about a further change in consciousness from post-disaster response to broader disaster risk reduction, the public needs to be given more understanding that existing disaster risks can be reduced and that there are steps that can be taken to minimize the impact of disasters.

Interactive public awareness activities bring about positive changes in behaviour and contribute to empowering people at all levels of society to reduce their risks, including through improved community participation in risk reduction actions. The incorporation of hazard and disaster risk-related issues into the education system – from elementary school to university level – contributes to the progressive instilling of di-

aster risk reduction as a value in society. It ensures the continuous exposure to risk knowledge by ‘effective agents’, and ultimately makes policy implementation more successful. By understanding the principles of disaster risk reduction, the general public increasingly begins also to hold governments accountable for their commitment and actions in addressing disaster risk reduction.

To this purpose, sustained efforts need to be made to develop appropriate awareness-raising strategies with a clear understanding of the perspectives and requirements of local levels and sectors. The strategies should seek to inform and engage different groups, including decision-makers, educators, professionals, members of the public and individuals in vulnerable communities. Task forces and committees must be established, including in cooperation with relevant state institutions – such as ministries of education – to assess current disaster risk reduction knowledge and promote the development of appropriate programmes and curricula to integrate risk-related topics at all levels of education.

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<sup>43</sup> Ref.: ‘Climate Change Adaptation and Disaster Risk Reduction in Europe – A review of Risk Governance’ (UNISDR, 2011).



