

# IMPLEMENTING THE HYOGO FRAMEWORK FOR ACTION IN EUROPE

Regional Synthesis Report 2011-2013



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# Implementing THE HYOGO FRAMEWORK FOR ACTION IN EUROPE

**REGIONAL SYNTHESIS REPORT 2011-2013** 









#### **Preface**

The Hyogo Framework for Action (HFA) 2005-2015: Building the Resilience of Nations and Communities to Disasters emphasizes the need to monitor and review progress in disaster risk reduction to both documents the implementation of the Framework and to inform disaster risk reduction planning and programming at national and regional levels.

Responsibilities for monitoring the HFA are assigned mainly to governments, but they are also identified for regional organizations and institutions, international organizations and partners in the International Strategy for Disaster Reduction.

The main objective of this report to identify key trends in terms of progress made and challenges faced at both national and regional levels through the implementation of the HFA in Europe between 2011 and 2013 and to compare progress made, lessons learned and challenges to overcome as compared with those reported in 2011 and in 2009.

This synthesis report is based on reports submitted by countries and regional organizations that responded to the HFA monitoring requirements. Those countries that have yet to respond remain unrepresented.

While in some countries consultation exercises were conducted as part of the review process, the reports are self-assessments by national authorities prepared by the designated HFA Focal Points.

In addition, this report presents the findings of the first seven European cities to complete the Local Government Self-Assessment Tool, an effort to benchmark and report progress made in building resilient cities.

This is the last European regional HFA report to be published in advance of agreement on a successor to the HFA, as the World Conference on Disaster Reduction is tentatively scheduled for January 2015. At that time a new instrument will be agreed upon and submitted to the United Nations General Assembly for endorsement. It is therefore hoped that this report will inform the consultations for how best to continue DRR work in the Post-2015 framework.

#### Acknowledgements

UNISDR gratefully acknowledges the countries and regional organizations of Europe that have reported on the implementation of the HFA.

The countries are: Albania, Armenia, Belarus, Bulgaria, Croatia, Czech Republic, Finland, France, Georgia, Germany, Greece, Hungary, Italy, Monaco, The Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovenia, Sweden, Switzerland, The former Yugoslav Republic of Macedonia, Turkey and the UK. Special thanks are offered to the HFA Focal Points of those countries who facilitated, coordinated and presented the reports.

The regional organizations and initiatives are: the Council of Europe (EUR-OPA Major Hazards Agreement), the European Commission, the Disaster Preparedness and Prevention Initiative for South Eastern Europe and the European Forum for Disaster Risk Reduction.

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Ms. Paola Albrito (UNISDR) guided the development of this report.

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#### **Contents**

5
7
7
11
13
23
23
23
23
28
32
35
38
40
51
51
51
56
58
59
65
66
67
68
69
70
71
71
72
73
74
77
81
81
82
84
84 86

#### Acronyms and Abbreviations

ACP African, Caribbean and Pacific Group of States Natural Disaster Facility

CIMA International Centre on Environmental Monitoring
CMEPC Civil Military Emergency Planning Council for SEE

CRR Community Risk Register

CoE Council of Europe
DG Directorate General

**DIPECHO** Disaster Preparedness ECHO

DKKV Deutsches Komitee Katastrophenvorsorge e.V. (German Committee for Disaster Reduction)

**DPP** Disaster Preparedness and Prevention

**DPPI SEE** Disaster Preparedness and Prevention Initiative for South Eastern Europe

DRR Disaster Risk Reduction

DRRI Disaster Risk Reduction Initiative

EC European Commission

ECHO DG Humanitarian Aid and Civil Protection (European Commission)

**EENA** European Emergency Number Association

**EU** European Union

EUR-OPA Council of Europe European and Mediterranean Major Hazards Agreement

**EWS** Early Warning Systems

FP7 Seventh Framework Programme

GMES Global Monitoring for Environment and Security

HFA Hyogo Framework for Action 2005-2015: Building the resilience of nations and communities to

disasters

IDNR International Decade for Natural Disaster Reduction

IFRC International Federation of Red Cross and Red Crescent Societies

ISDR International Strategy for Disaster Reduction

LRF Local Resilience Forum

LRRD Linking Relief Rehabilitation and Development

NATO North Atlantic Treaty Organization
NGO Non-Governmental Organization

NP National Platform

PPRD Programme for the Prevention, Preparedness and Response to Natural and Man-made Disasters

RCC SEE Regional Cooperation Council of South East Europe

SEE South Eastern Europe

SEEDRMAP South Eastern Europe Disaster Risk Mitigation and Adaptation Programme

UN United Nations

**UNDP** United Nations Development Programme

UNISDR United Nations Office for Disaster Risk Reduction

UNOCHA
United Nations Office for the Coordination of Humanitarian Affairs
UNU-EHS
United Nations University, Institute for Environment and Human Security
WCDR
World Conference on Disaster Reduction, Kobe & Hyogo/Japan, 2005

WMO World Meteorological Organization

#### **Executive Summary**

#### Background

In January 2005, at the World Conference on Disaster Reduction, UN Member States adopted the Hyogo Framework for Action (HFA) 2005-2015: Building the Resilience of Nations and Communities to Disasters as an ambitious programme of action to significantly reduce disaster risk<sup>1</sup>.

Monitoring and reporting on progress is an essential feature of the HFA. Responsibility for monitoring and reporting is assigned mainly to governments, with specific requirements including the preparation of national baseline assessments, periodic summaries and reviews of progress, and reports on risk reduction progress in other policy frameworks such as Millennium Development Goals. Other requirements include contributing to regional assessments<sup>2</sup>. Reporting responsibilities are also identified for regional organizations and institutions, international organizations within the ISDR system.

In accordance with the HFA monitoring process, reports were prepared for the first, second and third sessions of the Global Platform for disaster risk reduction, which took place in Geneva, Switzerland, in May 2007, June 2009, and May 2011, respectively. The report prepared for the third Global Platform covered the period 2009 -2011. The aim was to update all stakeholders on the progress made since the 2009 reporting. The reports<sup>3</sup> identified trends and patterns in disasters and global disaster risk, mainly gathered from recent global and regional reports, and progress made by countries and organizations to reduce risks and to implement the HFA.

To continue the HFA monitoring process, UNISDR instituted a systematic process with a request on reporting issued in January 2007 to the nationally-nominated HFA focal points and to the Permanent Missions to the United Nations in Geneva, accompanied by guidelines for reporting on progress on the implementation of the HFA. As a follow-up, in order to systematize existing data and assessments, and reviews of progress at the national level, an on-line monitoring and reviewing tool, the "HFA Monitor" was made available to countries.

In addition, a "Global Assessment Report", coordinated by UNISDR, was developed to undertake a major global stock-taking on trends in disaster occurrence and risks and progress on disaster risk reduction. The report was launched in June 2009. In May 2011, the second annual "Global Assessment Report on Disaster Risk Reduction" (GAR) was launched, to assess risks and progress made since 2009 and the third bi-annual "GAR" will be published in May 2013.

The process of reflection on the progress achieved has been useful in identifying areas where more work is needed and highlighting how regional partners may support the efforts in furthering disaster resilience. The monitoring has also been helpful in highlighting best practices at the Global Platform to promote more widespread adoption of successful approaches in building disaster resilience.

#### **Objectives**

The main objective of this report is to provide an update on achievements, advances and key trends in the implementation of the HFA at national and regional levels in Europe from 2011 - 2013, as identified by the partners, and to report progress made and challenges encountered since the last report prepared in 2011.

The assessment process aims:

- To monitor progress on achievements, build resilience to disasters, and identify gaps and necessary resources related to programmes and initiatives;
- To foster closer collaboration and cooperation among national actors and among/with regional organizations;
- To stimulate exchanges and activities with regional/ international entities;
- To enhance visibility of countries within the global arena;
- To share good practices/lessons learned among national actors and with other countries that might be undertaking similar initiatives; and
- To access the "rolling" possibility of the HFA Monitor on-line reporting tool.

Given that countries have the primary responsibility for implementing measures to reduce disaster risk and for monitoring and reporting on their progress, the ISDR system and UNISDR are focusing on assisting national efforts towards these ends, in addition to the task of collating information to support regional coherence and coordination in addressing efforts towards a more disaster resilient Europe.

#### Methodology

The present study is based on a review of reports provided by national and regional actors via the monitoring tool HFA Monitor, which was designed and coordinated by UNISDR and is hosted online at PreventionWeb. Other information and reports have also been consulted and made available via sources including the UNISDR website and from ISDR system partners. In view of the fact that the

<sup>&</sup>lt;sup>1</sup>Hyogo Framework for Action 2005-2015: Building the resilience of nations and communities to disasters: http://www.unisdr.org/hfa <sup>2</sup>Reporting on Disaster Risks and Progress in Risk Reduction, UNISDR/GP/2007/2, http://www.preventionweb.net/globalplatform

information available covers only some countries in the Europe region, this report provides only a partial and hence indicative account of the progress being made.

Of the 38 national authorities/HFA Focal Points included in the HFA Monitor tool for Europe, a total of 26 have reported. The countries which reported results for the 2011 – 2013 period are: Albania, Armenia, Belarus, Bulgaria, Croatia, Czech Republic, Finland, France, Georgia, Germany, Greece, Hungary, Italy, Monaco, The Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovenia, Sweden, Switzerland, The former Yugoslav Republic of Macedonia, Turkey and the United Kingdom.

Regional organizations and initiatives that provided information are: the Council of Europe (EUR-OPA Major Hazards Agreement), the European Commission, the Disaster Preparedness and Prevention Initiative for South Eastern Europe, and the European Forum for Disaster Risk Reduction.

The report provides key insights into how disaster risk reduction is currently conceived and practiced by national authorities implementing the HFA. It analyses the progress made in reducing disaster risk in Europe as reported by national authorities and identifies obstacles and challenges that need to be overcome.

The report is based on the three "Strategic Goals" and five "Priorities for Action" of the HFA and includes an identification of good practice and achievements, as well as an analysis of gaps and suggestions for ways forward, through an in-depth review of the experiences of the countries that responded. Such assessments can reveal gaps in resource use and capacities and identify untapped potential.

The levels of progress developed by UNISDR for the HFA Monitor, which are applied in all five HFA Priorities, enable a self-assessment of the extent to which policies, programmes and initiatives are sustainable in achieving the indicated risk reduction objectives. The levels of progress are:

- 1. Minor progress with few signs of forward action in plans or policy.
- 2. Some progress but without systematic policy and/or institutional commitment.
- Institutional commitment attained but achievements are neither comprehensive nor substantial.
- 4. Substantial achievement attained but with recognized limitations in capacities and resources.
- Comprehensive achievement with sustained commitment and capacities at all levels.

Insights into progress made on key "cross-cutting" issues, such as gender issues and human security/social equity, are highlighted where they have been mentioned in national or other reports.

#### **Findings**

Governments and organizations recognize the need to raise the priority of disaster risk reduction and are directly responding to the expectations and directions of the HFA. This commitment is evident in the establishment of 38 focal points and 25 national platforms established for disaster risk reduction activities of Europe.

The specific indicators of progress presented in the country reports show that a large majority of reporting countries attained institutional commitment or substantial achievements in ensuring that disaster risk reduction is a national and local priority with a strong institutional basis for implementation. However, there are recognized limitations in capacities and resources.

While little change is seen in the quantitative levels of achievement relative to what had been reported in 2011, subtle changes are occurring that are profound and revealed in the text of the country and regional partner reports. At the national level, the strategic goal statements illustrate the ways in which countries are moving from a culture of reactive response and recovery from disaster to proactive risk reduction and safety. Countries and partner organizations reported on their levels of progress with both qualitative self-assessments that the countries measured in terms of quantitative values.

Significant challenges remain in implementing the HFA; the lack of adequate resources to support disaster risk reduction measures remains the most severe constraint. Clearly more work must be done to demonstrate the efficacy of public investment in DRR.

Another strong insight to emerge from the reports is that the demands of effective DRR are increasing from a range of factors, such as emerging risks, population migration patterns and the effects of climate change. As a consequence, the quantitative levels of achievement tend to understate the work that has been done; while the results appear constant over three reporting cycles, the goal posts moved. In responding to new hazards, countries are working harder to stay in place.

#### **Conclusions**

At the national level the strategic goal statements illustrate the ways in which countries are moving from a culture of reactive response and recovery from disasters to proactive risk reduction and safety. This requires a significant change from a mind-set of crisis to one of resilience.

Many challenges remain to successfully embed a resilience culture into policies, programmes and planning. The core challenge relates to the need for the political will to advance disaster risk reduction to the top of the policy agenda. This

National Platforms and HFA Focal Points Established in Europe				
National Platforms	HFA Focal Points			
Armenia Belarus Bosnia and Herzegovina Bulgaria Croatia Czech Republic Finland France Germany Greece Hungary Italy Monaco The Netherlands Norway Poland Portugal Russian Federation Serbia Spain Sweden Switzerland The former Yugoslav Republic of Macedonia Turkey United Kingdom	Albania Armenia Austria Belarus Bosnia & Herzegovina Bulgaria Croatia Cyprus Czech Republic Denmark Finland France Georgia Germany Greece Hungary Iceland Italy Malta Moldova	Monaco Montenegro The Netherlands Norway Poland Portugal Romania Russian Federation Serbia Slovakia Slovenia Spain Sweden Switzerland The former Yugoslav Republic of Macedonia Turkey Ukraine United Kingdom		

requires strong public support to ensure that political leaders are responsive to their constituents in assuring that disaster risk programmes are properly supported at all levels.

This has been a particular challenge owing to the prolonged economic downturn in Europe. Governments are finding it difficult to support public investment in disaster risk reduction when faced with more immediate needs and scarcer financial resources. At the same time, the process of reflecting on the achievements of the HFA since 2005, in preparation for the Post-2015 Framework, may motivate increased attention by governments to DRR.

#### **Progress**

An area of substantial progress concerns the **establishment of legal and regulatory frameworks for disaster risk reduction.** All countries reported progress in this area. In some cases, the countries enacted new legislation to address DRR; in other countries, existing legislation was amended to remain current and relevant to the changing risk landscape.

The functioning of multi-sectoral **National Platforms** showed significant gains with seven countries establishing new National Platforms: Belarus, Bosnia and Herzegovina, Greece, The Netherlands, Norway, Serbia and Turkey. Existing platforms expanded their reach and engagement. Other countries, such as Austria, Romania and Slovenia,

are actively working to establish National Platforms.

Reliance on key drivers of progress improved, with 50% increases over the last reporting cycle in significant reliance on key drivers such as gender, capacities, security/social equity, and engagement/partnership approaches.

**Preparations for trans-boundary risks** showed substantial improvement, in part motivated by legislation of the European Union, the initiatives of the regional partners and the need for countries to collaborate on mutual risks to better leverage limited resources.

The first ever peer review on the implementation of the Hyogo Framework for Action, performed in the United Kingdom was a success, with helpful feedback and insight generated to support DRR efforts.

At the local level: strong growth in the **Resilient Cities** Campaign and the first ever reporting using the Local Government Self-Assessment Tool were strong successes. Equally important were new initiatives to raise awareness, such as the Champions of Change Award and the commitment to invest in DRR to protect cultural heritage.

Progress in addressing **climate change adaptation** was made at local and at regional levels. **The science-policy dialogue** was enhanced with specific measures to translate scientific research into measures to reduce disaster risk.

The 2011 HFA Europe Report recommended more work be done to **engage the private sector in DRR.** Since then, some tentative measures have been advanced, such as work with the insurance sector in several countries. Ideally engagement with the private sector should occur on several different levels: it is critical that the private sector develop resilience, both to reduce unnecessary demands on government services and to ensure more reliable tax and employment bases. In addition, the private sector can better inform threat and hazard identification as it offers a different perspective on risk. Finally, the private sector can mobilize a broad range of resources to support effective DRR.

#### Challenges

The increased awareness of the importance of disaster risk reduction is evident in the country and regional partner reports. However, building a culture of safety and resilience is challenging owing to the crosscutting nature of disaster risk reduction.

Many gaps and challenges identified in the 2009-2011 HFA progress report persisted over the 2011-2013 period, such as the need to deepen capacity in the insurance sector both to assess risk and to reduce the burden on the governments.

As severe disasters increasingly impact economic and social development without necessarily accompanying physical damage, policymakers are challenged to shift their paradigm of disasters and risk finance. This requires news policy frameworks, responses and programmes for risk mitigation, needs that are proving challenging.

Nearly all countries reported challenges in sustaining commitment to and engagement in DRR. A window of opportunity exists following a major disaster when awareness is high. But as the disaster recedes into memory, it becomes more difficult to sustain interest in the longer-term work of DRR.

The need to develop capacity in the insurance sector should be viewed with greater urgency. Lessons learnt from initiatives such as Europa Re reinsurance facility could be drawn to facilitate affordable access to catastrophic insurance coverage in other countries.

Much more work needs to be done to build capacity at the local level. Too often responsibilities for DRR have been transferred to the local levels without sufficient resources to implement the programmes.

There has been **virtually no progress in developing plans for sectoral risk assessment** and protection and safeguarding of economic activities. Effectiveness in implementing DRR is hindered by the lack of common understanding or appraisal of impacts. Property damage or destruction of key physical infrastructure is relatively easy to measure, but

other losses, such as reduction of the tax base when disasters disrupt livelihoods, are more difficult to measure. Addressing these gaps in understanding may motivate greater DRR investment.

Nearly all of the countries reported that it was **almost impossible to calculate DRR spend**, as DRR activities are embedded in multiple agency budgets (environmental, security, humanitarian, etc.) and at all levels of government. Developing a database of disaster losses may be helpful in furthering this analysis.

Most countries reported that they were **challenged to mobilize adequate resources** to fund DRR activities at all levels. These difficulties were compounded by a prolonged period of economic downturn and competing demands for more limited public resources.

Assessing progress in the domain of the **identification**, assessment and monitoring of disaster risks and enhanced early warning systems is difficult, owing to the fact that the challenges become greater every year. Emerging threats that had not previously been identified, changes in technology that render state-of-the-art systems obsolete or less effective and migration patterns that shift populations to hazard-prone areas – all these factors conspire to make progress challenging.

It is absolutely **critical that countries commit to the financial analysis of DRR.** The example of Switzerland shows how the analysis motivates better resource allocation and decision-making. Most of the evidence for positive return on DRR investment in anecdotal; a more rigorous approach must be adopted to develop a strong analysis.

Developing approaches to **enhancing the safety of aging infrastructure and housing** remains a challenge for most countries.

The approach to **safeguarding hospitals and schools** shows some progress, but much more work is needed.

Motivating more comprehensive risk assessments remains a challenge, and is being supported by initiatives at regional level.

#### Recommendations

Based on the experiences reported by the national and regional partners via the HFA online reporting tool, and with reference to other information made available through UNISDR and its partners, the following recommendations are put forth for consideration.

#### National level

- National policies for disaster risk reduction should be integrated into sectoral and development plans to ensure a comprehensive approach to building resilience. This is consistent with the recommendation advanced in the 2011 HFA Europe Report.
- The private sector should be engaged in an appropriate manner to allow data gathering for threat assessment to private sector players as their vulnerability impacts livelihoods and production. They should also be engaged through public-private partnerships, to contribute their professional competencies to disaster risk reduction efforts and to ensure their own disaster resilience.
- A more intense investment in the modernization of early warning systems and communications technologies is required, accompanied by a public education campaign to ensure their proper use.
- Substantial progress has been made in gathering risk and hazard data. It is recommended that an appropriate investment be made in developing knowledge management and management information systems to ensure that such data can be retrieved, analysed and used in the most effective manner. This is consistent with the recommendation put forth in the 2011 HFA Europe Report. The 2013 HFA country reports indicate risk and hazard data are being collected, but integrating reporting systems limits the effective use of the data.
- Progress has been made in securing commitments and mobilizing resources to develop disaster loss databases. This work is critical to developing the analysis on returns to public investment in DRR. More work needs to be done to expand the development of such databases in other European countries.
- It is critical to develop analyses of financial and social returns on investment in disaster risk reduction in order to build public support for resource mobilization. At present, such evidence is mostly anecdotal. A rigorous financial study to demonstrate the value of DRR may be helpful in motivating public investment, particularly in times of economic austerity. Towards this end, engaging private sector players, particularly the insurance sector, which has

- a repository of claims data, may be helpful. Some countries, such as France, Germany, Sweden and Switzerland have made progress in this area.
- The Resilient Cities Campaign provides a positive example of making progress with very limited financial resources, but boundless creativity. Celebrating the "Firefighter of the Year" or the "Champion of Local Change" keeps DRR in the public attention. It also affords an effective way of sharing best practices, such as recognizing Barcelona as a model city for DRR.
- Innovations on insurance coverage and the accessibility of global pools of capital in the reinsurance market offer countries new opportunities for risk transfer to ensure contingent capital when needed. Countries should examine new, less capital-intensive measures to use insurance instruments to protect public resources.
- It is recommended that countries begin to consider DRR in their insurance regulatory frameworks particularly as regards compulsory insurance to reduce burdens on governments, and insurance pricing as an incentive to promote risk awareness prevention and mitigation.
- An area for future work remains translating integrated risk approaches from the national level both upward to regional levels and downward to local levels.
- It is recommended that the regional organizations promote discussion of gender perspectives on DRR to promote dialogue on both how to interpret and best implement this approach.

#### Regional level

- Similar to what emerged in the last reporting cycle, there has been coherence regarding the recommendations developed in the 2011-2013 HFA Europe Report and the area of focus in the past two years. This has been the case particularly for the significant progress made by the EC in supporting disaster risk reduction efforts in South Eastern Europe, supporting efforts towards the development of comparable risk assessments, and mainstreaming disaster risk reduction in EU financial and legislative instruments.
- The 2011 HFA Europe report recommended that National Platforms be more inclusive to enhance their effectiveness. More effective engagement of the private sector allows for better risk assessments as the private sector views different hazards and emerging threats from a unique perspective. In

addition, motivating private sector preparedness ensures the stability of livelihoods and local economies impacted by disaster while reducing demands on emergency responders. Certain countries have been successful in engaging the private sector; their experiences should be highlighted by the EFDRR to share lessons learned for all member National Platforms.

- All of the countries report challenges in motivating investment in DRR, in large part due to competing demands on limited resources in an environment of economic austerity. Like the example of Switzerland, there is the need to work at national level to demonstrate a positive return on DRR investment, without which governments cannot justify budget allocations to DRR. The European Forum for Disaster Risk Reduction may be helpful in triggering its member National Platforms to develop such financial analysis from which all countries would benefit. Regional Organizations, such as the EC, should continue supporting on-going efforts on cost-benefit analyses of disaster risk reduction at the national level including through the development of disaster loss databases.
- The cooperation facilitated by regional initiatives, such as the Council of Europe and Disaster Preparedness and Prevention Initiative for South Eastern Europe (DPPI), has also motivated progress towards better management of trans-boundary risks.
- Over the recent years, EU cooperation in disaster management has evolved by shifting from response towards a more balanced system that also covers preparedness and prevention actions. In addition to the development of a EU cross sectoral risk management framework, disaster risk prevention and management considerations have been included in a number of key EU policies and legislation. It is recommended that the EU continues its engagement to support the development of a comprehensive approach to risk assessment and management to ensure resilience in the face of threats.
- The European Forum for Disaster Risk Reduction brings coherence and a coordinated approach to implementing the HFA in Europe. It is recommended that the EFDRR consider how to best facilitate exchanges among participating cities in its member National Platforms where communities of interest can be formed to address critical gaps.
- Limited progress has been made in advancing sectoral risk assessments and programmes since the 2011 reporting cycle. This remains an area of critical vulnerability as countries are at risk for vital sectors of their economy being impacted by hazards. Certain

countries report awareness of how, for example, their tourism sectors would be impacted by disasters, but this awareness should be translated in tangible programmes of action. The on-going efforts from the regional organizations to support risk assessment to could motivate a greater sense of urgency.

- Regional insurance programmes may diversify risk and reduce the cost of insurance coverage. Regional actors have an area of comparative advantage in this domain as certain countries are identified with high-severity risks (Armenia and earthquakes, for example, or the Czech Republic and floods). Regional programmes can construct insurance portfolios to dampen the consequences of catastrophic risk at local and national levels. Expanding capacity for insurance programmes is an area requiring further attention from the regional partners.
- In considering the need to deepen insurance capacity, the National Platforms need to better engage the insurance sector for its expertise in assessing and pricing risk. Very limited progress has been reported in this area. As many European insurers do not limit their underwriting to national markets, this is an area where regional partners can engage and provide support to the national platforms. The European Forum for Disaster Risk Reduction can engage insurance companies with pan-European operations to provide technical expertise, particularly to those countries with more modest resources supporting their National Platforms.
- Regional organizations have achieved progress in including DRR into their policy and strategy papers. It is now important to ensure that these efforts will translate, as done in the past, into suitable and coherent programming for the benefit of complementing national efforts.
- while at the same time highlighting for national actors the success of local municipalities in creative approaches to move the DRR agenda forward even when resources are limited. The EC should explore possibilities of support to such efforts particularly in the view of the Climate Change Adaptation strategy developed for European Countries. A number of approaches may be envisioned to achieve this result, such as, perhaps, a handbook of success stories from the Resilient Cities Campaign.

#### Local level

- Consider how the local reports may advance DRR, in addition to their benchmarking function. The original intent of the local reporting tool was to be responsive to the third focus area for the 2012 - 2015 phase of the Resilient Cities Campaign: to develop an instrument for benchmarking and reporting progress against baseline measures at the local level. The initial set of reports suggests they may offer a wider range of uses to advance DRR. The local reporting may identify cities that could join working groups dedicated to common areas of concern, such as, for example, addressing the challenges of aging urban infrastructure. They may also highlight innovative approaches that could be replicated in different national contexts. The European Forum for Disaster Risk Reduction should give time and attention to the first set of local reports, as it did to the first national peer review of a country on the HFA implementation, to solicit input from all stakeholders as to how best utilize the local reports, in addition to their aid in benchmarking progress at the local level. The cities have invested considerable time and effort to develop thoughtful responses to the self-assessment tool; the result can be a more effective resource for DRR than was originally envisioned. The EC should ensure that such efforts toward exchanges among the local level on building resilience to disasters are met with facilitation of such exchanges.
- Examine how the 2011 2013 local reports may guide the development of a Post-2015 DRR framework. As consultations for the Post-Hyogo Framework for DRR are underway, an examination of the first set of local reports may suggest how the Post-2015 framework should be developed to ensure that it is well adapted to the local level. The Local Government Self-Assessment Tool [LGSAT] was developed in the context of the Resilient Cities Campaign, which will continue in its present form beyond 2015. Nevertheless, the local reports should be examined not only in the context of the Resilient Cities Campaign, but also in the context of the Post-2015 consultations as the reports are, in effect, seven case studies of how the Hyogo Framework applied to the local levels and where gaps may exist.



HFA
Implementation
At National Level



## 1. HFA Implementation at National Level

This chapter examines the achievements, advances and key trends in the implementation of the Hyogo Framework for Action at national level. It presents an overview of the responses provided by the individual governments to the requests for information regarding progress towards each of the three HFA Strategic Goals and five HFA Priorities for Action. This is the third such bi-annual assessment undertaken, enabling progress to be measured against previous reporting cycles in 2007 – 2009 and 2009 – 2011.

#### 1.1 Strategic Goals

With the adoption of the HFA in 2005, the following three strategic goals were outlined to guide activities on disaster risk reduction and recovery across all levels: :

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

To accomplish these strategic goals, the HFA identifies five "Priorities for Action":

HFA 1: Ensure that disaster risk reduction is a national and local priority with a strong institutional basis for implementation.

HFA 2: Identify, assess and monitor disaster risks and enhance early warning.

HFA 3: Use knowledge, innovation and education to build a culture of safety and resilience at all levels.

HFA 4: Reduce the underlying risk factors.

HFA 5: Strengthening the disaster preparedness for effective response at all levels.

#### 1.2 Priorities for Action

Responses to each of the priorities are addressed in terms of the individual indicators of progress. Where appropriate, progress is identified, along with any constraints and recommendations.

The indicators of progress developed by UNISDR in the HFA on-line tool, which are applied in all five HFA priorities, enable a qualitative self-assessment of the extent to which the policies, programmes and initiatives are sustainable in achieving the indicated risk reduction objectives. Indicators are assessed using the following graduated five-point scale:

- 1. Minor progress with few signs of forward action in plans or policy.
- Some progress but without systematic policy and/or institutional commitment.
- 3. Institutional commitment attained but achievements are neither comprehensive nor substantial.
- 4. Substantial achievement attained but with recognized limitations in capacities and resources.
- 5. Comprehensive achievement with sustained commitment and capacities at all levels.

The resulting values of each of the indicators of progress convert the qualitative self-assessments presented by each of the partners into quantitative values. This enables comparisons both within and across reporting cycles.

#### **Priority 1:**

Ensure that disaster risk reduction is a national and local priority with a strong institutional basis for implementation.

#### Indicators:

- 1.1 National policy and legal framework for disaster risk reduction exists with decentralized responsibilities and capacities at all levels
- 1.2 Dedicated and adequate resources are available to implement disaster risk reduction activities at all administrative levels
- 1.3 Community participation and decentralization are ensured through the delegation of authority and resources to local levels
- 1.4 A national multi-sectoral platform for disaster risk reduction is functioning

0%	Minor progress with few signs of forward action in plans or policy	
4%	2. Some progress, but without systematic policy and/or institutional commitment	Armenia
12%	3. Institutional commitment attained, but achievements are neither comprehensive nor substantia	Georgia, Monaco, The former Yugoslav Republic of Macedonia
72%	Substantial achievement attained but with recognized limitations in capacities and resources	Belarus, Bulgaria, Croatia, Czech Republic, Finland, France, Germa- ny, Greece, Italy, The Netherlands, Norway, Poland, Portugal, Roma- nia, Serbia, Sweden, Turkey, UK
12%	5. Comprehensive achievement with sustained commitment and capacities at all levels.	Hungary Slovenia, Switzerland

#### **Summary of Progress** Average Result: 3.7

The average score for Priority 1 is 3.7, with three-quarters of countries reporting indicators of achievement attaining this result. Three countries – Hungary, Slovenia and Switzerland – reported comprehensive achievement, but all countries reported some level of progress over the two-year reporting cycle. This result is even with the level reported in 2009 and a slight increase over the level of 3.3 reported in 2011.

#### Progress against indicators

**Indicator 1.1:** National policy and legal framework for disaster risk reduction exists with decentralized responsibilities and capacities at all levels.

#### **Average Result: 4.0**

A country's constitutions, laws and governmental system provide the basis to develop plans and institutional arrangements for all areas of disaster risk reduction. In most countries, disaster risk reduction is a cross-sectoral topic and therefore no single law exists for its regulation. Instead, the elements of disaster risk reduction are integrated in national legislation at all levels.

Nearly all of the countries reported that they have legal frameworks in place for DRR. One country, Albania, reported that its Civil Protection law exists in draft version and is awaiting approval by the Parliament.

Two areas of significant progress were reported by many of the countries. The first was the means by which legal frameworks evolved and are updated to reflect emerging risks and new insights into hazards. The **Czech Republic**, for example, reported that it has developed its "National Programme to Abate the Climate Change Impacts" and its legislative and regulatory framework for Environmental Security 2012- 2015. **Poland** reported that its policy framework now includes current work on Climate Change Adaptation Strategy and elaboration of flood defence programmes for at-risk regions.

In January 2012, **Georgia** adopted its National Environmental Action Plan 2012-2016, as required by law for every five-year period. The Plan sets long-term goals, short-term targets and provides respective activities for eleven areas: Disasters (including natural and man-made disasters), Climate Change, Waste and Chemical Substances, Nuclear and Radiation Safety, Water Resources, Ambient Air, Black Sea, Biodiversity and Protected Areas, Land Resources, Forestry and Mineral Resources.

The United Kingdom reported that it had reviewed its Civil Contingencies Act, and accompanying non-legislative measures, that had been designed to deliver a single framework for civil protection capable of meeting the challenges of the twenty-first century. The review concluded that existing legislation was adequate for current and anticipated needs.

A second area of significant progress reported by many of the countries were the actions taken to engage many actors to build capacity and ensure implementation of DRR legislation consistent with the intent of Parliamentarians. Armenia, for example, reported that it had established three governmental decrees for a DRR national strategy. HFA focal points in the country formed and led 10 DRR regional teams to ensure effective implementation of the strategy.

Hungary reported that its Parliament adopted a new Act on 19 September 2011, "Disaster management is a national cause" which became effective with new decrees on its implementation on 1 January 2012. The Act renewed the rules of prevention and preparedness, enabled extraordinary measures in case of disasters and emergencies and established a uniform disaster management system. The Act also stressed the involvement of the society in its fulfilment, thus providing a framework for self-care and voluntary participation.

In **Finland**, where the government completed an action plan in the Spring of 2012, the National Platform is following up and reporting annually about the 46 actions within that plan that are related to disaster risk reduction. In addition, the Finnish National Platform will highlight key research projects relevant to DRR.

Turkey reported that in 2011, the Disaster and Management Agency set forth the strategies and actions, within the country's National Earthquake Strategy and Action Plan 2012 – 2023, to engage civil society in earthquake disaster risk reduction. The Plan also organizes workshops in the relevant provinces to provide a road map to prepare a risk reduction strategy at local level.

Two key challenges were reported by nearly all of the countries; the first concerns the difficulties in addressing risks in a comprehensive way. For example, many countries are

at work implementing the requirements of the European Union Floods Directive. The challenge is that the focus on flooding risk may divert attention and resources away from other risks. The opportunity was that the Directive motivated action that might not otherwise have been initiated. This challenge is particularly acute in countries that face a narrower range of identified hazards and so face difficulty in mobilizing resources to address emerging threats.

The second challenge reported was the lack of financial resources to implement DRR measures enacted into legislation. Indeed, the responses to nearly every one of the 22 indicators in the HFA Framework identify lack of financial resources as a serious constraint.

**Indicator 1.2:** Dedicated and adequate resources are available to implement disaster risk reduction plans and activities at all administrative levels.

#### **Average Result: 3.6**

Nearly all of the countries reported that it was almost impossible to calculate DRR spend, as DRR activities are embedded in multiple agency budgets (environmental, security, humanitarian, etc.) and at all levels of government.

Many countries reported implementation of DRR plans and activities in response to specific threats. The decentralized democracy of **The Netherlands**, for example, has legal requirements for stakeholders (national, provincial, regional and local governments as well as private sector businesses) to fulfil responsibilities and commit budgets for disaster risk reduction. Local levels of government, for example, collect



Source: Turkey National Platform

their own taxes providing for flood protection measures.

Facing a serious earthquake hazard, **Turkey** initiated its National Earthquake Investigation Programme in 2012, which funds earthquake research projects of universities and government institutions with an initial budget in 2012 of US\$1 million, increasing annually through the year 2023. Turkey has also mobilized resources for DRR from the World Bank, the European Union, the Japan International Cooperation Agency and the Islamic Development Bank. The country experienced a severe earthquake in 2011 in the Van region and since 2012 has hosted Syrian refugees in its border area. The consequence has been to place a greater emphasis on disaster response and recovery than DRR.

Other countries finance DRR activities for a broader range of risks. In **Slovenia**, DRR activities are financed through the national and municipal budgets and through insurance assessments and other funds contributed by commercial companies. The government annually allocates 0.34% of the national budget to the disaster management system (exclusive of reconstruction). In addition, municipalities are expected to set aside 3% of their annual budgets for this purpose, although in recent years, they have allocated just 2.1%.

Along those lines, each of **Sweden's** counties has a dedicated budget for disaster preparedness as part of a total budget for work on emergency preparedness. In the event of insufficient resources at the local level, the county or national government would assume management of a disaster.

The Albania Disaster Risk Mitigation and Adaptation Project, funded by the World Bank, aims to strengthen institutional capacities to reduce Albania's vulnerability to natural and man-made hazards and to limit human, economic and financial losses due to these hazards. Albania reported that in November 2012 the General Directorate of Civil Emergencies made progress in establishing the National Strategy of Disaster Risk Reduction and a National Platform with an investment to support a DRR perspective. Albania expects to complete the work programme in May 2013.

However, the average level of attainment on this Indicator is institutional commitment but without comprehensive or substantial achievements. Most countries reported that they were challenged to mobilize adequate resources to fund DRR activities at all levels. These difficulties were compounded by a prolonged period of economic downturn and competing demands for more limited public resources.

**Indicator 1.3:** Community participation and decentralization are assured through the delegation of authority and resources to local levels.

#### **Average Result: 3.6**

Countries reported progress in delegating authority and resources for DRR to local levels, but the levels of progress are uneven. Countries with decentralized systems, such as **Switzerland**, reported success in both delegating authority and commensurate financial resources to discharge DRR responsibilities.

**France** was able to build consensus around the need for DRR investment within the context of environmental protection. France reported that from July 2011 to July 2012, 26 flood risk programmes were reviewed, of which 15 were completed and 11 are moving forward. A total of € 390 million was committed for the 2011 − 2016 period with the national government funding 37.5% of that amount.



Source: Sector for Emergency Management and Civil Protection of Montenegro

Within the framework of a Disaster Preparedness Programme of the European Union, DIPECHO, **Georgia** is advancing several projects for 2012 – 2013 to increase resilience and reduce vulnerability of local communities: "Supporting Community Resilience in the South Caucasus" (implemented by Oxfam), the "Regional Programme for Building Safer Local Communities in the South Caucasus" (in Georgia and Armenia and implemented by DRC and the Georgian Red Cross Society) and "Supporting Community Resilience to Natural Disasters" implemented by ACF-ESP.

Norway's Climate Change Adaptation Programme highlights the role of municipalities including adaptation in all levels of planning. The programme offers training courses, educational materials and a website disseminating research and good practices. A white paper on the Programme is forthcoming in 2013.

Despite these examples of progress, countries also reported challenges in sustaining commitments at the local levels. **Romania**, for example, reported that local authorities have



important responsibilities for emergency management and have annual funds allocated for this purpose. However, if the local community isn't facing an immediate disaster, the funds are often redirected for other purposes.

**Indicator 1.4:** A multi-sectoral National Platform for disaster risk reduction is functioning.

#### **Average Result: 3.6**

A multi-sectoral National Platform (NP) for disaster risk reduction is a nationally owned and led mechanism facilitating the interaction of key development players around the national disaster risk reduction agenda. The National Platform serves as an advocate for adopting disaster risk reduction measures at all levels.

The following countries have officially designated National Platforms: Armenia, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Finland, France, Germany, Greece, Hungary, Italy, Monaco, The Netherlands, Norway, Poland, Portugal, the Russian Federation, Serbia, Spain, Sweden, Switzerland, the former Yugoslav Republic of Macedonia, Turkey and the United Kingdom.

The following countries have nominated HFA focal points for disaster risk reduction: Armenia, Albania, Austria, Belarus, Bosnia & Herzegovina, Bulgaria, Croatia, Cyprus,

Czech Republic, Denmark, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Italy, Malta, Moldova, Monaco, Montenegro, The Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, the former Yugoslav Republic of Macedonia, Turkey, Ukraine, and the United Kingdom.

National Platforms can be effective advocates for DRR. The NP in **Armenia**, for example, is working with the UNDP to integrate DRR into the country's four-year development plan.

Since the last HFA reporting cycle, seven countries in Europe have formed National Platforms: Belarus, Bosnia and Herzegovina, Greece, the Netherlands, Norway, Serbia and Turkey. In 2012, Greece established the Hellenic National Platform for Disaster Risk Reduction, as an open network and forum of government agencies and other stakeholders, such as scientific and civil society institutions. The General Secretariat for Civil Protection coordinates the NP and serves as the national HFA focal point.

In 2012, **Belarus** established its National Platform, the State System of Prevention and Elimination of Emergency Situations. In addition to representation from all of the relevant government ministries, the Belarusian Republican Unitary Insurance Company ("Belgosstrakh") is included as a key stakeholder as well as the Belarusian Republican

Union of Consumer Societies for its role in providing food and emergency supplies.

In 2013, **Bosnia and Herzegovina** launched its National Platform with its first conference on disaster risk reduction in the Parliamentary Assembly. Following the opening ceremony, the National Platform presented sessions on managing disaster risk and reducing the risk of dangerous natural phenomena and concluded with a discussion of the sectoral impact of DRR.

In December 2011, the **Netherlands** appointed the National Steering Committee for National Safety and Security as its National Platform for DRR and its secretariat at the National Focal Point for the HFA. The NP advises the cabinet and parliament on DRR matters and regularly reports on national risk assessment and activities to strengthen capabilities and coherence.

**Norway** established its National Platform in 2011. The platform's mandate is to implement the HFA and coordinate DRR efforts between governmental agencies.

**Serbia** established its National Platform in 2013, which plans to hold three to four regular sessions annually with a provision for more frequent sessions should emergency situations arise. The activities of the National Platform are financed through the federal budget and the resources of the authorities that are members of the NP.

The National Platform of **Turkey** is one of the few that has broad stakeholder participation beyond government ministries, including four representatives of the news media, such as the Turkish Association of Journalists and NGO's such as the Turkish Red Crescent.

In countries where National Platforms have not yet been established, other mechanisms serve to convene stakeholders in DRR. In **Georgia**, for example, a think tank was established with the support of the United Nations Development Programme. The think tank engages government institutions, international agencies, non-governmental organizations and the scientific community in the promotion of DRR according to the HFA. The think tank holds regular meetings with specific agendas and active participation of the stakeholders. From 2013 the Ministry of Environment Protection of Georgia assumes responsibility for this role. Disaster Risk Reduction is identified as an upcoming priority for the Ministry of Environment Protection of Georgia, which will facilitate the establishment of the National Platform.

Other countries, such as **Austria**, **Romania** and **Slovenia**, report plans to develop National Platforms. In Romania, the National Committee for Emergency Situations was intended to perform the role of the National Platform. However, as this Committee focused more on disaster response and recovery and as it lacked representatives from civil soci-

ety, the government drafted a decision to develop a national platform.

One of the challenges countries report is inclusion in their National Platforms. **Italy**, for example, cited as a constraint in DRR "the need for adequate representation of all of the actors involved". A number of countries identified the need to include representatives from the news media in their National Platforms, perhaps reflecting the urgency of informing and engaging the public in DRR. **Portugal** specifically reported its need to engage the private sector, the news media and the general public in its National Platform.

#### **Priority 2:**

Identify, assess and monitor disaster risks and enhance early warning.

#### Indicators:

- 2.1 National policy and local risk assessments based on hazard data and vulnerability information are available and include risk assessments for key sectors
- 2.2 Systems are in place to monitor, archive and disseminate data on key hazards and vulnerabilities
- 2.3 Early warning systems are in place for all major hazards, with outreach to communities
- 2.4 National and local risk assessments take account of regional/trans-boundary risks, with a view to regional cooperation on risk reduction.

#### **Summary of Progress Average Result: 3.8**

The average score for Priority 2 is 3.8 with 80% of countries reporting substantial or comprehensive achievement. This level is slightly above the levels of 3.6 reported in 2009 and 3.4 reported in 2011. The numerical indicators suggest little progress achieved over the past three reporting cycles. Careful examination of the text of the country reports suggests more meaningful progress than that implied by the numbers.

Assessing progress in the domain of the identification, assessment and monitoring of disaster risks and enhanced early warning systems is difficult, owing to the fact that the challenges become greater every year. Emerging threats that had not previously been identified, changes in technology that render state-of-the-art systems obsolete or less effective and migration patterns that shift populations to hazard-prone areas – all these factors conspire to make progress against Priority 2 challenging.

This, in turn, highlights one of the limitations of the HFA reporting methodology. The country reports identify progress made and challenges remaining against five priorities. They do not provide for a control group in which no interventions take place. If countries' self-reported levels

0%	Minor progress with few signs of forward action in plans or policy	
8%	Some progress, but without systematic policy and/or institutional commitment	Armenia, Georgia
12%	3. Institutional commitment attained, but achievements are neither comprehensive nor substantial	Monaco, Serbia, The former Yugoslav Republic of Macedonia
60%	Substantial achievement attained but with recognized limitations in capacities and resources	Belarus, Bulgaria, Croatia, Czech Republic, Finland, France, Germa- ny, Greece, Italy, Norway, Poland, Portugal, Romania, Sweden, Turkey
20%	5. Comprehensive achievement with sustained commitment and capacities at all levels.	Hungary, Switzerland, The Nether- lands, Slovenia, UK

of progress remain flat over three reporting cycles, despite substantial investment and work, would indicators of progress have shown steep declines over the time period if less effort had been advanced? The common theme in HFA 2 is that progress is being made, but that much work is being done to stay current in best DRR practices, as the goal posts are moving.

#### **Progress against indicators**

Indicator 2.1: National and local risk assessments based on hazard data and vulnerability information are available and include risk assessments for key sectors.

#### **Average Result: 3.7**

The country reports present numerous examples of achievement in performing risk assessments and making the findings available to advance safer societies. In **Albania**, work is underway to build a disaster loss database ("Desinventar") with the support of UNISDR and the Italian National Platform through CIMA Research Foundation. **Greece** will have completed its flood hazard maps by December 2013 and its flood risk maps by December 2015.

Following the commitment from EU Member States undertaken within the EU cooperation on risk management to elaborate national disaster risk assessments, **Hungary** identified key relevant risks, such as floods, earthquakes, forest fires, industrial accidents, extreme weather phenomena and man-made events (such as migration or terrorism). A national conference was organized on 30 June 2011 that convened the government administration and scientific and academic institutions to conduct and report the risk assessment.



Source: Bosnia and Herzegovina National Platform

**Sweden** reported progress in improving the state of knowledge of landslide risks along the Göta River. In 2012, the Swedish Geotechnical Institute completed a report including digital risk maps and disseminated it to all stakeholders.

The UK Government has, since 2006, undertaken an annual National Risk Assessment across all sectors. The findings are published as a National Risk Register, which assesses the likelihood and potential impact of a range of different risks that may directly affect the UK. Risks are grouped into three main categories: natural events, major accidents and malicious attacks. The National Risk Register serves to both raise awareness about risks to individuals and organizations in the hope of motivating their own preparedness while informing of efforts made by the Government and emergency services to prepare. Community Risk Registers consider the likelihood and potential impact of a range of hazards occurring in specific areas of England and Wales.



### **Disaster Loss Database:** Assessing local risks – *Finland*

Accounting for disaster losses is a key tool for national governments to fully understand the costs of not investing in disaster risk reduction and, in turn, developing national and local databases on disaster-related economic losses is a tool to inform decision makers on the most appropriate risk reduction investments. Six European countries are building national disaster loss databases: Albania, Croatia, France, Italy, Serbia and Turkey.

They are approved by Local Resilience Forums, which have been established under the Civil Contingencies Act. The Forums include representatives from local emergency services and public, private and voluntary organizations. The Forums rely on their own judgments about local risks as well as guidance provided by the National Risk Assessment.

The key challenges countries identify in making progress against HFA 2 is the increasing work required to remain in place vis-à-vis state of the art DRR. This insight was best expressed by **Italy**, where risk assessments concerning all main hazards are performed at local, regional and national levels. These activities are carried out according to risk maps updated periodically in order to maintain a thorough knowledge of the distribution, over the whole national territory, of hazards, exposition and vulnerability.

However, the **Italy** national report states that the main challenge is the increasing magnitude of disasters occurring across the country. According to Italy, "climate change is modifying the relation between the communities and their territories. This problem is exacerbated by the presence of human settlements and activities even in remote and/or dangerous areas." With climate change introducing new risks, and migration occurring to more hazard-prone areas, concluding up-to-date risk assessments can be an elusive goal.

An innovative approach to this challenge is reported by **France** that, on 3 May 2012, signed a partnership between the Government (represented by the Ministry of Sustainable Development and the Central Reinsurance Treasury) and the private sector, represented by a reinsurance industry association. The partnership was formed to establish a registry of natural hazards and a standardized risk review.

Indicator 2.2: Systems are in place to monitor, archive and disseminate data on key hazards and vulnerabilities.

#### Average Result: 3.8

Countries report specific achievements in establishing systems to monitor and disseminate data on key vulnerabilities. For example, **Albania**, together with its partners,

is upgrading its hydro-meteorological services network by installation of a central data management system. Data will be collected and shared with other national meteorological and hydrological services in South Eastern Europe via a public website.

Germany reports one of the world's largest loss databases for natural disasters is the NatCat Service of the Munich Re Group, a private reinsurance company that has more than 26.000 data set entries. The service detects and analyses between 700 and 900 events annually, allowing for the analysis of risk and development of trend forecasts. In addition, Germany's Helmholtz Research Network provides data on natural disasters to the country's National Platform.

In Central Europe, a project is underway to develop software for highly refined weather forecasts and is expected to be completed in September 2013. The project partners (Austria, Czech Republic, Germany, Hungary, Slovakia, Poland, Italy and Slovenia) expect to establish a web portal with real time forecasts to enhance the safety of the local population.

Greece reported that its Institute for Astronomy, Astrophysics, Space Applications and Remote Sensing is developing a real-time fire hotspot detection service. The pilot application was made available to the public in the summer of 2012. The service monitors atmospheric conditions over Athens and recognizes changes arising from Saharan dust intrusions, fire smoke dispersion, volcanic ash flight and other sources.

One of the key challenges is mobilizing sufficient resources both to remain current with new technologies and to monitor newly identified hazards. For example, **Serbia** reported that it has developed a proposal to implement the emergency 112 system, but that funding is a constraint.

**Indicator 2.3:** Early warning systems are in place for all major hazards, with outreach to communities.

#### Average Result: 3.9

Each of the countries reports specific examples of early warning systems operating on a national basis. However, the key challenge is the dual moving targets of emerging hazards and changing technologies, placing systems at risk of becoming obsolete.

In **Bulgaria**, two-thirds of the population continues to use an outdated early warning and notification system.

Italy reported that its National Warning System consists of Regional Functional Centres responsible for integrating relevant data for foreseeable risks. The challenge is one of systems integration. There are resources at the regional and sub-regional level that have not yet been integrated into the national system.

**Serbia** reports that its system of alarm sirens does not cover the entire territory of the country owing to the fact that for the past 30 years there was insufficient financial investment in maintaining the system.

Indicator 2.4: National and local risk assessments take account of regional/trans-boundary risks, with a view to regional cooperation on risk reduction.

#### Average Result: 4.0

Each of the countries reported substantial achievements in regional cooperation to reduce trans-boundary risks. **Belarus**, for example, reported cooperation agreements in force with Latvia, Lithuania, the Russian Federation and Ukraine. **Croatia** reported that it has active international cooperation through bilateral agreements signed with Albania, Austria, Bosnia and Herzegovina, France, Hungary, Montenegro, Poland, Russian Federation, Slovak Republic, Slovenia and the former Yugoslav Republic of Macedonia.

Hungary reported that it is the lead partner in SEERISK, a programme funded by the European Union for joint disaster risk management in the Danube region that began in July 2012. The other project partners are Austria, Bosnia and Herzegovina, Bulgaria, Croatia, Romania, Serbia, Slovakia and Slovenia. Each project partner has a specific role and responsibility over the life of the project.

**Monaco** reported its participation in a UNESCO programme to develop a tsunami alert system for the Mediterranean countries.

Progress against this indicator is advanced mainly due to binding legislation of the European Union (such as the EU



Photograph: Crisis Management Centre and "911" Rapid Response of Armenia's Ministry of Emergency Situations Source: Ministry of Emergency Situations, Armenia

0%	Minor progress with few signs of forward action in plans or policy	
4%	Some progress, but without systematic policy and/or institutional commitment	Armenia
28%	3. Institutional commitment attained, but achievements are neither comprehensive nor substantial	France, Poland, Georgia, Romania, Monaco, Serbia, The Netherlands
60%	4. Substantial achievement attained but with recognized limitations in capacities and resources	Bulgaria, Croatia, Czech Republic, Finland, Germany, Greece, Italy, Norway, Portugal, Sweden, Switzer- land, The former Yugoslav Repub- lic of Macedonia, Turkey, UK
8%	5. Comprehensive achievement with sustained commitment and capacities at all levels.	Hungary, Slovenia

Seveso Directive regarding chemical accidents and the European Floods Directive), regional cooperation programmes (PPRD, IPA) as well as the cooperation facilitated by regional organizations, such as the Disaster Preparedness and Prevention Initiative for South Eastern Europe (DPPI). The main challenge identified in the country reports is the difficulty assessing emerging risks both in-country and across national boundaries.

#### **Priority 3:**

Use knowledge, innovation and education to build a culture of safety and resilience at all levels

#### Indicators:

- 3.1 Relevant information on disasters is available and accessible at all levels, to all stakeholders (through networks, development of information sharing systems, etc.)
- 3.2 School curricula, education material and relevant training include disaster risk reduction and recovery concepts and practices
- 3.3 Research methods and tools for multi-risk assessments and cost-benefit analysis are developed and strengthened
- 3.4 Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities

### **Summary of Progress** Average Result: 3.5

The average level of progress for HFA 3 is 3.5, representing a modest improvement over the level of 3.2 that had been reported in 2011 and 3.5 that had been reported in 2009. While the quantitative indicators may appear to suggest that the countries are not advancing, there are two issues to consider. First: the samples considered across reporting cycles are not strictly comparable as a different mix of countries submitted reports in 2009, 2011 and 2013. Only ten countries submitted reports across all three cycles: Armenia, Bulgaria, Croatia, Czech Republic, France, Germany, Sweden, Switzerland, the former Yugoslav Republic of Macedonia and Turkey. Adjusting the results to compare the ten countries across reporting cycles shows that progress remained even at 4.0.

The second issue is that countries are expending considerable effort to remain in place, as they must simultaneously deal with emerging risks and technological changes. In other words, the goal post (attaining a level of comprehensive achievement) is moving out of reach.

#### Progress against indicators

**Indicator 3.1:** Relevant information on disasters is available and accessible at all levels, to all stakeholders (through networks, development of information sharing systems, etc.).

#### **Average Result: 3.8**

The countries report specific achievements in capturing and disseminating information on disasters to all stakeholders. Armenia reported, for example, that in 2011 its Crisis Management State Academy in cooperation with UNICEF published and distributed manuals on DRR for teachers of students at the pre-school, elementary school and middle school levels. Bulgaria organizes regular information campaigns around key events, such as honouring International Disaster Risk Reduction Day and celebrating the "Firefighter of the Year". These events keep the DRR agenda in the media and public attention even in the absence of a current emergency situation, which is when public attention is typically focused on disasters. Finland reported that its new legislation requiring public warnings of disasters will become effective on 1 June 2013.

As with all of the Indicators of progress, the key constraint to implementation is lack of resources, both financial and human.

**Indicator 3.2:** School curricula, education material and relevant training include disaster risk reduction and recovery concepts and practices.

#### **Average Result: 3.6**

Countries report various approaches to introduce DRR concepts into the school curricula. **Albania** is currently implementing a project to introduce DRR concepts to elementary and secondary schools, with a targeted completion date of 30 June 2013.

**Bulgaria** reported an innovative approach with its national competition for children's drawings "I saw the disaster with my eyes" jointly sponsored by the Ministry of Education and Science and the National Palace of Children. In addition, a children's colouring book, "About the disasters – main rules for kids" contains ten rules for emergency response for different types of disaster with the aim of providing safety information for children.

Croatia reported that DRR education forms part of its school curricula, but existing efforts are believed to be inadequate by the National Platform which has identified disaster reduction in schools as one of its main priorities. The country reports that introducing DRR concepts into schools is met with strong resistance from teachers who believe that the children have more than enough academic

material to learn.

Croatia's experience highlights the key challenge identified by countries: DRR may fall under the domain of a number of actors in civil preparedness, economic development or environmental sustainability, for example, but it has not been embraced by the actors responsible for primary and secondary school education.

**Georgia** offers an example of integrating DRR concepts in the existing core curriculum through two special initiatives: the first is the addition of DRR themes to a mandatory Civil Protection and Safety course for grades 4 and 8 and second, the introduction of DRR learning into the mandatory Head of Class Hour programme for grades 5 through

In the Head of Class programme the coordinator of teachers of each grade level is responsible for conducting a onehour lesson each week on cross-curricular topics not easily accommodated within core subjects. The program encompasses not only discussions in the classroom but also a range of practical activities, such as excursions and environmental campaigns. As part of the Head of Class Hour programme, children also participate in the mapping of school hazards, risks and vulnerabilities and in developing school disaster preparedness plans, giving them opportunities to learn by doing as well as to test their newly acquired knowledge in practice. Head of Class is a joint effort of UNICEF, the Disaster Preparedness Programme of the European Commission for Humanitarian Aid and Civil Protection (DIPECHO), Ministry of Education and Science, Ministry of Environment Protection and Emergency Management Department of the Ministry of Internal Affairs.

In addition, Georgia provides DRR education and preparedness activities to pre-school-aged children and special/inclusive schools through DRR activities in Tbilisi and two disaster-prone regions in the country. Georgia has in place a policy to integrate age- and ability-appropriate DRR materials into the school curricula and replicate the courses nationwide.

**Indicator 3.3:** Research methods and tools for multi-risk assessments and cost-benefit analysis are developed and strengthened.

#### **Average Result: 3.3**

Countries report many successes in developing research methods and tools. In **Switzerland**, "EconoMe" is a tool provided by the Federal Office for the Environment to assess the cost and benefits of various protection measures. It allows for better decision making in DRR investment given limited financial resources. In addition, Switzerland's Federal Offices for Civil Protection and for the Environment developed an e-learning platform to facilitate multi-risk analyses: LearnRisk and RiskPlan.



Training course, 12 December 2012 Source: Italian National Civil Protection

The **UK** reported substantial investment in research initiatives, such as "Living with Environmental Change", which incorporates DRR concepts, and the Foresight Project, which convenes researchers, academics and policymakers to consider risks to the UK emerging over a long time horizon, up to 50 years.

The countries report several challenges to achievement on HFA 3.3; in particular, lack of funding and time. For countries currently responding to severe hazards, it is difficult to take the long view on developing research methods when resources are diverted to response and recovery. Another challenge is the difficulty in quantifying the benefits of public investment in DRR; Switzerland's experience is a notable exception. Finally, the evolving nature of new risks confounds research commitments.

**Indicator 3.4:** Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

#### **Average Result: 3.5**

Countries implement diverse approaches to reach out to the public with DRR messaging. Romania reported a number of innovative approaches in this domain. In addition to its national public awareness campaigns, local responders for emergency situations promote DRR at all levels with brochures, posters and flyers. And in cooperation with local authorities and NGOs, Romania recently began a project to assess and monitor public awareness of disaster risks to better assess the effectiveness of its public messaging campaigns.

Slovenia motivates public awareness through a number of initiatives. Within the primary and secondary schools, children's books and games present disaster preparedness topics in an engaging way using a hedgehog as the project's mascot with the slogan "We save lives together". Adults are invited to two-day events in their local communities called "Protection and Rescue Days", which convene local stakeholders from the rescue services, private businesses and other actors to present their activities to the public.

Finland has legal requirements, embedded in the country's Rescue Act, for preparedness. The aim is to engage all stakeholders in providing for their own safety. To accomplish that goal, public messaging makes households, businesses and other entities aware of their responsibilities.

Germany reports that it has a strong tradition of non-governmental organizations engaging the public in DRR. This includes the involvement of many individuals in NGOs, such as the Germany Red Cross, which mobilizes 400.000 volunteers. The fire brigades have a volunteer force of about 1,2 million, with the result that most communities have some disaster response capacity integrated into the population.



#### Resilient Cities in Europe

The Making Cities Resilient: "My City is getting ready!" campaign, launched in May 2010, addresses issues of local governance and urban disaster risk. Currently, 421 European cities have joined the campaign, of which ten are Role Model cities. The Mayor of Venice, Mr. Giorgio Orsoni, was appointed the first European Champion of the Campaign.

On 19-21 March 2012, UNISDR and the City of Venice jointly organized an event titled "Building cities' resilience to disasters: protecting cultural heritage and adapting to climate change". Mayors and their representatives, national government officials, the private sector, the media, the European Commission, the European Parliament, regional organisations and UN agencies attended the event. The event concluded with the signing of the "Venice Declaration on building resilience at the local level towards protected cultural heritage and climate change adaptation strategies."

4%	Minor progress with few signs of forward action in plans or policy	Monaco
12%	Some progress, but without systematic policy and/or institutional commitment	Armenia, Romania, Poland
16%	Institutional commitment attained, but achievements are neither comprehensive nor substantial	Bulgaria, Georgia, Czech Republic, Serbia
60%	4. Substantial achievement attained but with recognized limitations in capacities and resources	Belarus, Croatia, Finland, France, Germany, Greece, Italy, The Neth- erlands, Norway, Portugal, Slove- nia, Sweden, The former Yugoslav Republic of Macedonia, Turkey, UK
8%	5. Comprehensive achievement with sustained commitment and capacities at all levels.	Hungary, Switzerland

The countries report that their major challenge in this area is one of consistent engagement. There is a window of opportunity immediately following a major disaster to reach the public through the news media and other challenges regarding risk and the need to prepare. However, as disasters recede into memory, the public's attention turns to other interests.

#### **Priority 4:**

Reduce the underlying risk factors.

#### Indicators:

- 4.1 Disaster risk reduction is an integral objective of environment-related policies and plans, including for land use, natural resource management and adaptation to climate change
- 4.2 Social development policies and plans are being implemented to reduce the vulnerability of populations most at risk
- 4.3 Economic and productive sectoral policies and plans have been implemented to reduce the vulnerability of economic activities
- 4.4 Planning and management of human settlements incorporate disaster risk reduction elements, including enforcement of building codes
- 4.5 Disaster risk reduction measures are integrated into post-disaster recovery and rehabilitation processes
- 4.6 Procedures are in place to assess the disaster risk impacts of major development projects, especially infrastructure

#### **Summary of Progress Average Result: 3.5**

HFA Priority 4 provides perhaps the clearest evidence of the challenges countries face in reaching the level of comprehensive achievement in disaster risk reduction. The results for HFA 4 are the lowest of all five of the Priorities for Action, a result consistent with the findings of the 2009 – 2011 and 2007 – 2009 reporting cycles. HFA 4 calls for a reduction in the underlying risk factors, a strong challenge as climate change, new technologies, emerging threats and population and demographic changes are increasing the frequency and severity of risk factors countries face. Even as countries report progress in reducing existing risk factors, new risk factors emerge.

#### Progress against indicators

**Indicator 4.1:** Disaster risk reduction is an integral objective of environment-related policies and plans, including for land use, natural resource management and adaptation to climate change.

#### **Average Result: 3.7**

The countries report accomplishments in integrating DRR into environment-related policies and plans. European Union legislation and initiatives by the regional organizations have played a key role in achieving these results. For example, **Croatia** reports that the EU Directive Seveso II dealing with industrial accidents is implemented into its national legislation. Another approach is that of **Sweden**, where three out of four municipalities include adaptation to climate change in their disaster risk analyses. Another successful approach is provided by the Resilient Cities Campaign, which enlists local actors in building resilience for safer urban living.

Countries are challenged both by the lack of public resources and the limited ability to mandate environmental compliance on private actors. **Portugal**, for example, reported



Damage caused by side erosion of the Kander River, Berne, Switzerland, 10 October 2011, Photographer: Hugo Raetzo, Federal Office for the Environment Switzerland

the need to update its older properties to comply with current measures for safety. However, with limited public resources at their disposal, certain communities, such as Lisbon, are auctioning public properties with the requirements that buyers invest in bringing the properties to current code. Other countries report the lack of effective enforcement for violations of environmental regulations.

Many countries report stronger policies for environmental protection and natural resource management, but are frustrated by their inability to impose new codes on existing properties or assets. Often, stronger resource use codes apply only to new community developments.

**Indicator 4.2:** Social development policies and plans are being implemented to reduce the vulnerability of populations most at risk.

#### **Average Result: 3.5**

The levels of progress against Indicator 4.2 directly correlate with the reporting countries' level of financial sector development. As even the wealthiest countries face public resource constraints to the growth of social programmes, private means of covering risks are critical. **Norway**, for example, reported that most households are insured against potential losses and its national Natural Perils Pool protects against losses that cannot be covered by insurance.

**Turkey** reported that residential earthquake insurance has been available since 2000 and state-supported agricultural insurance since 2006. Micro finance and insurance are in the very early stages. In May 2012, Turkey enacted the Disaster Insurance Law to improve insurance penetration in the country. A national insurance system is now under discussion in **Poland**, where access to coverage is presently limited.

Romania reported the dual challenges of lack of financial sector capacity and lack of public trust in financial institutions. Compounding the challenge is that economic insecurity diverts resources away from protection against losses that may never materialize to meeting more immediate

needs, as household budgets can more readily justify expenses for food and shelter than insurance premiums. At the same time, while property owners have a legal requirement to purchase insurance coverage, many elect not to do so, to save funds.

Wealthier countries report more developed insurance sectors and universal access to coverage.

**Indicator 4.3:** Economic and productive sectoral policies and plans have been implemented to reduce the vulnerability of economic activities.

#### Average Result: 3.3

The average level of achievement on HFA Indicator 4.3 is quite low, with wide variations in the responses among the countries.

The **UK** is an exception in that it placed strong emphasis on business continuity in the event of emergency. In partnership with the insurance sector, the government has developed a book, "Business Continuity for Dummies" and a



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business continuity management tool kit. Raising awareness of the need to protect economic activities appears to be an obstacle as, despite the availability of resources to aid in the developing of business continuity plans, roughly half of UK small and medium enterprises have not put plans in place.

Other countries report awareness of the need to protect economic activities and develop sectoral policies, but the awareness is not yet translated into action. The Government of **Turkey** is aware of the need to better engage small and medium enterprises, which account for most employment, in protecting their economic output to secure livelihoods. However, it has not yet put in place plans to further this goal.

**Croati**a reported that its economy is strongly dependent upon tourism; a natural disaster in the coastal area would cause extreme economic hardship.



A house in Refvik (western Norway) – in this area, one side of the houses are always constructed so to withstand ice storms from a nearby lake. Photo: Torfinn Kraahennes

**Poland** reported a lack of coordination in sectoral, company and risk hazard policies. The vulnerability of flood risk, for example, is considered independently of its sectoral impacts. The key obstacle to advance against HFA 4.3 appears to be a matter of priorities, as investing in other initiatives, such as early warning systems, provides more tangible assurances of safety to the public than promoting business continuity planning.

**Indicator 4.4:** Planning and management of human settlements incorporate disaster risk reduction elements, including enforcement of building codes.

#### **Average Result: 3.5**

Countries report specific initiatives in this area. **Norway**, for example, reported its programme, Cities of the Future, is a collaboration between 13 participating cities, the national government and the private sector. The programme, which runs from 2008 – 2014, aims to reduce greenhouse gas emissions and motivate climate-friendly development. In **Portugal**, efforts are underway to re-settle low-income urban residents into safer housing.

In this Indicator, as with others, a strong correlation exists between the country's level of financial development and its reported progress. Lower-income countries reported lack of enforcement of building codes; wealthier countries did not typically cite this as a constraint. Following recent severe flooding, **Hungary** found that 71% of affected homes were not insured, with the result that the government provided financial assistance to the victims. Lower income populations tend to reside in areas more prone to hazards where enforcement of building codes (or enforcement of requirements for insurance coverage) may be weak.

**Indicator 4.5:** Disaster risk reduction measures are integrated into post-disaster recovery and rehabilitation processes.

#### Average Result: 3.2

Many countries reported the integration of DRR measures into post-disaster recovery and rehabilitation processes in the context of their development aid programmes. In the domestic context, responses were more varied. Some countries have programmes to link the compensation of disaster victims to relocation into safer communities. Others rely on their insurance sector as a risk pricing mechanism that would motivate similar choices; recent hazards make communities less affordable. The lack of capacity in the insurance sector correlated with achievement in this Indicator, as insurance underwriters price risk in a forward-looking way that governments cannot.



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As an example of the vulnerability caused by lack of insurance sector capacity, **Hungary** reported that following a severe industrial accident, in which red sludge contaminated a large area, it was discovered that the insurance coverage in force was insufficient to pay all of the losses.

**Georgia** reported a specific example of a reclamation project over the period of 2011 – 2012 when it rehabilitated its irrigation channels to reduce the risk of flooding in agricultural lands. **Armenia** reported that each year public funds are allocated for seismic risk protection of buildings along the shores of the Arak River.

The **former Yugoslav Republic of Macedonia** reported that following the great wildfires of 2007, the government and NGO sector initiated a process of reforestation with broad public participation. Each year, all citizens may devote two working days dedicated as "Days of the Trees" to plant trees in order to renew the forests and improve the environment, thus introducing disaster risk reduction in practice.

A key challenge common to all countries is that citizens bring strong demands for returns to normalcy, as quickly as possible, following a disaster and are often impatient to consider delaying rebuilding efforts until safer construction can be worked out.

**Indicator 4.6:** Procedures are in place to assess the disaster risk impacts of major development projects, especially infrastructure.

#### **Average Result: 3.6**

Nearly all countries reported that procedures are in place to assess disaster risk impacts of major development projects. **Belarus**, for example, reported that it had developed a national strategy for sustainable development that specifically addresses threats to economic achievements. In its report, **Greece** addressed its compliance with the EU Floods Directive in the context of developments, such as dams, that have consequences for disaster risks. The key challenge

countries face is that while procedures are in place to assess the disaster risk impacts of new development projects, it is more difficult to address the vulnerabilities of existing developments, especially infrastructure. It is often easier to build new projects to a higher level of safety than to retrofit older ones. And with financial resources a constraint for many countries, reducing the disaster risk impacts of developments does not provide the same assurances to the public as more visible measures, such as emergency warning systems, do.

#### **Priority 5:**

Strengthening disaster preparedness for effective response at all levels.

#### Indicators:

- 5.1 Strong policy, technical and institutional capacities and mechanisms for disaster risk management, with a disaster risk reduction perspective, are in place
- 5.2 Disaster preparedness plans and contingency plans are in place at all administrative levels, and regular training drills and rehearsals are held to test and develop disaster response programmes
- 5.3 Financial reserves and contingency mechanisms are in place to support effective response and recovery when required
- 5.4 Procedures are in place to exchange relevant information during hazard events and disasters, and to undertake post-event reviews

#### **Summary of Progress Average Result: 3.4**

The average level of achievement for HFA 5 is 3.4, a slight decline from the level of 3.6 that had been reported in both 2011 and 2009. While each of the countries reports specific achievements against HFA 5, the primary constraint appears to be the availability of resources, which has been particularly pronounced during the current reporting cycle as Europe remained in a prolonged economic downturn.

#### Progress against indicators

Indicator 5.1: Strong policy, technical and institutional capacities and mechanisms for disaster risk management, with a disaster risk reduction perspective, are in place.

#### Average Result: 3.9

Countries report relatively higher level of progress against this indicator. The examples of progress were typically reported in the context of dominant risks and known hazards. Countries expressed lower levels of confidence in non-dominant risks. For example, the **Czech Republic** reported that it has not only developed flood plans for each city and community; it has implemented and progressively

0%	Minor progress with few signs of forward action in plans or policy	
8%	Some progress, but without systematic policy and/or institutional commitment	Armenia, Monaco
8%	Institutional commitment attained, but achievements are neither comprehensive nor substantial	Serbia, The former Yugoslav Republic of Macedonia
60%	4. Substantial achievement attained but with recognized limitations in capacities and resources	Belarus, Bulgaria, Croatia, Finland, France, Georgia, Germany, Greece, Norway, Poland, Portugal, Roma- nia, Sweden, Turkey, UK
24%	5. Comprehensive achievement with sustained commitment and capacities at all levels.	Czech Republic, Hungary, Italy, The Netherlands, Slovenia, Switzerland

improved them. The Czech Republic has extensive experience with flooding. The country reports a lower degree of confidence in its capacities to manage other types of risks.

**Norway** reported strong institutional capacities with respect to more familiar risks but that it was not adequately prepared for a recent terrorist attack that claimed many casualties. Following the tragedy, Norway undertook a risk review to examine how it could improve its future response.

In an exception to this trend, **France**, **Germany** and **Switzerland** reported their cooperation on an earthquake drill that took place in May 2012. Participants in the drill included public and private sector task forces.

The key challenge to progress on this Indicator is the difficulty in motivating investment in capacities for risks that are not familiar hazards. Building capacity for flood risks, for example, was relatively easier for most European countries than investing in capacity for other risks less likely to materialize. At the same time, countries reported concerns about risks that were not strongly evidenced in the 2009 – 2011 HFA progress report, such as the need to assure continuous electrical supply or concerns about food and water safety. But awareness of these risks does not always translate into investment in capacity.

**Indicator 5.2:** Disaster preparedness plans and contingency plans are in place at all administrative levels, and regular training drills and rehearsals are held to test and develop disaster response programmes.

#### Average Result: 4.0

All countries reported some level of progress in holding regular training drills to prepare for disasters. A significant

area of achievement concerned bilateral and multilateral cooperation in holding drills for trans-boundary risks. The Disaster Preparedness and Prevention Initiative for South Eastern Europe, DPPI SEE, has organized many such drills for its participating countries. Another example is provided by Georgia, which hosted a training drill on 22 – 28 September 2012 for the North Atlantic Treaty Organization Euro-Atlantic Disaster Response Coordination Centre. More than 1.000 members of civilian and military teams from 11 participating countries took part in the drill. The scenario for the exercise was a severe earthquake affecting the vicinity of Tbilisi, resulting in a large number



Source: The former Yugoslav Republic of Macedonia National Platform

of victims and widespread damage to critical infrastructure, including chemical spills and radiation leakage.

Another example is provided by Sweden where, in 2011, its civil protection agency developed a guide for use by local rescue departments for emergency response to landslides. Sweden will begin training courses on responding to landslide emergencies in 2013.

The former Yugoslav Republic of Macedonia reported that it is working with the World Health Organization to develop response plans for the country's hospitals. The Ministry of Health is also preparing the reorganization of the First Aid Services.

Turkey reported that, in 2013, its governmental and non-governmental organizations developed a national response strategy plan for use in all types of disasters and emergencies.

The countries report two major challenges to further progress: the first concerns lack of financial and human capacity to conduct planning and drills. This challenge is particularly severe at the local level. The second concerns the tendency to develop plans and rehearsal drills for disasters that have recently occurred; in effect, driving an automobile while looking at the rear-view mirror. It is more difficult for countries to prepare drills for disasters that have receded into memory or never occurred in the first place.

Indicator 5.3: Financial reserves and contingency mechanisms are in place to support effective response and recovery when required.

#### Average Result: 3.9

The countries reported examples of progress in developing financial reserves and contingency mechanisms, but much more work remains to be done. Significantly, there was little middle ground in this Indicator. Countries that expressed confidence in the ready availability of insurance coverage did not appear to take into consideration the risk that in a challenging economic climate, households may elect to forego insurance coverage, thereby saving the premium expense, but putting themselves at risk should disaster strike. Nor did they consider the high level of financial literacy required to purchase appropriate insurance coverage.

Countries that had mature insurance industries expressed confidence that contingency mechanisms were adequate; countries that had less developed insurance sectors expressed concern about this need, particularly the need to attract foreign risk capital in their domestic insurance sector.

Countries in South Eastern Europe participate in a Catastrophe Risk Facility that provides access to affordable catastrophe risk insurance to households and small and medium enterprises. In Italy, a National Civil Protection Fund has been established to provide a financial reserve available in the event of major disaster.

Germany reported that it offers basic protection for small and medium enterprises through reconstruction credits from the federal state banks. To raise awareness about the need for insurance, the Germany Insurance Association developed a flyer "Stormy times – preventing damages and providing appropriate insurance". The flyer contains infor-



Source: Belarus National Platform

mation about how to insurer property against storms and how to reduce the vulnerability to storm hazards.

Many countries, such as Armenia, Belarus, Croatia and Poland reported the need to deepen capacity in their domestic insurance sectors.

Indicator 5.4: Procedures are in place to exchange relevant information during hazard events and disasters, and to undertake post-event reviews.

#### **Average Result: 3.8**

Countries reported relatively high levels of achievement against this Indicator. Where challenges exist, it was often due to the need to respond to the next crisis rather than reflect on the last one. An example of achievement was reported by Norway, which established a new emergency network. In the summer of 2012, Parliament authorized extension of that network to the rest of mainland Norway. The new emergency network will provide for better communication between the police, fire service and medical personnel and therefore more rapid assistance to the victims of accidents and crises. The context for the investment in this new network was the 22 July Commission's review of the terrorist attacks on the Norwegian Government Complex and Youth Camp on Utoya Island. The Review was strongly critical of the government's preparation and response and proposed measures for change.

Other countries reported the lack of procedures in place to conduct post-event review, relying instead on informal, ad hoc measures. The lack of procedures for systematic postevent analysis exposed these countries to repeated risks.

#### 1.3 Drivers of Progress

The HFA online monitoring tool gives countries the opportunity to report on their approaches to five factors believed to be drivers, or catalysts, for achieving substantial progress in disaster risk reduction and sustainable recovery from disasters:

- Multi-hazard integrated approach to disaster risk reduction and development.
- Gender perspectives on risk reduction and recovery adopted and institutionalized.
- Capacities for risk reduction and recovery identified and strengthened.
- Human security and social equity approaches integrated into disaster risk reduction and recovery activities.
- Engagement and partnerships with nongovernmental actors, civil society and private sector, among others, have been fostered at all levels.

Three levels of reliance are identified to provide a measure of the progress countries are making towards the implementation of the HFA, while relying on the particular drivers of progress outlined above:

- 1. No/little reliance: no acknowledgement of the issue in policy or practice; or, there is some acknowledgement but nothing/little done to address it;
- Partial/some reliance: full acknowledgement of the issue; strategy/framework for action developed to address it; application still not fully implemented across policy and practice; complete buy-in not achieved from key stakeholders;
- Significant and on-going reliance: significant ongoing efforts to actualize commitments with coher-

ent strategy in place; identified and engaged stakeholders.

### Multi-hazard integrated approach to disaster risk reduction and development.

A multi-hazard approach can improve efficacy in DRR. Communities face risk exposures from a variety of hazards, both natural and man-made in origin, which can stem from hydro meteorological, geological, technological or environmental forces. The resulting cumulative risks cannot be properly addressed if actors plan merely for selective hazardous events. A multi-hazard approach involves translating and linking knowledge of the full range of hazards into risk management approaches, strategies, assessments and analysis, leading to greater effectiveness and cost efficiency.

Countries acknowledge this issue but do not fully implement it across policies and practice. Some 52 per cent of countries report only partial or some reliance (level 2), almost unchanged from the 55 per cent that had reported this level in the 2011 reporting cycle. A further 48 per cent of countries report significant and on-going reliance (level 3), above the 40 per cent that had reported this level in 2011. Please note that in this, and the tables that follow for drivers of progress, that not all countries reported on each indicator or on each driver; hence, the total numbers of reporting countries vary within a single reporting cycle.

A theme that strongly emerges from the country reports is that recent disasters motivated greater consideration of

	Level of reliance on multi-hazard approach as driver of progress		
Reporting Cycle	1: No or little reliance	2. Partial or some reliance	3. Significant and on-going reliance
		Armenia Belarus Bulgaria Croatia Finland France Georgia Germany Greece Monaco Portugal Serbia The former Yugoslav Republic of Macedonia	Czech Republic Germany Hungary Italy The Netherlands Norway Poland Slovenia Sweden Switzerland UK
2011-2013	No. of countries: 0	No. of countries: 12	No. of countries: 11
	Percentage of total: 0%	Percentage of tota I: 52%	Percentage of total: 48%
2009-2011	No. of countries: 1	No. of countries: 11	No. of countries: 8
	Percentage of total: 5%	Percentage of total: 55%	Percentage of total: 40%
2007-2009	No. of countries: 0	No. of countries: 10	No. of countries: 6
	Percentage of total: 0%	Percentage of total: 64%	Percentage of total: 36%

	Level of gender perspectives approach as driver of progress		
Reporting Cycle	1: No or little reliance	2. Partial or some reliance	3. Significant and on-going reliance
	Belarus Bulgaria France Georgia Poland	Armenia Czech Republic Italy Monaco Serbia The former Yugoslav Republic of Macedonia Turkey	Armenia Czech Republic Italy Monaco Serbia The former Yugoslav Republic of Macedonia Turkey
2011-2013	No. of countries: 5	No. of countries: 7	No. of countries: 11
	Percentage of total: 22%	Percentage of tota I: 30%	Percentage of total: 48%
2009-2011	No. of countries: 6	No. of countries: 8	No. of countries: 6
	Percentage of total: 30%	Percentage of total: 40%	Percentage of total: 30%
2007-2009	No. of countries: 1	No. of countries: 9	No. of countries: 6
	Percentage of total: 7%	Percentage of total: 57%	Percentage of total: 36%

multi-hazard approaches. For example, in its HFA report, Switzerland observed that the "nuclear accident of Fukushima showed the importance of the interactions between natural and technical hazards. Subsequently, Swiss nuclear power plants have undergone a thorough re-assessment of the impacts of floods and earthquakes given advances in process knowledge, methodologies and design procedures since the original investigations were carried out."

In other European countries, where floods were dominant risks, the multi-hazard approach was emphasized. In 2012, France's Commissioner-General for Sustainable Development released a methodological guide on the "Multi-criteria analysis: application to flood prevention measures". This document is intended for communities and local government services to aid assessment of flood prevention measures by providing the elements of a multi-criteria analysis. The objective of the work is to offer a method of developing a cost-benefit analysis for different hazards contributing to flood risks.

Other countries reported their intent for future work on multi-hazard approaches. **Monaco** reported that to date, only earthquake risks had been the subject of numerous studies to evaluate hazards; however, a multi-hazard (technological, transportation, etc.) risk analysis is being drafted.

The 2009 – 2011 HFA synthesis report recommended the creation of new National Platforms to better implement a multi-hazard approach to DRR. The recent experience of European countries documents the challenges in bringing the considerable expertise of NPs to bear in multi-hazard approaches, particularly at local levels. In its report, for example, **France** wrote that "In the area of prevention, the National Platform brings together players specialized in a strategic 'multi-hazard' approach at national level. But at the municipal level or territories, few initiatives have re-

sulted in the creation of plans for risk prevention. " An area for future work remains translating integrated risk approaches from the national level both upward to regional levels and downward to local levels.

### Gender perspectives on risk reduction and recovery adopted and institutionalized.

Gender is a core factor to be considered in the implementation of disaster risk reduction measures. Gender is a central organizing principle in all societies, and therefore women and men may experience different disaster-related risks. Gender shapes the capacities and resources of individuals to build resilience, adapt to hazards and to respond to disasters. It is thus necessary to identify and use gender-differentiated information, to ensure that risk reduction strategies are correctly targeted at the most vulnerable groups and are effectively implemented through the roles of both women and men.

Some 22 per cent of countries report no or little reliance in this area (level 1) as compared with 30% that had reported level 1 in 2011. A further 30 per cent of countries report partial or some reliance (level 2) as compared with 40 per cent in 2011. Finally, 48 per cent report significant and ongoing reliance (level 3) a significant increase over the 30 per cent that had reported this level in 2011.

The 2011 HFA regional synthesis report stated "It should also be noted that there is significant variation from country to country even within a common quantitative indicator (level 1, 2 or 3) as to how gender issues are treated. Certain countries believe that as gender equity is enshrined in law, the issue has been addressed. Other countries believe that gender issues are not pertinent to disaster risk reduction as men and women both sustain disaster-related losses."

For the most part, that observation holds true in the current reporting cycle. However, several countries have articulated their interpretation of the implications of integrating gender perspectives into DRR. In its report, Germany stated "Women play an important role in DRR. Not only do they often belong to the most susceptible personal groups, considering they are not as equally integrated into official communication mechanisms as men, but also because they make a substantial contribution to the creation of a culture of resilience. Often they are responsible for the education of children, giving them the opportunity to teach disaster preventive behaviour to younger generations. Stay-at-home mothers, for example, are more actively integrated into local early warning systems. Because the everyday lives of men and women can differ greatly, the often unique perspective that women offer include an indispensable perspective to emergency and evacuation plans."

But among other countries that reported significant and on-going reliance on gender perspectives as a driver of progress, nearly all stated that the basis for this assessment was the fact that gender equality is enshrined in the law.

It is recommended that the regional organizations facilitate discussion of gender perspectives on DRR to promote dialogue on both how to interpret and best implement this approach. Is legal equality the extent to which gender impacts risk vulnerability or is there more work to be done in this area?

### Capacities for risk reduction and recovery identified and strengthened.

Capacity development is a central strategy for reducing disaster risk. It is sustained through institutions that support capacity development and capacity maintenance as dedicated, on-going objectives at all levels. Capacity approaches for risk reduction at local and regional levels are increasing, with 50 per cent reporting significant and on-going reliance (level 3), as compared with 35 per cent in 2011. A common theme emerges from the country reports that capacity development, particularly in human resources, is a serious constraint to DRR at local levels.

A model approach for consideration by the National Platforms may be that reported by **the Netherlands**, where cabinet ministers provide briefing dossiers to Parliament concerning progress on safety and security, thereby ensuring that capacity development receives appropriate attention.

Another approach to capacity building is performed by the regional organizations that leverage limited resources. The European Union is financing several capacity-building projects within the EU (for instance, the "EU Cities Adapt" Project on adaptation strategies for European cities) or as part of the EU cooperation with non-EU countries (for instance, the PPRD South and PPRD East programmes). DPPI's approach in training-the-trainers allows "multiplier" effects in results achieved per sums invested.

It is recommended that the European Forum for Disaster Risk Reduction engage its members to address means of

Level of reliance on capacities approach as driver of progress			
Reporting Cycle	1: No or little reliance	2. Partial or some reliance	3. Significant and on-going reliance
		Armenia Belarus Bulgaria Croatia Czech Republic Finland France Georgia Monaco Serbia The former Yugoslav Republic of Macedonia Turkey	Germany Greece Hungary Italy The Netherlands Norway Poland Portugal Slovenia Sweden Switzerland UK
2011-2013	No. of countries: 0	No. of countries: 12	No. of countries: 11
	Percentage of total: 0%	Percentage of total: 50%	Percentage of total: 48%
2009-2011	No. of countries: 0	No. of countries: 13	No. of countries: 7
	Percentage of total: 0%	Percentage of total: 65%	Percentage of total: 35%
2007-2009	No. of countries: 0	No. of countries: 9	No. of countries: 7
	Percentage of total: 0%	Percentage of total: 57%	Percentage of total: 43%

Level of reliance on security/social equity approach			
Reporting Cycle	1: No or little reliance	2. Partial or some reliance	3. Significant and on-going reliance
		Armenia Belarus Czech Republic France Georgia Monaco Portugal Serbia The former Yugoslav Republic of Macedonia Turkey	Bulgaria Croatia Finland Germany Greece Hungary Italy The Netherlands Norway Poland Slovenia Sweden Switzerland UK
2011-2013	No. of countries: 0	No. of countries: 10	No. of countries: 14
	Percentage of total: 0%	Percentage of tota I: 42%	Percentage of total: 58%
2009-2011	No. of countries: 1	No. of countries: 11	No. of countries: 8
	Percentage of total: 5%	Percentage of total: 55%	Percentage of total: 40%
2007-2009	No. of countries: 0	No. of countries: 8	No. of countries: 8
	Percentage of total: 0%	Percentage of total: 50%	Percentage of total: 50%

ensuring adequate funding for capacity building initiatives, perhaps through advocacy or more effective media outreach in the aftermath of disasters, when the experience provides a window of opportunity to inform the public of the importance of DRR.

Human security and social equity approaches integrated into disaster risk reduction and recovery activities.

One of the key challenges in disaster risk management is to ensure that the most vulnerable are protected from existing and emerging environmental risks, and that those most affected are reached through disaster response and recovery programmes. Often, the most vulnerable belong to socioeconomic and demographic "minority" groups. Focused attention to meeting the special needs of the socio-economically vulnerable and/or isolated groups must be ensured through risk reduction and recovery plans and programmes.

Meaningful progress was made from the 2011 to 2013 reporting cycles with nearly a 50% increase in the number of countries indicating significant and on-going reliance on human security and social equity approaches. From the 2009 to the 2011 reporting cycles, the results were virtually unchanged.

Two trends are evident among the countries that report significant reliance on security/social equity approaches. First, the commitment comes from national level and applies to all local levels. In **Croatia**, for example, the commitment to security and social equity is enshrined in its Constitution.

The **UK** Government, to implement socially equitable approaches, produced guidance for all emergency planners and responders regarding vulnerable people, titled "Identifying People Who Are Vulnerable in a Crisis – Guidance for Emergency Planners and Responders".

A second trend that emerged, that was not strongly evidenced in the 2011 country reports, was increasing concerns about the safety of food and water supplies, both as a security concern and as a social equity concern as vulnerable populations would be at greater risk for resource shortages.

**Sweden**, for example, reports that its National Food Administration is responsible for the coordination of supplying food and drinking water, which must meet standards even during emergency situations. The Administration is authorized to work with national, regional and local actors, as well as the private sector to discharge this responsibility. In another context, Sweden reported the need and challenges of engaging the private sector in DRR, since the private sector owns and manages many of the resources providing vital services to the society.

Nearly all countries reported challenges in engaging the private sector and in accessing adequate resources for implementing DRR measures. An area for future work remains effective engagement of the private sector in ensuring the safety of all citizens, especially the most vulnerable.

Engagement and partnerships with non-governmental actors, civil society and private sector, amongst others, have been fostered at all levels.

Effective disaster risk reduction requires effective community participation. Participatory approaches can more efficiently capitalize on existing coping mechanisms and strengthen community knowledge and capacities. Public-private partnerships are also an important tool for disaster risk reduction.

Such voluntary associations may involve public organizations such as government agencies, professional and/or academic institutions and NGOs, together with business organizations such as companies, industry associations and private foundations. Public-private partnerships can offer opportunities to combine resources and expertise to act jointly to reduce risks and potential losses. They can, in turn, improve the resilience of communities.

A similar trend is seen with the engagement/partnership approach as in the security/social equity approach: even levels of reliance from the 2009 to 2011 reporting cycles followed by a 50% increase in significant reliance in 2013. This trend appears to be driven by the prolonged economic downturn in Europe as governments seek to mobilize limited resources wherever available, from the volunteer workforce of the NGO's to in-kind and monetary contributions from the private sector.

Italy reports a successful approach, as all actors involved in disaster risk reduction are part of the National Civil Pro-

tection Service. These include public institutions, public agencies, research centres, private companies and voluntary associations. Partnerships are established through bi- and multi-lateral agreements and by means of inter-agency bodies, such as the National Commission for the Forecasting and Prevention of Major Risks and the Civil Protection Operational Committee. Similar bodies have been established at the regional, provincial and local levels. While such mechanisms allow for engagement of diverse sets of professional expertise, they require careful coordination to be effective.

Another example is provided by **Turkey**, which has successfully brought together actors from the public, private and voluntary sectors to the common cause of DRR. The Turkish Red Crescent, the Turkish universities and small and medium enterprises are strongly engaged through the country's National Platform.

	Level of reliance on capacities approach as driver of progress		
Reporting Cycle	1: No or little reliance	2. Partial or some reliance	3. Significant and on-going reliance
		Armenia Belarus Bulgaria Czech Republic Georgia Monaco Portugal Serbia The former Yugoslav Republic of Macedonia Turkey	Croatia Finland France Germany Greece Hungary Italy The Netherlands Norway Portugal Slovenia Sweden Switzerland UK
2011-2013	No. of countries: 0	No. of countries: 9	No. of countries: 15
	Percentage of total: 0%	Percentage of total: 38%	Percentage of total: 63%
2009-2011	No. of countries: 0	No. of countries: 12	No. of countries: 8
	Percentage of total: 0%	Percentage of total: 60%	Percentage of total: 40%
2007-2009	No. of countries: 0	No. of countries: 9	No. of countries: 7
	Percentage of total: 0%	Percentage of total: 57%	Percentage of total: 43%

#### **United Kingdom HFA Peer Review**

In September 2012, the first ever Peer Review on the HFA implementation was performed in the United Kingdom, which had volunteered for this purpose. The peer review team, consisting of representatives from Finland, Italy and Sweden and a joint Secretariat (formed by the UNISDR, European Commission and OECD), carried out the peer review mission, interviewing some 90 people including representatives from 45 entities such as government departments, NGOs and businesses across the UK. The Peer Review has been carried out with financial support from the European Commission, and with in-kind contributions of OECD and UNISDR, and the dedicated time and expertise of the participating peers. It is envisioned that such a review will help strengthening the varying quality of the information and subjectivity in the national self-assessments and strengthen national strategies for policy implementation.



From left to right: Yordanka Mincheva (European Commission), Thomas de Lannoy (European Commission), Luca Rossi (Italy), Taito Vainio (Finland), Charles Baubion (OECD), Anna Hedenström (Sweden), Steven Barnes (UK), Stefanie Dannenmann-Di Palma (UNISDR) at the London Cabinet Office on the occasion of the High Level Meeting for the UK HFA Peer Review, 17 September 2012.

#### Contextual drivers of progress

Contextual drivers of progress are those factors specific to individual countries believed to be effective in advancing DRR. A key contextual driver of progress for European countries that had signed the United Nations Development Assistance Framework 2011 – 2015 is the partnership with the UN in working towards implementing the HFA. This driver of progress was attributed a high level of importance as implementing the HFA is viewed as progress towards achieving national Millennium Development Goals (MDGs); specifically #1 – Eradicate extreme poverty and #7 – Ensure Environmental Sustainability.

A number of countries identified human resource development at all levels and across all sectors as a key contextual driver of progress. **Portugal** provides one such example, as it has legislated requirements for development of formation and training at all levels of government administration.

The success of peer review for promoting progress and improving policy-making in DRR emerged as a contextual driver of progress in the **UK** national report. The UK report states, "A clear driver of progress for the UK will be the recently completed Peer Review. The peer review team, {consisting of representatives from Finland, Italy and Sweden and a joint Secretariat [UNISDR Europe, European Commission and OECD} made an independent assessment of the UK's progress against the HFA Core Indicators from this template. This assessment will help us to see what we are doing well and those areas in which we need to do better."

As the results of the Review are disseminated, other countries may come to regard peer review as helpful in promoting DRR such that the 2015 regional synthesis report will likely present more examples of the peer review process.



HFA Implementation At Regional Level



#### 2. HFA implementation at regional level

Monitoring progress is an essential feature of the HFA and although responsibility for monitoring progress is assigned mainly to national governments, reporting responsibilities are also assigned to regional and international organizations and institutions. The following partners submitted reports that indicate the progress made in strengthening DRR at regional level, along with efforts to assess and monitor regional and trans-boundary risk.

#### **European Commission**

Over the past two years, European Union policy in disaster risk reduction has made a vital contribution to achieving the objectives of the Hyogo Framework for Action.

Building on the existing cooperation in disaster response and preparedness, the EU is developing a cross-sectoral risk management policy that promotes national risk assessments and planning, sharing of good practices between countries including through peer reviews, "disaster proofed" investments supported by EU funds and awareness raising. Innovative solutions for financing disaster prevention are high on the agenda, including the use of insurance as a tool for disaster management and as an incentive to promote risk awareness, prevention and mitigation.

Disaster risk prevention and management considerations have also been included in a number of key EU policies and legislation (e.g. cohesion policy, health, environmental impact assessment, climate change adaptation, ecosystems, agriculture, food and nutrition security, water, flood risk management, major industrial accident prevention risk financing, nuclear safety ,transport and energy, research and innovation).

Furthermore, resilience building is an integral part of EU development and humanitarian policies.

The EU disaster risk reduction strategy in support to developing countries promotes a comprehensive approach to disaster resilience and integration with climate change adaptation. Through the EU disaster risk reduction implementation plan for developing countries, significant progress is being made to regional disaster risk reduction strategies and action plans, such as the African, Caribbean and Pacific Group of States Natural Disaster Facility ("ACP). Regional programmes on disaster risk reduction are also being developed with the EU's closest neighbours in the East and South within the framework of the EU Neighbourhood and Partnership Instrument.

The EU, together with its partner countries, is stepping up its efforts to build up the resilience of vulnerable populations, in the Sahel (AGIR, Alliance Globale pour l'Initiative Resilience) and Horn of Africa Region (SHARE, Supporting Horn of Africa Resilience). Using the lessons learnt from

these experiences, the EU has developed its new approach to resilience. The objective is to address the structural causes of vulnerability in poor households and to tackle the root causes of recurrent crises, rather than just their consequences. Increasing resilience is a central aim of EU development cooperation and humanitarian aid; in particular in countries facing recurrent crises, to improve the effectiveness of EU support to reduce vulnerability in disaster prone areas.

Greater political attention to disaster risk reduction is being paid within the context of the post 2015 development agenda and the Rio +20 outcome document and the EU is engaging fully in these international processes, building upon a constructive dialogue with partners and stakeholders.

# HFA 1: Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation

The European Commission is carrying out a number of measures to implement an EU framework for the prevention of disasters, as proposed by the Communication on the prevention of natural and man-made disasters adopted in 2009, supported by Council Conclusions. The European approach to prevention focuses on improving the knowledge base, encouraging risk assessment and mapping, developing good practices to raise prevention culture, including through peer reviews, and mainstreaming in other policies.

In April 2013, the European Commission adopted a climate change adaptation strategy, promoting strong linkages between disaster risk reduction and climate change adaptation. In particular, the European Commission encourages Member States to adopt comprehensive adaptation strategies by providing funding to help Member States build up their adaptation capacities and take action. The strategy also supports adaptation in cities by launching a voluntary commitment based on the Covenant of Mayors initiative. The strategy drives "climate-proofing" action at EU level by further promoting adaptation in key vulnerable sectors such as agriculture, fisheries and cohesion policy, ensuring that Europe's infrastructure is made more resilient, and promoting the use of insurance against natural and man-made disasters. The strategy also addresses gaps in knowledge about adaptation and further develops the European climate adaptation platform (Climate-ADAPT).

The EU Strategy supporting DRR in emerging economies defines the EU's contribution to the HFA outside Europe. In close cooperation with Member States, the European Commission focuses on regional action plans for DRR and their integration in EU external action. To facilitate the elaboration, coordination, and monitoring of the implementation plan of the EU strategy for supporting disaster risk reduction in emerging economies, a steering group was set up in 2009.

#### **EUROMED PPRD South**

In March 2009, the EU funded the three-year Euromed Programme for Prevention, Preparedness and Response to Natural and Man-made Disasters (PPRD South) with a budget of €5 million. This programme builds on two previous initiatives designed to strengthen civil protection cooperation. PPRD South's mandate is to develop a civil protection culture in the Mediterranean that is based on preventing disasters rather than responding to them. The Italian Civil Protection Authority, the UNISDR and the civil protection authorities of France, Egypt and Algeria manage the programme.

The closing programme event that took place in Brussels on 8 November 2012 voiced the engagement of the European Commission to continue the support towards increasing disaster resilience focus in the Mediterranean and the South Eastern Europe Region. The programme reported the following accomplishments: the development of the PPRD South Regional Risk Atlas, increased knowledge and awareness with 17 thematic training workshops on prevention and preparedness; and eight awareness-raising activities implemented in partner countries.

In October 2012, the European Commission adopted the Communication "The EU Approach to Resilience: Learning From Food Security Crises". The resilience approach aims to make aid more efficient and effective by tackling the root causes of recurrent crises rather than just dealing with their consequences. This approach is a long-term commitment focusing on strengthening capacities at all levels, improving the coordination between humanitarian and development interventions, as well as promoting local ownership and partnership with all stakeholders.

As announced in the Communication, the European Commission is in the process of elaborating an Action Plan for Resilience.

Coordinating mechanisms for disaster risk reduction have been implemented.

Within the Commission, given the cross cutting nature of disaster risk reduction, several European Commission services (such as humanitarian aid and civil protection, development, environment, research, climate policy, enlargement) have cooperated in recent years in the implementation of the HFA and cooperation with UNISDR on common priorities through an informal inter-service working group. The group will also discuss European Commission contribution to the post 2015 consultation process towards a new HFA framework.

Capacity building programmes support disaster risk reduction objectives.

Within the EU, the legislative proposals for the future cohesion policy (2014-2020) have integrated more specific eligible actions to support risk management projects, and requirements of "disaster proofing" factored into investment decisions.

Pilot projects are supported, such as the project "Adaptation strategies for European cities" providing capacity building and assistance for cities in developing and implementing adaptation strategies. Prevention, preparedness, and response projects are also supported by the civil protection financial instrument.

The European Commission has pursued cooperation activities with candidate, potential candidate, and other neighbouring countries. The European Commission contributes to the prevention of, preparedness for, and response to disasters affecting partner countries, especially in regions adjacent to the EU (Western Balkans, Mediterranean and Eastern Partnership) with support from the pre-accession (IPA) and neighbourhood financial programmes.

One such example is the European Commission's support in May 2012 of an IPA project "Building resilience to disasters in the Western Balkans and Turkey" (implemented by UNISDR and the World Meteorological Organisation) aimed at enhancing regional cooperation and capacity, mainly on meteorological and hydrological hazards.

The PPRD East Programme (2010- June 2014) implements specific activities such as the development of an electronic regional risk atlas, training, exchanges of experts, and table-top exercises, and awareness raising campaigns on disaster prevention.

The European Commission is also developing cooperation with some of its key strategic partners (Russia, US, China, Japan, and Australia).

In the development cooperation context, the EU supports national, regional and global efforts in an integrated approach to disaster risk management. This is being accomplished through its intra-ACP funding stream, which reserved € 180 million to disaster risk reduction for ACP countries. For example, under the "Natural Disaster Facility", the EU supports, among others, IGAD (Intergovernmental Authority on Development) in establishing a Disaster Response Strategy for East Africa, in building the capacity of its member states' disaster risk management agencies and in developing regional multi-hazard and vul-

nerability maps and an atlas. The intra-ACP approach has also allowed for a major contribution to the World-Bank led Global Facility for Disaster Reduction and Recovery (GFDRR), through the "ACP-EU Natural Disaster Risk Reduction Programme" which, since its launch in 2011 delivers in more than 30 ACP countries, most of them in Africa.

The EU is also funding specific preparedness actions in certain disaster-prone regions. In 2012, DIPECHO (Disaster Preparedness ECHO) action plans have been launched in Southern Africa ( $\epsilon$ 6M), Caucasus and Central Asia ( $\epsilon$ 8M), South East Asia ( $\epsilon$ 11M) and Central America ( $\epsilon$ 10M). In 2012, over 16% of European Commission humanitarian funding went to disaster risk reduction activities.

## HFA 2: Identify, assess and monitor disaster risks and enhance early warning

In 2010, the European Commission issued guidelines on risk assessment for disaster management to support Member States in the preparation of national risk assessments. Building on that work, the European Commission is now preparing an overview of risks in the EU, taking into account, where possible and relevant, the future impact of climate change and the need for climate adaptation.

The overview will focus primarily on risks that are "shared"; i.e., those with likely cross-border impacts, or those on a larger scale where impacts would be experienced by more than one Member State. While the intention, at a later stage, is to look at emerging risks with a high impact/low probability nature, the initial overview focuses on the next five-year period.

Risk assessment is integrated in existing EU legislation (Floods Directive requesting Member States to prepare flood hazard and flood risk maps by the end of 2013, Water Framework Directive, Seveso II Directive on Industrial Accidents, European Critical Infrastructures). Risk assessment has also been mainstreamed in EU legislation: on 26 October 2012, the Commission adopted a proposal for a revised EIA Directive that would amend the current Directive 2011/92/EU. Inter alia, the proposed changes are forward looking, as emerging challenges that are important to the EU as a whole in areas like resource efficiency, climate change; biodiversity and disaster prevention will now be reflected in the assessment process. The revised EU nuclear safety legislation has incorporated improved safety procedures and standards. Comprehensive risk assessments (nuclear stress tests) have been carried out for all nuclear power plants and specific recommendations developed.

As concerns early warning, the European Commission is developing several detection and warning systems through its Joint Research Centre (JRC), such as the Global Disaster Alert and Coordination System (GDACS), the European Flood Early Warning System (EFAS) the European Forest Fire Information System (EFFIS) and Meteoalarm.

# HFA 3: Use knowledge, innovation and education to build a culture of safety and resilience at all levels

Significant efforts on data availability, accessibility, and comparability have been made to enhance the existing knowledge base on disasters in order to inform better policies and disaster risk management strategies. The European Commission Joint Research Centre (JRC) is currently carrying out a study on existing standards and protocols for recording disaster losses, which will lead to recommendations for a European approach. The results of the study will also feed into joint work with the US Federal Emergency Management Agency on disaster data standards.

In 2012, the European Commission approved a project on "Building capacities for increased public investment in integrated climate change adaptation and disaster risk reduction: 2012 − 2015". The project, coordinated by UNISDR, is co-funded by the EU (€7 million) under the thematic programme for environment and sustainable management of natural resources (ENRTP). The project aims inter alia at supporting up to 40 developing countries to account for disaster losses and to develop probabilistic estimations of future risks, with an emphasis on weather and climate change-related hazards,

The web-based European Climate Adaptation Platform (Climate-ADAPT) has been launched in March 2012. It incorporates the latest data on adaptation action in the EU (such as data from the European Environment Agency 2012 report on climate change, impacts and vulnerability in Europe), together with several useful policy support tools.

#### Exchange of good practice

The European Commission supports exchange of good practices to develop a prevention culture: the work has included the collection and analysis of more than 400 examples of good practices across a variety of hazards. Based on the good practices, the Commission has started work on guidelines for disaster prevention, focusing on five crosscutting themes: governance, planning, disaster data, risk communication and information, and research and technology transfer.

The European Commission has started to promote and support peer reviews (such as the United Kingdom HFA peer review) to encourage learning across Member States and steer progress in further developing and implementing risk management policies and practices.

On 19 September 2012, the European Commission adopted a proposal on "EU Aid Volunteers". Trained volunteers will be deployed in humanitarian projects worldwide, including for actions aiming at reinforcing disaster risk reduction, preparedness and resilience.

The "Policy Expert Workshop" of the EC funded "Policy-relevant assessment of socio-economic effects of droughts and floods (PREEMPT)" project, (Venice, Italy 29-30 November 2012) focused on the impact of knowledge on disaster losses for the European policy makers in their public investment decisions with respect to DRR. The discussion brought practical examples from non-European countries and the work that has been done in other regions in building database for disaster losses and the practical implications of these databases to build probabilistic risk models and plan national and local investment decisions. National representatives of disaster management services, research institutions, the European Commission and other European organizations attended the workshop. The outcome of the project contributed sharing knowledge at regional level on the existing local risk assessments and collection of disaster data especially in relation to Germany, the Netherlands, Spain and Italy.

#### Research

Since the last 1980s, through successive framework programmes (FPs), the European Commission supported research in the field related to natural hazards and disasters.

The on-going FP7 programme (2007-2013) through some of its research programmes, reinforces the networking capacity (e.g., the Infrastructures programme) and the necessary improved knowledge—base, methods and integrated frameworks necessary for a better assessment of hazards, vulnerabilities and risks and for the development of a more sound risk management approaches promoting prevention and mitigation strategies (e.g., the Environment programme).

On the more pre-operational activities, the JRC, the GMES programme, or the Security programme make use of more applied research and contribute to the assessment of crisis/emergency situations as well as to the improvement of management and security issues.

In 2011 and 2012, the European Commission organised conferences and seminars for the dissemination of research results to policy-makers on tsunami risks, governance of climate-related risks, or social sciences. During that same period, the Environment Research Programme invested effort in hazard-driven research and its social and economic dimensions.

The Horizon 2020 proposals, identified as focus areas of high growth and innovation, include disaster resilience and safeguarding a secure society (including innovation and technological development). Specific research topics will be developed.

#### HFA 4: Reduce the underlying risk factors

In addition to linking disaster prevention to climate change adaptation work and mainstreaming in EU funding instruments (e.g., cohesion funds), efforts are also underway to mainstream disaster prevention into EU sectoral policies including: water, resource efficiency, energy, transport, agriculture, nuclear safety, environmental impact assessment, industrial accidents, and health.

The 2011 transport and energy network guidelines include specific provisions on climate change resilient infrastructure and risk assessments

The proposed revision of the Environmental Impact Assessment Directive requires major projects to take into account the possible impacts of natural and man-made disasters (including those related to climate change) at the very first stages of planning. Disaster risk management will be also firmly embedded into the long-term EU strategy on water policy. The roadmap to a resource-efficient Europe includes specific milestones on long-term sustainability and resilience to environmental shocks.

The recently adopted EU strategy on adaptation to climate change underlines the close synergies between climate change adaptation and disaster risk management, especially in cross-cutting areas such as data and knowledge dissemination, assessment of risks and vulnerabilities, mainstreaming into relevant EU policies and financial instruments, and coherence between national adaptation strategies and national risk management plans. It also anticipates work with standardisation organisations to identify to what extent industry-relevant standards in the area of energy, transport, and buildings should be strengthened for better consideration of adaptation and DRR considerations.

The Seveso III Directive, which became effective in August 2012, encourages better access for citizens to information about risks resulting from activities of nearby companies, and about how to behave in the event of an accident.

As part of it post-2010 biodiversity policy, the Commission has adopted in May 2013 a strategy on green infrastructure, promoting ecosystem-based management approaches.

To combat serious cross-border threats to health such as infectious diseases, influenza and swine flu, a recent revision of the EU legislation introduced enhanced risk management actions, such as monitoring, risk assessments, early warning as well as related preparedness and response planning.

## HFA 5: Strengthen disaster preparedness for effective response at all levels

Since the establishment of the EU Civil Protection Mechanism and of the Civil Protection Financial Instrument, the Commission has succeeded in developing a key role for the EU in facilitating the deployment and coordination of Member States' in- kind assistance for major emergencies inside and outside the EU.

The Commission implements an ambitious preparedness programme including training courses, yearly field exercises, and exchanges of experts enhancing links between national civil protection services.

In December 2011, the European Commission proposed legislation to strengthen European co-operation in civil protection to provide a more efficient, effective, and rapid response to disasters as well as enhanced prevention and preparedness action. In May 2013, a 24/7 emergency response centre (ERC) was established to enable the EU to facilitate real-time exchange of information and to respond to disasters in a timely and efficient manner. The ERC will manage a pre-identified pool of Member States' response assets (civil protection intervention modules) that can immediately be deployed to any large-scale emergency. The countries participating in the Civil Protection Mechanism can commit some of their resources on a standby basis to a voluntary pool, ready to be deployed as part of a coherent European response when the need arises. Better planning and the preparation of a set of typical scenarios will further enhance the ERC's capacity for rapid response. The new legislation further promotes the development of national risk assessment and disaster management plans.

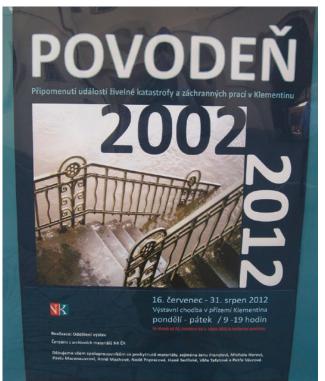
The Treaty on the Functioning of the European Union (TFEU) contains a new provision for a "solidarity clause" (Article 222) establishing that the Union and its Member States shall act jointly in a spirit of solidarity if a Member State is the object of a terrorist attack or the victim of a natural or man-made disaster.

Disaster risk reduction is a central pillar in the joint efforts with the UN and the World Bank when developing methodologies for Post Disaster Needs assessments. The European Commission is financing projects under the instrument for the facility on post-disaster needs assessments, as well as on disaster recovery to strengthen region-based capacities in pre-disaster recovery planning.

#### Insurance and disasters

On 16 April 2013, the European Commission adopted a Green Paper on insurance and disasters that will start a dialogue with stakeholders. The objective is to raise awareness and to assess whether action at EU level is warranted to improve the market for disaster insurance in the European Union. More generally, this process will also expand the knowledge base, help to promote insurance as a tool of disaster management and thus contribute to a shift towards a general culture of disaster risk prevention and mitigation, and generate further data and information.

The European Commission also supports risk financing initiatives for emerging economies, such as the Caribbean Catastrophe Risk Insurance Facility (CCRIF), the Global Index Insurance Facility (GIIF) and the Pacific Catastrophe Risk Assessment and Financing Initiative.



Photograph: Ten Years of Disastrous Floods Photo Exhibition, 2012 Source: Czech National Committee for Disaster Risk Reduction

#### Council of Europe – European and Mediterranean Major Hazards Agreement (EUR-OPA)

In 1987 the Committee of Ministers of the Council of Europe established an inter-governmental Open Partial Agreement called EUR-OPA Major Hazards Agreement<sup>4</sup>, which has been joined by 26 countries to date. The main objective of the Agreement is "to reinforce and promote cooperation between member states in a multi-disciplinary context to ensure better prevention, protection and organization of relief in the event of major natural or technological disasters by calling upon present day resources and knowledge to ensure efficient and interdependent management of major disasters."

In 2011 and 2012, the EUR-OPA Agreement pursued its dual mandate of formulating recommendations addressed primarily to member States' authorities and developing the knowledge to facilitate the implementation of such recommendations.

The Agreement's activities since 2011 have been defined according to a two-year work plan implementing the general guidelines defined by its Medium Term Plan for 2011-2015 adopted at the Agreement's 12th Ministerial Session back in 2010. The plan reflects the priorities for action in the field of disaster reduction in the European and Mediterranean area within the context of the HFA, taking into account previous activities developed by EUR-OPA in the five HFA priority areas.



Flood in Bisser Source: Bulgaria National Platform, Photographer Mr. Hristo Rusev

# HFA 1: Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation

As an international cooperation group, the Agreement has continuously promoted within its 26 member States the importance of disaster risk reduction mainly through recommendations adopted by its Committee of Permanent Correspondents. In 2011, it adopted resolutions on forest fires and on radiological hazards. One additional recommendation was adopted in 2012 on Environment-Based Disaster Risk Reduction and a recommendation addressing the specific needs of most vulnerable people is under preparation for 2013.

The involvement of local and regional authorities in major hazard management motivated back in 2008 the launching of a comparative study on this topic. After an initial phase (based on 7 member countries), it was extended during 2011 to three other countries and led to a revised report highlighting the importance of smooth cooperation between the various levels at all stages of risk management and consequently the need to avoid information gaps between them: several proposals based on good practices were identified. An electronic version of the data already collected is available at <a href="www.ispu.net">www.ispu.net</a> to allow information update through the Internet and an easier contribution by other countries (two new countries will join the project in 2013).

In order to cope with this wider spread of competencies among multiple stakeholders, the Agreement confirmed its commitment to support the creation of National Platforms to better coordinate their actions and maintain efficiencies, proposing to the interested member States its support to set up such National Platforms. The Agreement has continued to support the European Forum for Disaster Risk Reduction (EFDRR), whose second and third meetings took place respectively in Skopje in 2011 and in Dubrovnik in 2012. Through its involvement in the EFDRR working groups, the Agreement is also actively participating in the organisation of the fourth meeting scheduled in Oslo in September 2013.

## HFA 2: Identify, assess and monitor disaster risks and enhance early warning

The Agreement is mainly interested in the comparability of risk issues between countries and consequently favours such transnational projects. Along this line of action, and based on a study of the different methodologies used in mapping landslides and their possible harmonisation, the Strasbourg Centre (in collaboration with the Tbilisi Centre) has worked in 2012 and will continue to do so in 2013 on a pan-European landslides susceptibility mapping based on landslide type maps of three different countries.

Another domain where the Agreement has been active is

coastal hazards. In 2011 and 2012 it supported a study on vulnerability of selected Mediterranean coastlines with regard to tsunamis and rising sea levels, leading to the production of local vulnerability risk maps. A project launched in 2012 and coordinated by the Valletta Centre also focuses on studying landslide risks in such interface areas, emphasizing the necessary coupling of both marine and terrestrial available data to improve existing hazard maps.

The trans-boundary effects of major hazards are also an important aspect for the Agreement as illustrated by the on-going initiatives on forest fires led by the Freiburg Centre and the Athens Centre on the definition of common guidelines on defence of rural zones against wildfires and the project, in collaboration with UNECE, of developing a reference document on trans-boundary cooperation in fire management.

# HFA 3: Use knowledge, innovation and education to build a culture of safety and resilience at all levels

The network of 27 specialised centres has continued its extensive work in such diverse fields as landslides, coastal hazards or risk education, and has thus contributed to a better knowledge of the phenomena. The new 2011-2015 Medium Term Plan adopted at the Agreement's 12th Ministerial Session (St Petersburg, 28 September 2010) guided activities in 2012 and 2013, stressing in particular the recent emergence of two important issues: the role of people themselves as a tool to improve resilience and the additional challenges raised by climate change.

Concerning the link between risks and climate change, the organisation of short-term specialised courses at master-level has been favoured in 2011 and 2012 for:

- Cultural heritage and climate change impact, coordinated by the Ravello Centre;
- "Climate Change: impact on health, human environment and water" coordinated by the Strasbourg University and the ENGEES;
- Climatic risks management, organised by the Biskra Centre (Algeria);
- Coastal risks, coordinated by the Biarritz Centre, mainly for coastal managers.

The joint initiative with UNISDR Europe and the European Commission on common governance issues in DRR and CCA materialized in 2011 in the publication of a study on existing international mechanisms and a workshop on climate-related risks in Brussels and was pursued in 2012 by the organisation of a special session on the topic during the Davos Forum on DRR.

Following the 2006 recommendation on disaster risk reduction through education at school, the Agreement has continued to develop the BeSafeNet initiative, a multi-

lingual web-based project providing teachers with teaching material on main hazards to raise students' awareness. The intensive work developed since 2010 led to the official launch of the website in 2012 during the 25th anniversary celebration of the creation of the Agreement. The website will be enriched during 2013 both in terms of content and in terms of available languages.

#### HFA 4: Reduce the underlying risk factors

The collaboration of some Centres with their national authorities on earthquake risk and infrastructures must be highlighted as an example of greater synergy between scientists and decision makers. The Rabat Centre continued its joint work with authorities on seismic feasibility studies for new cities and existing large dams and public buildings' vulnerability to earthquakes. The Moscow Centre's on-going work on emerging risks in the Arctic region linked to its increased development resulting from climate change, an approach which can be useful to address other climate-related changes, also reflects the usefulness of technical works more oriented to their actual implementation.

The involvement of citizens in disaster risk reduction must be highlighted. The Bruyères-le-Châtel Centre continued to develop its innovative initiative on earthquake monitoring through on-line questionnaires filled in by web users and will try to use new social networks (such as Twitter or Facebook) to collect more information on earthquakes. The role of public awareness campaigns in increasing resilience to disasters was also explored through a pilot project to identify needs and shortcomings of national and municipal campaigns on population information in Armenia with a view to defining a general methodology valid for other neighbouring countries.

## HFA 5: Strengthen disaster preparedness for effective response at all levels

The Agreement has continued its support to two major technical initiatives concerning data dissemination: the European Warning System (operated by the Bruyères-le-Châtel Centre), which provides real-time alerts on earth-quakes higher than 6 on the Richter scale within the Euro-Mediterranean area, and the Extremum Project (operated by the Moscow Centre), which completes it with an early estimation of the possible consequences of the reported earthquake. Based on that information, the Agreement collects possible needs expressed by the affected country to disseminate them among the other member States.

Alongside these technical tools, the Agreement has also stressed the human dimension in disaster preparedness as a major factor for successful response. Regarding psychosocial assistance to victims, the cooperation with the European Federation of Psychologists' Associations (EFPA) initiated in 2010 by the definition of the structure of a training course for psychologists has been pursued in 2011 and 2012

#### South Eastern Europe Disaster Risk Mitigation and Adaptation Programme (SEEDRMAP)

The World Bank and UNISDR have initiated SEEDRMAP (South Eastern Europe Disaster Risk Mitigation and Adaptation Programme) in collaboration with regional and international partners. This initiative contributes to regional and country-specific investment priorities (projects) in the area of early warning, disaster risk reduction and financing.

The SEEDRMAP objective is to reduce the vulnerability of SEE countries to disasters, including the loss of life, property and economic productivity caused by weather extremes and other natural hazards. In March 2012, SEEDRMAP, together with the World Bank and UNISDR, held an international event towards facilitating the exchange of best practices on hydro meteorological services for disaster risk reduction. The event concluded with number recommendations to reduce hydromet risks in Europe and Central Asia, as well as highlighting a number of opportunities and success in disaster risk reduction.

The Europa Reinsurance Facility Ltd. (Europa Re) is a catastrophe risk insurance services and reinsurance company owned by countries of Southeast Europe. It offers insurance market infrastructure services and technology solutions to local insurance companies, enabling them to provide homeowners, farmers, enterprises, and government organizations of South Eastern Europe with affordable insurance products against weather risk and geo-related perils. Europa Re's services also include optional reinsurance support to local insurers for Europa Re designed catastrophe and weather risk products. Europa Re was established to increase the level of catastrophe insurance penetration among households and small and medium enterprises (SMEs) in the region.

through training courses for trainers addressed to psychologists from Eastern Europe. In parallel to the psychological approach of victims, a new activity around the more traditional medical emergency viewpoint was launched in 2012 to diffuse pertinent first aid information through an online booklet to be finalized in 2013.

This focus on the human dimension has also driven the Agreement to address a relatively innovative issue, namely the ethical implications of DRR related activities. It gave rise in 2011 to the publication of ethical principles for DRR and people's resilience, recalling major international commitments applying to the various phases of risk cycle. The natural follow up to this somewhat conceptual work is to define concrete actions, with special attention devoted from 2013 onwards to the specific case of most vulnerable populations such as disabled persons or displaced people.

In short, the Agreement's activities over the past two years have continued to focus on addressing the sources of possible disasters, at the same time acknowledging the disaster response mechanisms in place at various levels. As economic and death tolls paid by societies to disasters remains high, it is important to continue to work not only on actual sources of vulnerability but also on potential vulnerabilities related to the increasing climate-related risks.

## Disaster Preparedness and Prevention Initiative for South Eastern Europe (DPPI SEE)

In 2000, the Stability Pact for South Eastern Europe launched the Disaster Preparedness and Prevention Initiative (DPPI) to contribute to the development of a cohesive regional strategy for disaster preparedness and prevention for its 11 members (Albania, Bosnia & Herzegovina, Bulgaria, Croatia, , Moldova, Montenegro, Romania, Serbia,

Slovenia, The former Yugoslav Republic of Macedonia and Turkey) and partnering countries (Greece and Hungary).

The goal of the DPPI SEE is to foster regional cooperation and coordination in disaster preparedness and prevention for disasters in South Eastern Europe, as well as to:

- Strengthen good neighbourly relations and improvement through the exchange of information, lessons learned and best practices in the field of disaster management.
- Enhance cooperation between DPPI partners in view of EU enlargement and the process of Euro-Atlantic integration for SEE countries.
- Support and encourage countries in the region to develop, adopt and/or enforce state-of-the-art disaster emergency legislation, environmental regulations and codes designed to prevent and mitigate disasters in line with guidelines and common practices accepted in the international community.
- Assist and encourage countries in the region to implement the Hyogo Framework for Action 2005 2015.

Other international and regional organizations that have supported this process include the EU, UNDP, UNISDR, UN OCHA, the International Federation of Red Cross and Red Crescent Societies (IFRC), North Atlantic Treaty Organization (NATO), the Swedish Rescue Services Agency and the Danish Emergency Management Agency.

Over the 2011 – 2013 period, DPPI implemented Phase II of its Disaster Management Training Programme (DMTP) curricula. DMTP aims to build capacity in DRR by a variety of means including developing training tailor-

made for the needs of the SEE region, by leveraging human resources through a train-the-trainer approach, improving capacity for risk identification and assessment and building familiarity with the framework for DRR in the HFA and UNISDR system.

Gender awareness in DRR programmes formed a major part of the DMTP courses. DMTP delivered five training courses (and training the trainers) over the 2011- 2013 period, in Bosnia and Herzegovina. Bulgaria, Croatia, Romania, and the former Yugoslav Republic of Macedonia. The DPPI SEE Secretariat regularly monitored the progress of the project and offered follow-up with trainees and mentoring of trainers to build capacity.

In April 2012, DPPI SEE held a two-day planning meeting in Dubrovnik, Croatia, which was organized by the Croatian National Protection and Rescue Directorate. The meeting was designed in a workshop format to allow all of the participants to take stock and reflect on past activities, detail capacities built and lessons learned and explore continuing gaps in capacity and needs and translating those into future project activities.

### European Forum for Disaster Risk Reduction (EFDRR)

Since the establishment of the UNISDR Regional Office for Europe in 2007, the European NPs and HFA Focal Points have met to share their experiences, good practices and challenges in addressing disaster risk reduction in the context of the HFA implementation.

The European Forum includes HFA Focal Points and representatives of National Platforms in the European region, UNISDR-Europe, regional organizations, in particular representatives from the Council of Europe EUR-OPA, and representatives from the European Commission, and sub-regional organizations/institutions as agreed by the Forum.

The objectives of the EFDRR are:

- To serve as a forum to stimulate and facilitate the exchange of information and knowledge among participating National HFA Focal Points and Platforms and regional/sub regional partners.
- 2. To provide advocacy for effective action to reduce disasters, by contributing to the implementation of the HFA and by promoting and supporting the creation of new National Platforms
- 3. To create a safer Europe by reducing the impact of natural hazards to reduce vulnerability, and increasing the ability to minimize consequences of disasters
- 4. The Forum facilitates exchanges among European nations on the implementation of the HFA, for expanding the political space devoted to the issue and promoting innovative ideas in the field of DRR.

At the third annual meeting of the European Forum for Disaster Risk Reduction, 27 Countries, together with the Major Hazard Agreement of the Council of Europe, (EUR-OPA), the European Commission (DG ECHO), the Disaster Preparedness and Prevention Initiative for South Eastern Europe (DPPI-SEE) and the UNISDR gathered on 1 -2 October 2012 in Dubrovnik, Republic of Croatia, under the chairmanship of Croatia. The platform consulted and highlighted key elements of reflections on the post HFA framework for disaster risk reduction. The Forum agreed on the way forward in sharing information in Europe towards awareness raising, analysed the impact of European countries in including risk reduction in climate change adaptation strategies and issued recommendations towards a systematic integration of a risk reduction approach in climate change adaptation strategies and committed to join forces towards building resilience at the local level. The Forum also heard the experience of the HFA UK peer review and highlighted its value in raising the profile of DRR at the national level.



#### "Champion of Local Change" Award

During Europe's Regional Platform Meeting in Dubrovnik, Republic of Croatia, 1-3 October 2012, the first European "Champion of Local Change" Award was given to the local Croatian educator Ms. Sunèana Jokic for her work in raising awareness on disaster risk with a special focus on children and young people.

"Remember – if you are working with one child you are working with a whole family and a small part of the community" – Sunèana Jokic

Photo: Damir Cemerin (Deputy Commander of Civil Protection National Protection and Rescue Directorate) and Sunèana Jokic – 1 October 2012, Dubrovnik. Republic of Croatia

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The Forum meeting was also the occasion to honour the first European "Champion of Local Change" with the

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The EFDRR Working Group on Climate Change Adaptation and Disaster Risk Reduction (chaired by Norway in 2012, which also took the lead in organizing the survey) developed a pan-European survey on how governments include disaster risk reduction measures into their national climate change adaptation strategies, with 23 countries completing the survey. While in 2012 the activity has increased knowledge sharing among European countries developing national strategies for adaptation to climate change; in 2013, the survey is envisaged to be further developed into an analysis of its findings for recommendations.

The main findings were presented at the 2012 Global Risk Forum in Davos, Switzerland (August 2012) and at the European Forum for DRR in Dubrovnik, Republic of Croatia (October 2012).

The EFDRR annual meeting was the first one attended by Belarus, which submitted its first HFA monitoring report

and nominated its HFA Focal Point. In 2013, Belarus will likely launch its National Platform and arrange ministerial level attendance for the Global Platform for Disaster Risk Reduction.



HFA
Implementation
at local level
-getting cities ready



## 3. HFA implementation at local level – getting cities ready

Local governments are the institutional and politically responsible bodies at community level. They are often the first to respond to citizens' needs, provide basic services and oversight, engage in urban development and manage emergencies and disaster risk. They need knowledge, tools, capacities and resources to meet their responsibilities. The Making Cities Resilient Campaign can help local governments to serve their citizens. It is critical that the national and international communities consider local governments when policies are set and resources made available.

The "Making Cities Resilient – My City is Getting Ready" Campaign, launched in May 2010, addresses issues of local governance and urban risk. With the support and recommendation of many partners and participants, and a Mayors Statement made during the 2011 Global Platform for Disaster Risk Reduction, the Making Cities Resilient Campaign entered its second phase in 2012 and will continue throughout 2015.

The campaign focus areas for 2012-2015 are:

- Know More and Commit: sign up more local governments and national government support for resilient cities
- Invest Wiser, Build Safer: Implement city-to-city learning exchanges and promote capacity building, handbooks and guidelines.
- 3. Benchmark and Report: Local Government Self-Assessment Tool and Resilient Cities Report.
- 4. Emphasis on partnerships and UNISDR capacity as a platform and knowledge management hub.

In connection with the third focus area, benchmarking and

reporting, seven European cities have concluded the Local Government Self-Assessment Tool. Experiences from several European Campaign cities are show cased in the Resilient Cities Report 2012 drawing on the Ten Essentials for Making Cities Resilient.

The Ten Essentials is a ten-point checklist and the building block for disaster risk reduction, developed in line with the five priorities of the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters.

The Local Government Self-Assessment Tool (LGSAT) provides key questions and measurements against the Ten Essentials for Making Cities Resilient and builds upon the priorities and national indicators of the Hyogo Framework for Action. The Local Government Self-Assessment Tool will help cities and local actors to set baselines, identify gaps and have comparable data across local governments, within the country and globally, to measure advancements over time.

The main purposes of the LGSAT are to:

- Help local governments engage with different stakeholders to map and understand existing gaps and challenges in disaster risk reduction in their city or locality.
- Set a baseline and develop status reports for cities and municipalities that have committed to the Making Cities Resilient Campaign and its Ten Essentials.
- Complement information gathered through the national Hyogo Framework for Action monitoring system (HFA Monitor) by providing local-level information. Cities can choose to share their results with national HFA focal points as part of the national reporting process.

Level of Progress	DESCRIPTION OF LEVEL OF PROGRESS FOR OVERALL RANKING
5	Comprehensive achievement has been attained, with the commitment and capacities to sustain efforts at all levels.
4	Substantial achievement has been attained, but with some recognized deficiencies in commitment, financial resources or operational capacities.
3	There is some institutional commitment and capacities to achieving DRR, but progress is not comprehensive or substantial.
2	Achievements have been made but are incomplete, and while improvements are planned, the commitments and capacities are limited.
1	Achievements are minor and there are few signs of planning or forward action to improve the situation.

TEN ESSENTIALS	KEY QUESTION PER ESSENTIAL [Numbers following each question indicate references to HFA Core Indicators]
ESSENTIAL 1: Put in place organization and	<ol> <li>How well are local organizations (including local government) equipped with capacities (knowledge, experience, official mandate) for disadter risk reduction and climate change ad- aptation? [1.1]</li> </ol>
coordination to clarify everyone's roles and responsibilities	To what extent do partnerships exist between communities, private sector and local authorities to reduce risk? [1.1]
[HFA PRIORITY 1]	3. How much does the local government support vulnerable local communities (particularly women, elderly, infirmed, children) to actively participate in risk reduction decision making, policy making, planning and implementation processes? [1.3]
	4. To what extent does the local government participate in national DRR planning? [1.4]

The online system and template were developed by UNIS-DR, in consultation with partners, including representatives of local and national governments. To be effective, the self-assessment should be undertaken as a multi-stakeholder process, led by local governments. The main actors include local government authorities, civil society organizations, local academia, the business community and community-based organizations, with the support of national entities as needed. The involvement of civil society organizations and community-based organizations is essential to the success of this process.

The online version of the LGSAT includes local context indicators, presented as "key questions", each of which is assessed on a scale from 1 to 5.

The key questions are aligned with the HFA priority areas and core indicators as well as to the Ten Essentials of the Resilient Cities Campaign. The self-assessment will enrich the national HFA review process and the online profile of local governments participating in the Resilient Cities Campaign. The self-assessment is suggested to coincide with the national HFA monitoring cycle, to be undertaken every two years.

In the 2011 – 2013 HFA monitoring cycle, nine European cities completed the LGSAT:

- Italy: Casarza Ligure\*, Venice
- Portugal: Amadora, Lisbon
- Spain: Barcelona\*
- Sweden: Arvika, Jonkoping, Gothenburg, Karlstad

As this is the first local level reporting for the HFA, the following should be considered baseline results. As not all countries provided indicators for each of the 41 key questions, in several instances stating that the Key Questions were not related to the local context, the results are grouped within the Ten Essentials, rather than an analysis of re-

sponses to each question. One city reported against the five areas of priority in the HFA.

#### Essential 1: Average result: 4.2

The cities reported the strongest progress within the first Essential and have made significant efforts to put organizational structures in place. Each of the cities reported different approaches to organization and coordination. In Amadora, the Mayor created a team that established more than 40 partnerships to work on building resilience to disasters at the local level.

With respect to the support of vulnerable communities, Lisbon reported that its organizational structure includes linkages to the private sector. For example, the City's contingency plan for extreme cold includes a response to the homeless population based on a partnership between local authorities and the private sector for temporary food and shelter. In terms of participation in national DRR planning, Lisbon has working groups with experts in urban planning represented in the framework of prevention of risks at regional and national levels.

The Swedish disaster management system is based on a decentralized structure with responsibility remaining during a crisis with whichever entity had that responsibility during normal, pre-crisis operations. As such, the Swedish cities that completed the assessments all reported established organizational structures for DRR. Arvika, having experienced a number of severe floods, has created an efficient organization for risk reduction, with such structures as a crisis advisory group, a collaboration council and other entities to coordinate preparation and response. Jönköping reported that it holds disaster risk knowledge and experience in several different areas of its municipal organization and their work is coordinated through Rescue Services.

 $<sup>^</sup>st$ due to the late submission of the LGSAT report those two cities are not included in this local analysis chapter

Both Jönköping and Gothenburg reported progress in bringing private sector partnerships into the DRR organization, such as an effective partnership with the insurance sector to address flooding risks. The cities also have organizational structures in place to provide for city-to-city cooperation (with Stockholm and Malmö) and with universities and government agencies at regional and national levels.

Karlstad joined the Resilient Cities Campaign in 2010 and since then its DRR organization has implemented a flood risk management programme. Flood risk maps are published on the municipality website. A Flood Risk Management Coordinator has been employed since 2007 and additional projects are underway, both at the strategic and technical level.

Venice has a large and active network of actors dealing with DRR, including public administrations at all levels, civil protection actors, scientific institutions and NGOs. The Municipality of Venice runs a Tidal Forecasting and Early Warning Centre with dedicated specialized personnel active round-the-clock. The City's various civil protection authorities coordinate with one another and collaborate with authorities responsible for the conservation of cultural heritage.

#### Essential 2: Average result: 3.1

The second Essential, which concerns the availability of financial resources, was the area where the cities reported the least progress.

Amadora reported that it has few financial mechanisms to respond to disaster, but is contemplating a fund to invest in new technologies for risk assessment and to provide incentives to relocate people and activities away from the areas of highest risk. Lisbon reported that the response and recovery budget is not allocated by municipality.

Jönköping reported that some DRR activities falls within the normal duties of the municipality and is therefore part of the regular budget of the municipality. This includes rescue services, the technical office, environmental agency and the city planning office. In addition, local funding and national funding are available for example CCA. Two concrete examples of national funding are funds for a local risk coordination post and funds for natural hazard risk reduction measures.. Arvika reported that the Swedish Government reduced state funding for risk reduction efforts during the year 2013, which puts Arvika's planned investment in flood barriers towards Lake Glasfjorden at risk. In order to strengthen the infrastructural capacity to cope with heavy rains, Arvika has a long-term investment plan for the water and sewage system. The Fire and Rescue Service also has a budget for preventive action which increases preparedness and enables efficient measures to be taken in times of crisis. Karlstad has a DRR investment and operational budget and employs a risk management coordinator. The rescue and fire services have officials working with DRR, both in prevention and with operational issues. There is also a yearly budget for investigations and flood measurements etc and investments are made for special projects (for example purchasing of pumps and barriers as well as the construction of permanent flood protection structures). Prevention work is taken into account in urban planning.

TEN ESSENTIALS	KEY QUESTION PER ESSENTIAL [Numbers following each question indicate references to HFA Core Indicators]
ESSENTIAL 2: Assign a budget and provide incentives for	5. To what extend does the local government have access to adequate finanvial resources to carry out risk reduction activities? [1.2]
homeowners, low- income families and the private sector to invest in risk reduction	6. To what degree does the local government allocate sufficient financial resources to carry out DRR activities, including effective disaster response and recovery? [1.2]
[HFA PRIORITY 1 AND 4]	7. What is the scope of financial services (e.g. saving and credit schemes, macro and micro-insurance) available to vulnerable and marginalised house holds for pre-desaster times? [4.2]
	8. To what extent are microfinancing, cash aid, soft loans, loan guarantees, etc. available to affected households after disasters to restart livelihoods? [4.2]
	<ol> <li>How well establishe are economic incentives for investing in disaster risk reduction for house- holds and businesses (e.g. reduced insurance premiums for households, tax holydays for busi- nesses)? [4.3]</li> </ol>
	<ol> <li>To what extent do local business associations, such as chambers of commerce and similar, support efforts of small enterprises for business continuity during and after disasters? [4.3]</li> </ol>

Sweden has funding instruments that provide for investment budgets and operational budgets in respect of DRR. These nationally funded general flood and landslide risk mapping and grants for which municipalities may apply to fund permanent prevention work, such as the construction of flood barriers. A challenge remains in that Swedish insurance companies do not assess higher risk premiums for construction in flood-prone areas.

Venice reported that the economic crisis has had a deep impact on local governance. In Italy both declining tax revenues and reduced government transfers from national level have affected the resources of local authorities. This has significantly impacted Venice. Over the past 30 years, the National Special Law for Venice has provided dedicated national funds to finance structural measures to safeguard the lagoon as well as maintenance activities directly impacting urban risk reduction. The Special Law financed significant safeguarding measures such as: the morphological restoration of the lagoon with the aim to re-equilibrate the capacity of the ecosystem, the restoration of sea-walls, the defence of Venice littoral through the reconstruction of the natural barriers from the sea and, finally, the MOSE infrastructure (Mobile Tidal Barrier System).

The maintenance activities financed by the Special Law include the seabed excavation of channels (for the navigation of boats, including emergency boats such as hydroambulances, fire boats and other vessels), the raising of the pavements and the restoration of underground services and other works of urban maintenance. Since 1984, the funds provided by the Special Law for Venice total approximately € 10 billion. In recent years, the funds have been almost completely absorbed by the construction of the MOSE system, and the urban maintenance works have been drastically reduced.

Venice believes that annual funding of approximately € 47 million will be required to ensure the physical survival of the city over the next 20 years. In 2011, the available funding was only € 4.5 million, with € 2.4 million available for 2013. Delays in receiving national funds postponed the conclusion of the MOSE from 2014 to 2016. Venice is advocating at national level for disbursement of the promised funds to ensure the maintenance of the City's sensitive ecology and for concluding the MOSE project.

In recent years, substantial funds have been spent for DRR work:  $\in$  1,3 million to realize the alert system for industrial accidents and  $\in$  35 million to date for the fire protection network with an additional  $\in$  20 million required to bring the project to completion. When fully operational, annual maintenance will cost  $\in$  1 million. In addition, specialized communications tools cost Venice some tens of thousands of Euros annually, such as SMS alerts for exceptionally high tides raising flood risks and variable message panels, for example.

Venice's local funding contribution consists of a "reserve fund" within the municipal budget which is established annually and must be between 0.3 and 2.0% of total current expenses (in 2012 amounted to € 1,638,577 on a total of € 514,078,553) Funds for emergency intervention and for the early recovery are allocated by the central government. Recently, a fuel tax has been introduced to finance measures of this type.

#### Essential 3: Average result: 4.1

The third essential, risk assessments, was an area of high achievement. Each of the cities reported specific accomplishments in conducting risk assessments and disseminat-

TEN ESSENTIALS	KEY QUESTION PER ESSENTIAL [Numbers following each question indicate references to HFA Core Indicators]
ESSENTIAL 3: Update data on hazards and vulner-	11. To what degree does the local government conduct thorough disaster risk assesments for key vulnerable development sectors in your local authority? [2.1]
abilities, prepare and share risk assesments  [HFA PRIORITY 2,3	12. To what extent are these risk assesments regularly updated, e.g. annually or on bi annual basis? [2.1]
AND 4]	13. How regularly does the local government communicate to the community information on local hazard trend and risk reduction measures (e.g. using a Risk Communications Plan), including early warnings of likely hazard impact? [3.1]
	14. How well are local government risk assesment linked to, and supportive of, risk assesment from neighbouring local authorities and state or provincial government risk management plans? [2.4]
	15. How well are disaster risk assesments incorporated into all relevant local development planning on consistent basis? [2.1]

ing the findings. At the same time, the cities are running fast to stay in place as the increasing frequency and severity of hazards means that risk assessments become obsolete in short order.

Amadora reported that over the past three years, it has performed several risk assessments (seismic risk, flood risk, landslide risk) through a multi stakeholder approach to better understand the City's vulnerability. The information is updated every two years and is available to the public. In February 2012, Amadora concluded a publication on Historic Loss Data (2000-2010) in Amadora Municipality, where it identified critical areas. Lisbon reported that its Emergency Plan, which is updated every two years, identifies key risks, including migration, extreme weather, rail crossing of dangerous goods and other hazards. Lisbon's Technical University monitors and analyses weather developments.

Arvika Municipality is a member of the regional group for crisis management organized by the county. Arvika municipality has developed reports commissioned by Swedish authorities, such as an investigation on climate vulnerability. Arvika has also supported the work to fulfil Sweden's obligations under the European Floods Directive, which requires EU Member States to engage their government departments, agencies and other bodies to develop flood risk assessments. Gothenburg reported that the city's risk assessments are updated annually; however a challenge remains in incorporating disaster risk assessments consistently into development planning. Jönköping is currently revising its municipal land use plan and will focus more on risk aspects. Karlstad has guidelines for new city planning and building, and analysis of flood risk in the vulnerable areas. The City of Venice adopted a Civil Protection Plan for emergency prevention and management. The Plan is published on the official website of the city and information campaigns are carried out in order to make relevant information available to citizens, giving particular attention

to students in schools exposed to flooding, industrial and domestic risks. The Emergency Plan is updated every two years.

#### Essential 4: Average result: 3.9

Progress against the fourth Essential would appear at first glance to be dependent of progress against the second Essential: availability of financial resources. Closer examination of the city reports reveals that this was not always the case. Certain of the cities participating in the Resilient Cities Campaign, such as Lisbon, have succeeded in providing in-kind resources to conduct risk assessments even if the financing is not available to correct the identified gaps.

Both Amadora and Lisbon reported that Portugal has legislation regarding the protection of infrastructure. Amadora has made efforts to guarantee the performance of certain critical infrastructure, but believes that more needs to be done, such as investments in efficient drainage networks, taking into account historic rainfall and demographic realities. In this domain, Amadora's Resilient Cities Campaign team has provided technical support to all stakeholders to improve the security of their facilities.

Arvika reported a long-term investment plan is in place for the water and sewage system. Since the municipality has not only been affected by floods caused by longer periods of rain, but also by so-called "urban floods" caused by short-term heavy rainfalls, this investment plan is an important part of strengthening the infrastructural capacity to cope with heavy rains. Gothenburg reports that the City has identified a system for priority in restoring electricity in the aftermath of disaster, recognizing the special vulnerability of hospitals and the elderly. Jönköping has approximately 50 Service Points, or facilities with back up electricity and water, which may be opened to the public in the event of an emergency. Karlstad is working on a contingency plan

TEN ESSENTIALS	KEY QUESTION PER ESSENTIAL [Numbers following each question indicate references to HFA Core Indicators]
ESSENTIAL 4: Invest in and maintain risk reducing infrastructure, such as storm drainage  [HFA 4]	<ul> <li>16. How far do land use policies and planning regulations for housing and development infrastructure take current and projected disaster risk (including climate related risks) into account? [4.1.2]</li> <li>housing</li> <li>communication</li> <li>transportation</li> <li>energy</li> </ul>
	17. How adequately are critical public facilities and infrastructure located in high risk areas assessed for all hazard risks and safety? [4.4.1]
	18. How adequate are the measures that are being undertaken to protect critical public facilities and infrastructure from damage during disasters? [4.4.2]

TEN ESSENTIALS	KEY QUESTION PER ESSENTIAL [Numbers following each question indicate references to HFA Core Indicators]
ESSENTIAL 5: Assess the safety of all schools and health facilities and upgrade these as necessary	<ul> <li>19. To what extent have local schools, hospitals and health facilities received special attention for "all hazard" risk assessments in your local authority? [2.1.1]</li> <li>Schools and/or</li> <li>Hospitals/ health facilities</li> </ul>
[HFA 2, 4 and 5]	<ul> <li>20. How safe are all main schools, hospitals and health facilities from disasters so that they have the ability to remain operational during emergencies? [2.1.2]</li> <li>Schools and/or</li> <li>Hospitals/ health facilities</li> </ul>
	21. To what degree do local governments or other levels of government have special programs in place to regularly assess schools, hospitals and health facilities for maintenance, compliance with building codes, general safety, weather-related risks etc.? [3.1.1]
	22. How far are regular disaster preparedness drills undertaken in schools, hospitals and health facilities? [2.4.1]  □ Schools and/or □ Hospitals/ health facilities

for flooding, including the development of an inventory of critical infrastructure at risk. The work is in progress.

In Venice, land use policies and planning regulations take current and projected disaster risks (including climate related risks) into account. The Urban-Structure Plan provides the minimum requirements for buildings located in vulnerable areas. The building code defines minimum quotas for the ground floors of buildings located in the Venice islands in order to protect them from high tides. The Italian National law requires, for some categories of buildings, a certificate of fire prevention and compliance with anti-seismic measures, depending on the area. All of the critical public facilities and infrastructure (wherever located) have to obtain these permissions; in some cases, these documents are released with prescriptions for improvement.

#### Essential 5: Average result: 3.7

Progress made against the Fifth Essential reveals that cities attach a high priority to protecting critical social infrastructure, such as schools, hospitals and health facilities. They have invested considerable effort in undertaking drills to rehearse emergency responses and assess and mitigate risks. The cities report that they share certain challenges: in some cases, responsibility for the facilities in their municipalities resides at county or higher levels, for example. Another common challenge was that safety plans and drills tend to focus on single known hazards, such as fires or, less frequently, floods, leaving many risks unaddressed.

However, where the cities have authority to do so, they have taken measures to assess the safety of their schools and health facilities and taken corrective action to remedy vulnerabilities. One of the challenges that the cities report is that their risk assessments and preparation drills are often limited to single, common hazards, such as fire or flood.

Amadora reported significant progress in this area. Specifically, the City has done risk assessments and developed safety plans for the schools. There is ongoing cooperation between the Resilient Cities Campaign, the schools and health facilities. Lisbon reported that its assessment of risks for schools has been limited to fire risks where exercises and drills take place on a regular basis.

Arvika reported that due to long standing democratic tradition, Sweden's population has many opportunities to take part in decisions concerning disaster risk reduction. At the municipal level residents are welcome to attend the meetings of the Municipal Council (Kommunfullmäktige) where time is allocated for questions from the public. Inhabitants of the municipality are also welcome to contribute to the Municipality Council meetings by formulating propositions (medborgarförslag) on how to improve the municipality and how it is managed. Thus, the public can influence the decisions made by the Municipality Council. These possibilities are available to all inhabitants of Arvika municipality (and in Jonkoping, Gothenburg and Karlstad), regardless of their age, gender or origin. There is also a Risk Group, which aims to encourage collaboration and coordinate risk and safety matters within Arvika's municipal organization. Gothenburg reported that regular assessments of schools and health facilities are the responsibility of the national government. Jönköping reported that hospitals, schools and homes for the elderly have workplace

health and safety plans in place, which are managed by the municipality and have back up electricity. Hospitals are managed by the County Council, and therefore are mainly the Council's responsibility, although the Municipality and City Council cooperate in order to manage risks. Workplace health and safety inspections are conducted on a regular basis in schools, health and medical facilities.

In Venice, the hospitals are under regional authority, but the City is responsible for the schools. The schools carry out constant awareness raising activities, such as evacuation drills for fires. For the hospitals, the regional authority organizes evacuation drills twice each year. The hospitals are equipped to supply continuous power in the event of disruption; the schools do not have comparable power supplies.

#### Essential 6: Average result: 3.9

Progress against the Sixth Essential is documented for work developed for building codes, land use regulation and other means of providing regulatory oversight at the local level. All of the cities report achievement in establishing codes and regulations to support disaster risk reduction. However, a consistent theme emerges from the city reports: strengthening structural codes does not automatically translate into enhanced disaster resilience. The challenges arise from the difficulty in enforcing codes and the perceived inability to impose higher safety standards retroactively on existing structures or mandating that existing structures be retrofitted to comply with new building safety codes.

Amadora reported progress with its oversight of the implementation of various laws on building codes, health and safety. However, a challenge remains in the gaps in national legislation addressing risk management at the local level. Lisbon reported that its historical areas are more vulnerable to natural hazards; some of them have been poorly preserved. The City is testing a new programme of rehabilitation by which publicly owned older properties are sold at auction enabling new buyers to restore them.

In Sweden, the system for risk-sensitive land use is well organized, relieving the local municipalities of that responsibility, according to the report of Gothenburg. However,

Arvika reported that a weakness in the Swedish building code is the lack of enforcement measures to demand risk reduction measures for existing buildings. Jönköping reported a challenge in that climate change is altering risks and that as a result, current land use plans may soon be obsolete to some extent. Karlstad reported that building codes are stronger today, but that it cannot put these codes into city plans for managing natural hazards.

Venice's Urban-Structure outlines the strategic choices concerning the structure and development of the City's land. It points out the specific issues – geological, geo-morphological, hydro-geological, landscape, environmental, historic, monumental, and architectural – according to the targets and guidelines set out in the land planning, as well as based on the needs of the local community.

#### Essential 7: Average result: 3.7

Progress against the Seventh Essential is significant in that each of the cities have undertaken educational programming and training on disaster risk reduction in schools and communities. However, the reports reveal that the efforts are not always comprehensive or consistent.

Amadora reported strong progress in this area and has developed manuals and risk and security programmes, with more than 3.000 students and 250 sessions organized for local schools. Several initiatives, including workshops, promote awareness of citizen safety and disaster risk reduction. In Lisbon, the Civil Protection Department has a training course "Growing Up in Safety" for children between the ages of five and twelve years of age. The course addresses safe behaviours in the face of fire and earthquake risks. In Arvika, the Fire and Rescue Services organized a project called "A risk-and-safety -conscious generation" during the years 2007-2010, which targeted youths of different ages. Gothenburg reported progress in training for risk and security for public officials. A challenge remains in citizen awareness and that evacuation plans and drills are mostly a matter for the police.

Jönköping's Safety and Security Department trains approximately 14.000 people annually in various safety and security courses. All parts of the municipal organization receive education and training for disasters based on their

TEN ESSENTIALS	KEY QUESTION PER ESSENTIAL [Numbers following each question indicate references to HFA Core Indicators]
ESSENTIAL 6: Enforce risk-compliant building regulations and land use planning, identify safe land for low-income citizen [HFA 2, 4 and 5]	23. How well are risk-sensitive land use regulations and building codes, health and safety codes enforced across all development zones and building types? [4.1.3]
	24. How strong are existing regulations (e.g. land use plans, building codes etc) to support disaster risk reduction in your local authority? [4.1.4]

TEN ESSENTIALS	KEY QUESTION PER ESSENTIAL [Numbers following each question indicate references to HFA Core Indicators]
ESSENTIAL 7: Ensure education programmes & training on disaster risk reduction are in place in schools and communities  [HFA 1, 3 and 5]	25. How regularly does the local government conduct awareness-building or education programs on DRR and disaster preparedness for local communities? [1.3.3.]  □ programs include cultural diversity issues □ programs are sensitive to gender perspectives
	26. To what extent does the local government provide training in risk reduction for local officials and community leaders? [3.2.1]
	27. To what degree do local schools and colleges include courses, education or training in disaster risk reduction (including climate related risks) as part of the education curriculum? [5.2.4]

own roles. In Karlstad, every city employee has to complete a course on climate adaptation that specifically addresses flood risks.

Venice reported training, particularly with students, for emergency protocols in the event of industrial accident, such as "shelter in place" rather than evacuate. Volunteer groups are very active in municipal civil protection.

#### Essential 8: Average result: 3.5

Progress against the Eighth Essential is uneven in that each of the cities reports high levels of awareness of the impacts of climate change and the urgency to develop adaptive responses. However, the awareness does not always translate into tangible actions or, in the examples of cities that

have undertaken specific programmes, actions that can be measured in quantifiable outcomes. Awareness and commitment at the city level are not always commensurate with outcome-oriented programmes.

Amadora recently joined the European program ECOXXI and has promoted a set of environmental and sustainable measures around climate change, recycling and the preservation of ecosystems. Many of these measures, such as the construction of urban parks in flood areas, are financed by the private sector. Lisbon has a "Green Plan" that covers the ecological structure, consisting of a matrix formed by the various systems, such as air and water. Its Local Agenda 21 Action Plans, developed with local stakeholders and the University of Lisbon, aim to engage citizens in the sustainable management of their communities.

The Swedish Environmental Code is comprehensive and

TEN ESSENTIALS	KEY QUESTION PER ESSENTIAL [Numbers following each question indicate references to HFA Core Indicators]
ESSENTIAL 8: Protect ecosystems & natural buffers to mitigate hazards, adapt to climate change [HFA 4]	28. How well integrated are local government DRR policies, strategies and implementation plans with existing environmental development and natural resource management plans? [4.1.1]
	<ul> <li>29. To what degree does the local government support the restoration, protection and sustainable management of ecosystems services? [4.1.5]    forests   coastal zones   wetlands   water resources   river basins   fisheries</li> <li>30. How much do civil society organizations and citizens participate in the restoration, protection and sustainable management of ecosystems services? [4.1.6]</li> </ul>
	31. How much does the private sector participate in the implementation of environmental and ecosystems management plans in your local authority? [4.1.7]

TEN ESSENTIALS	KEY QUESTION PER ESSENTIAL [Numbers following each question indicate references to HFA Core Indicators]
ESSENTIAL 9: Install early warning systems & emergency management capaci- ties [HFA 2 and 5]	32. To what degree do local institutions have access to financial reserves to support effective disaster response and early recovery? [5.3.1.]
	33. To what extent are early warning centres established, adequately staffed (or on-call personnel) and well resourced (power back ups, equipment redundancy etc) at all times? [2.3.1]
	34. How much do warning systems allow for adequate community participation? [2.3.2]
	35. To what extent does the local government have an emergency operations centre (EOC) and/or an emergency communication system? [5.2.3]
	36. How regularly are training drills and rehearsal carried out with the participation of relevant government, non-governmental, local leaders and volunteers? [5.2.1]
	37. How available are key resources for effective response, such as emergency supplies, emergency shelters, identified evacuation routes and contingency plans at all times? [5.2.2]    Stockpiles of relief supplies  Emergency shelters  Safe evacuation routes identified
	□ Contingency plan or community disaster preparedness plan for all major hazards

includes strict regulations ensuring effective environmental protection. For example, there are national restrictions on deforestation, logging and ditching dykes. Because of the strict national environmental legislation, the municipalities' role in the protection of important ecosystems is not a major issue for Arvika. Gothenburg reported the integration of local governments into existing national environmental plans in terms of clear division of roles and responsibilities. Oil discharge in the sea, for example, is an area for which the municipalities are responsible. Since 2009, Jönköping has a conservation programme to protect biodiversity, specifying the objectives and measures, for example, to increase the knowledge and understanding, and to provide material for strategies and land use planning. There are also more specific projects, such as one to remove bankings in order to restore streams and natural fish habitats. The number of Conservation Areas is regularly published on the website. The use of natural resources to slow floods down is mentioned in the Programme, though not fully integrated in the DRR work.

Karlstad has a strategy to be a sustainable city. It is working on different climate adaptation projects, energy saving projects, sustainable storm water management, forming new nature reserves, sustainable transport systems, protect valuable water systems, sustainable city building etc. in pursuit of this goal.

Venice engages the private sector in its new "Urban Structure Plan" that establishes a "Green Belt" for environmentally sustainable projects. Private businesses that partici-

pate may obtain permits to build in urban areas in exchange for rehabilitating designated environmentally protected areas. Participating businesses may also obtain building loans on favourable terms. Venice reported two particularly noteworthy projects within the Urban Structure Plan: the Venissa Project in the island of Mazzorbo focused on the integration between the recovery of production and development of the lagoon's traditional vegetable and wine and environmental protection. The second project was the territorial requalification of the Certosa Island with the development of a multifunctional area (for activities such as boating, hospitality, training, research, art, leisure activities, sports, agriculture and green spaces). A consortium of private companies is responsible for developing and implementing such projects, while the government is responsible for project oversight.

# Essential 9: Average result: 3.9

Essential 9 is an area of strong achievement, with the cities all reporting the installation of early warning systems and management capabilities. A shared challenge is the need to engage the public in accessing and responding to these warnings. In several cases, emergency management has been treated as the sole domain of public responders, such as the police. Creative solutions, such as the use of social media, are being attempted to alert the public to emergency situations.

Amadora reported achievements in having a dynamic

TEN ESSENTIALS	KEY QUESTION PER ESSENTIAL [Numbers following each question indicate references to HFA Core Indicators]
ESSENTIAL 10: Ensure that the needs and participation of the affected popula- tion are at the centre of reconstruction [HFA 4 and 5]	38. How much access does the local government have to resources and expertise to assist victims of psycho-social (psychological, emotional) impacts of disasters? [5.3.2]
	39. How well are disaster risk reduction measures integrated into post-disaster recovery and rehabilitation activities (i.e. build back better, livelihoods rehabilitation)? [4.5.1]
	40. To what degree does the Contingency Plan (or similar plan) include an outline strategy for post disaster recovery and reconstruction, including needs assessments and livelihoods rehabilitation? [5.2.5]

warning system and alerts to allow advance preparation of the local population. However, the City reported that it needs more financial resources to improve emergency shelters and supplies as well as conduct more drills with the participation of the whole community. Lisbon reported a challenge that it was addressing in that communities in the older parts of the city were invited to participate in the development of a local early warning system.

In Arvika, a civil protection alarm system alerts residents that a situation is critical. The alarm system is located in the urban area of Arvika, where the risk is high, as this area is where most people live close to industries and roads with hazardous goods. Arvika municipality is investigating the possibility to implement an early warning system to send text messages to property owners on their cell phones when the water levels approach their houses. Gothenburg reported achievement in early warning systems, but a challenge remains in the need for a creative campaign to raise public awareness about radio and other alerts in emergency situations. Jönköping's early warning systems are increasingly linking to social media, such as Facebook. Karlstad engages in frequent drills for disasters, particularly floods, and has a reserve budget for unforeseen risks.

Venice's early warning systems are impacted by the impediments local governments in Italy are experiencing in accessing national funding that had been committed to their programmes. The consequence to Venice has been insufficient funding for maintaining the equipment of the Tidal Forecasting and Early Warning Centre (IPCSM). Nevertheless, IPCSM is operational and carries out activities for forecasting and applied research. The early warning structure relies on teams from Civil Protection, Industrial Risk, Flood Risk and Municipal Volunteer Groups. The structure is guided by a councillor who reports directly to the Mayor of Venice.

# Essential 10: Average result: 3.8

Essential 10 is an area of strong awareness with each of the cities reporting specific measures to address the needs of the affected populations and engage them in the reconstruction of their communities. Each of the cities also reported continuous learning to better prepare for the next hazard, based on the most recent experience.

Amadora is developing its municipal emergency plan and contingency plans for extreme weather. There are specialized teams in place to support survivors in disaster situations. Last year, the City conducted training on postdisaster recovery plans. Lisbon is focusing its attention on the elderly population, where poverty and social isolation make this group more vulnerable to disasters. Gothenburg reported that it takes into consideration previous experiences of disasters to make improvements, such as protecting against the hazards of heavy snow on the roofs and Arvika has measures to ensure continuous learning to improve on experience with respect to floods. Jönköping and Karlstad are experienced in recovering from natural disasters and use learning and experience to improve resilience. Likewise, Venice reported that building regulations are updated to reflect the experiences of the most recent disasters.

# Integrating Local Assessment Tools into the HFA Core Indicators

To better comprehend how the Ten Essentials correspond to the five HFA Priorities for Action, the following table maps local key questions for the LGSAT against HFA core indicators.

HFA Priority for Action 1: Ensure that disater risk reduction is a nationa and local priority with a strong institutional basis for implementation		
<b>CI 1.1</b> National policy and legal framework for disaster risk reduction exists with decentralised responsabilities and capacities at all levels .		
<b>CI 1.2</b> Dedicated and adequate resources are available to implement disaster risk reduction plans and activities at all administrative levels.	5,6	
<b>CI 1.3</b> Community participation and decentralisation are ensured through the delegation of authority and resources to local levels.	3,25,26	
CI 1.4 A national multi-sectoral platform for disaster risk reduction is functioning.	4	
HFA Priority for Action 2: Identify, assess and monitor disaster risks and enhance early warning		
<b>CI 2.1</b> National and local risk assessments based on hazard data and vulnerability information are available and include risk.	11,12,15, 19,20	
<b>CI 2.2</b> Systems are in place to monitor, archive and disseminate data on key hazards and vulnerabilities.		
CI 2.3 Early warning systems are in place for all major hazards, with outreach to communities.	34 35	
<b>CI 2.4</b> National and local risk assessments take account of regional and trans-boundary risks, with a view to regional cooperation on risk reduction.	14	
HFA Priority for Action 3: Use knowledge, innovation and education to build a culture of safety and resilience at all levels		
<b>CI 3.1</b> Relevant information on disasters is available and accessible at all levels, to all stakeholders (through networks, development of information sharing systems, etc.).	13	
<b>CI 3.2</b> School curricula, education material and relevant trainings include disaster risk reduction and recovery concepts and practices.	27	
<b>CI 3.3</b> Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.		
<b>CI 3.4</b> Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.		

HFA Priority for Action 4: Reduce the underlying risk factors	
<b>CI 4.1</b> Disaster risk reduction is an integral objective of environment-related policies and plans, including for land use, natural resource management and adaptation to climate change.	30, 31 32
<b>CI 4.2</b> Social development policies and plans are being implemented to reduce the vulnerability of populations most at risk.	7 8
<b>CI 4.3</b> Economic and productive sectoral policies and plans have been implemented to reduce the vulnerability of economic activities.	
<b>CI 4.4</b> Planning and management of human settlements incorporate disaster risk reduction elements, including enforcement of building codes.	17,18
UFA Driegity for Astion E. Chromother dispeter proposed and	
HFA Priority for Action 5: Strengthen disaster preparedness for effective response at all levels	_
	1
for effective response at all levels  CI 5.1 Strong policy, technical and institutional capacities and mechanisms for disaster risk man-	1 22, 28, 36, 37, 38, 41
for effective response at all levels  CI 5.1 Strong policy, technical and institutional capacities and mechanisms for disaster risk management, with a disaster risk reduction perspective, are in place.  CI 5.2 Disaster preparedness plans and contingency plans are in place at all administrative levels, and regular training drills and rehearsals are held to test and develop disaster response pro-	22, 28, 36, 37, 38,

#### **Lessons Learned**

The LGSAT reports are not strictly comparable to the national HFA reports of the same 2011-2013 reporting cycle, in the sense that they are not structured around progress achieved and challenges remaining. Rather, the reports are descriptive in nature, as they are baseline measures with participation of only seven cities within three countries.

As an initial effort, the reports provide insight into achievements for DRR at the local level, particularly organizational structures for engaging a diverse set of actors with different DRR responsibilities, early warning systems and alerts, measures for protecting critical social infrastructure, such as schools and hospitals, and approaches to the risks brought on by climate change.

The reports also identify common challenges, suggesting an area for future work may be more city-to-city peer exchanges to share experiences and lessons learned. One of the common challenges reported was that while building codes address the need for greater resilience for new structures, it is unclear how to mandate that existing properties be retrofitted to withstand new hazards. Another common challenge was the need for more financial resources.

One can envision how future LGSAT reports might identify local governments that could join working groups to address common challenges or to highlight role model achievements. The initial local reports show enormous promise to do much more than the benchmarking and reporting that was originally intended.



Conclusions and Recommendations



#### 4. Conclusions and Recommendations

## 4.1 Progress from previous reporting cycles

The national and regional reports for the  $2011-2013~\mathrm{HFA}$  reporting cycle document the increasing recognition among governments of the need to raise the priority for disaster risk reduction. There is clear evidence of strong commitment in Europe to the HFA:

- UNISDR coverage in Europe includes 49 countries.
- HFA Focal Points have been designated in 38 European countries: Armenia, Albania, Austria, Belarus, Bosnia & Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Italy, Malta, Moldova, Monaco, Montenegro, The Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, the former Yugoslav Republic of Macedonia, Turkey, Ukraine, and the United Kingdom.
- National Platforms for disaster risk reduction have been established in 25 European countries: Armenia, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Finland, France, Germany, Greece, Hungary, Italy, Monaco, Netherlands, Norway, Poland, Portugal, Russian Federation, Serbia, Spain, Sweden, Switzerland, the former Yugoslav Republic of Macedonia, Turkey and the United Kingdom. Countries that do not have National Platforms officially recognized often utilize other mechanisms to convene the stakeholders in disaster risk reduction.

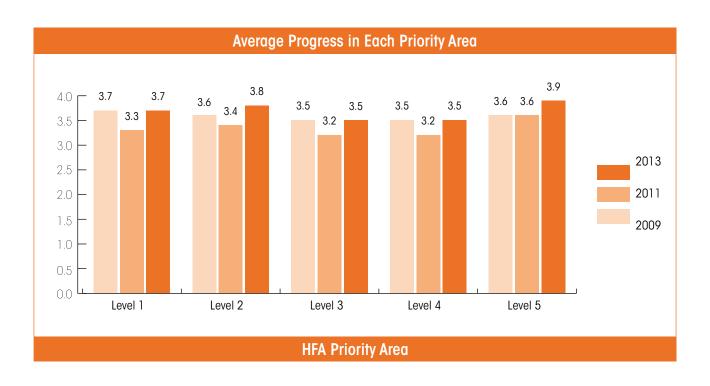
- There has been a consistent increase in the number of European countries reporting progress for the Hyogo Framework: in 17 in 2009, 22 in 2011 and 26 in 2013, a 50% increase in participation over four years.
- Several ministerial-level regional agreements, arrangements and strategies have been developed in sub-regions of Europe that include disaster risk reduction in their programmes and projects.
- UNISDR, the ISDR system, active governments and regional organisations have systematically promoted and advanced the implementation of the Hyogo Framework, such as within the European Union, a number of initiatives are being developed aimed at reducing vulnerability to disasters.

With the adoption of the HFA and the three strategic goals, the country reports show a desire to anchor a culture of risk and safety, instead of reactive emergency responses. The country reports also show increasing concern about adaptation to climate change challenges relative to what had been reported in 2009.

# Comparison of Progress Over Reporting Periods

At first glance, it may appear that the countries are making little progress, based on the average quantitative indicators. However, the following factors must be taken into account:

The sample of countries that conducted self-assessments of their HFA progress varied over the three reporting cycles. Only ten countries submitted reports in all three cycles. Adjusting the indicators to



include only those ten countries, thereby making the samples identical across reporting cycles, reveals that the levels of progress remained roughly even.

- Two of the three reporting cycles occurred during a period of severe economic recession, when financial resources for DRR investment were more difficult to obtain.
- An analysis of the text of the country reveals significant progress is being made that is not always reflected in the quantitative indicators.
- Countries are simultaneously dealing with emerging risks and changing technologies. They are not progressing against a static goal post; rather, they are working to achieve sustainable results in public safety even as the risks are increasing.
- Finally, the countries have done substantial groundwork in disaster risk reduction, the results of which may not be fully visible until future years.

#### **Areas of Substantial Progress**

An area of substantial progress concerns the **establishment of legal and regulatory frameworks for disaster risk reduction**. All countries reported progress in this area. In some cases, the countries enacted new legislation to address DRR; in other countries, existing legislation was amended to remain current and relevant to the changing risk land-scape.

The functioning of multi-sectoral **National Platforms** showed significant gains with eight countries establishing new NPs: Belarus, Bosnia and Herzegovina, Greece, The Netherlands, Norway, Serbia and Turkey. Existing platforms expanded their reach and engagement.

Reliance on key drivers of progress improved, with 50% increases over the last reporting cycle in significant reliance on key drivers such as gender, capacities, security/social equity, and engagement/partnership approaches.

**Preparations for trans-boundary risks** showed substantial improvement, in part motivated by legislation of the European Union, the initiatives of the regional partners and the need for countries to collaborate on mutual risks to better leverage limited resources.

The first ever peer review on the HFA implementation, performed in the United Kingdom was a success, with help-ful feedback and insight generated to support DRR efforts.

At the local level: strong growth in the Resilient Cities Campaign and the first ever reporting using the Local Government Self-Assessment Tool were strong successes. Equally important were new initiatives to raise awareness, such as the Champions of Change Award and the commitment to invest in DRR to protect cultural heritage.

Progress in addressing **climate change adaptation** was made at local and at regional levels. The **science-policy dialogue** was enhanced with specific measures to translate scientific research into measures to reduce disaster risk.

The 2011 HFA Europe Report recommended more work be done to **engage the private sector in DRR**. Since then, some tentative measures have been advanced, such as work with the insurance sector in several countries.

#### 4.2. Challenges

The increased awareness of the importance of disaster risk reduction is evident in the country and regional partner reports. However, building a culture of safety and resilience is challenging owing to the crosscutting nature of disaster risk reduction.

Many gaps and challenges identified in the 2009-2011 HFA progress report persisted over the 2009 – 2011 period, such as the need to deepen capacity in the insurance sector both to assess risk and to reduce the burden on the governments.

As severe disasters increasingly impact economic and social development without necessarily accompanying physical damage, policymakers are challenged to shift their paradigm of disasters and risk finance. This requires news policy frameworks, responses and programmes for risk mitigation, needs that are proving challenging.

Nearly all countries reported challenges in **sustaining commitment to and engagement in DRR**. A window of opportunity exists following a major disaster when awareness is high. But as the disaster recedes into memory, it becomes more difficult to sustain interest in DRR, which is a long-term process.

The need to develop capacity in the insurance sector should be viewed with greater urgency. Lessons learnt from initiatives such as the Europa Re reinsurance facility could be drawn to facilitate affordable access to catastrophic insurance coverage in other countries.

Much more work needs to be done to build capacity at the local level. Too often responsibilities for DRR have been transferred to the local levels without sufficient resources to implement the programmes.

There has been **virtually no progress in developing plans for sectoral risk assessment** and protection and safeguarding of economic activities. Effectiveness in implementing DRR is hindered by the lack of common understanding or appraisal of impacts. Property damage or destruction of key physical infrastructure is relatively easy to measure, but other losses, such as reduction of the tax base when disasters disrupt livelihoods are more difficult to measure. Addressing these gaps in understanding may motivate greater

Reporting Countries and Organizations		eporting Per	
Countries	2007/2009	2009/2011	2011/2
Albania		Х	Х
Armenia	Х	Х	Х
Belarus			Х
Bulgaria	Х	Х	Х
Croatia	Х	Х	Х
Czech Republic	Х	Х	Х
Finland		Х	Х
France	Х	Х	Х
Georgia		Х	Х
Germany	Х	Х	Х
Greece			Х
Hungary	Х	Х	Х
Italy	Х	Х	Х
Moldova		Х	
Monaco		Х	Х
Montenegro	Х		
The Netherlands			Х
Norway	Х	Х	Х
Poland		Х	Х
Portugal		Х	Х
Romania		Х	Х
Serbia	Х	Х	Х
Slovenia	Х		Х
Spain		Х	
Sweden	Х	Х	Х
Switzerland	Х	Х	Х
The former Yugoslav Republic of Macedonia	Х	Х	Х
Turkey	Х	Х	Х
United Kingdom	X		Х
Total	17	22	26
Regional Organizations			
Council of Europe (EUR-OPA Major Hazards Agreement)	Х	Х	Х
European Commission	Х	Х	Х
Disaster Preparedness and Prevention Initiative for South Eastern Europe	Х	Х	Х
Regional Cooperation Council for South Eastern Europe	Х		

#### DRR investment.

Nearly all of the countries reported that it was **almost impossible to calculate DRR spend**, as DRR activities are embedded in multiple agency budgets (environmental, security, humanitarian, etc.) and at all levels of government.

Most countries reported that they were **challenged to mobilize adequate resources** to fund DRR activities at all levels. These difficulties were compounded by a prolonged period of economic downturn and competing demands for more limited public resources.

Assessing progress in the domain of the **identification**, assessment and monitoring of disaster risks and enhanced early warning systems is difficult, owing to the fact that the challenges become greater every year. Emerging threats that had not previously been identified, changes in technology that render state-of-the-art systems obsolete or less effective and migration patterns that shift populations to hazard-prone areas – all these factors conspire to make progress challenging.

It is absolutely **critical that countries commit to the financial analysis of DRR.** The example of Switzerland shows how the analysis motivates better resource allocation and decision-making. Most of the evidence for positive return on DRR investment in anecdotal; a more rigorous approach must be adopted to develop a strong analysis.

Developing approaches to enhancing the safety of aging infrastructure and housing remains a challenge for most countries

The approach to **safeguarding hospitals and schools** shows some progress, but much more work is needed.

Motivating more comprehensive risk assessments remains a challenge and is being supported by initiatives at regional level.

#### 4.3. Recommendations

Based on the experiences reported by the national and regional partners via the HFA online reporting tool, and with reference to other information made available through UNISDR and its partners, the following recommendations are put forth for consideration.

#### National level

- National policies for disaster risk reduction should be integrated into sectoral and development plans to ensure a comprehensive approach to building resilience. This is consistent with the recommendation advanced in the 2011 HFA Europe Report.
- The private sector should be engaged in an appropriate manner to allow data gathering for threat assessment to private sector players as their vulnerability impacts livelihoods and production. They should also be engaged through public-private partnerships, to contribute their professional competencies to disaster risk reduction efforts and to ensure their own disaster resilience.
- A more intense investment in the modernization of early warning systems and communications technologies is required, accompanied by a public education campaign to ensure their proper use.
- Substantial progress has been made in gathering risk

and hazard data. It is recommended that an appropriate investment be made in developing knowledge management and management information systems to ensure that such data can be retrieved, analysed and used in the most effective manner. This is consistent with the recommendation put forth in the 2011 HFA Europe Report. The 2013 HFA country reports indicate risk and hazard data are being collected, but integrating reporting systems limits the effective use of the data.

- Progress has been made in securing commitments and mobilizing resources to develop disaster loss databases. This work is critical to developing the analysis on returns to public investment in DRR. More work needs to be done to expand the development of such databases in other European countries.
- It is critical to develop analyses of financial and social returns on investment in disaster risk reduction in order to build public support for resource mobilization. At present, such evidence is mostly anecdotal. A rigorous financial study to demonstrate the value of DRR may be helpful in motivating public investment, particularly in times of economic austerity. Towards this end, engaging private sector players, particularly the insurance sector, which has a repository of claims data, may be helpful. Some countries, such as France, Germany, Sweden and Switzerland have made progress in this area.
- The Resilient Cities Campaign provides a positive example of making progress with very limited financial resources, but boundless creativity. Celebrating the "Firefighter of the Year" or the "Champion of Change" keeps DRR in the public attention. It also affords an effective way of sharing best practices, such as recognizing Barcelona as a model city for DRR.
- Innovations on insurance coverage and the accessibility of global pools of capital in the reinsurance market offer countries new opportunities for risk transfer to ensure contingent capital when needed. Countries should examine new, less capital-intensive measures to use insurance instruments to protect public resources.
- It is recommended that countries begin to consider DRR in their insurance regulatory frameworks particularly as regards compulsory insurance to reduce burdens on governments, and insurance pricing as an incentive to promote risk awareness prevention and mitigation.
- An area for future work remains translating integrated risk approaches from the national level both upward to regional levels and downward to local

levels.

• It is recommended that the regional organizations promote discussion of gender perspectives on DRR to promote dialogue on both how to interpret and best implement this approach.

## Regional level

- Similar to what emerged in the last reporting cycle, there has been coherence regarding the recommendations developed in the 2011-2013 HFA Europe Report and the area of focus in the past two years. This has been the case particularly for the significant progress made by the EC in supporting disaster risk reduction efforts in South Eastern Europe, supporting efforts towards the development of comparable risk assessments, and mainstreaming disaster risk reduction in EU financial and legislative instruments
- The 2011 HFA Europe report recommended that National Platforms be more inclusive to enhance their effectiveness. More effective engagement of the private sector allows for better risk assessments as the private sector views different hazards and emerging threats from a unique perspective. In addition, motivating private sector preparedness ensures the stability of livelihoods and local economies impacted by disaster while reducing demands on emergency responders. Certain countries have been successful in engaging the private sector; their experiences should be highlighted by the EFDRR to share lessons learned for all member National Platforms.
- All of the countries report challenges in motivating investment in DRR, in large part due to competing demands on limited resources in an environment of economic austerity. Like the example of Switzerland, there is the need to work at national level to demonstrate a positive return on DRR investment, without which governments cannot justify budget allocations to DRR. The European Forum for Disaster Risk Reduction may be helpful in triggering its member National Platforms to develop such financial analysis from which all countries would benefit. Regional Organizations, such as the EC, should continue supporting on-going efforts on cost-benefit analyses of disaster risk reduction at the national level including through the development of disaster loss databases.
- The cooperation facilitated by regional initiatives, such as the Council of Europe and Disaster Preparedness and Prevention Initiative for South Eastern Europe (DPPI), has also motivated progress towards better management of trans-boundary risks.

- Over the recent years, EU cooperation in disaster management has evolved by shifting from response towards a more balanced system that also covers preparedness and prevention actions. In addition to the development of a EU cross sectoral risk management framework, disaster risk prevention and management considerations have been included in a number of key EU policies and legislation. It is recommended that the EU continues its engagement to support the development of a comprehensive approach to risk assessment and management to ensure resilience in the face of threats.
- The European Forum for Disaster Risk Reduction brings coherence and a coordinated approach to implementing the HFA in Europe. It is recommended that the EFDRR consider how to best facilitate exchanges among participating cities in its member National Platforms where communities of interest can be formed to address critical gaps.
- Limited progress has been made in advancing sectoral risk assessments and programmes since the 2011 reporting cycle. This remains an area of critical vulnerability as countries are at risk for vital sectors of their economy being impacted by hazards. Certain countries report awareness of how, for example, their tourism sectors would be impacted by disasters, but this awareness should be translated in tangible programmes of action. The on-going efforts from the regional organizations to support risk assessment to could motivate a greater sense of urgency.
- Regional insurance programmes may diversify risk and reduce the cost of insurance coverage. Regional actors have an area of comparative advantage in this domain as certain countries are identified with high-severity risks (Armenia and earthquakes, for example, or the Czech Republic and floods). Regional programmes can construct insurance portfolios to dampen the consequences of catastrophic risk at local and national levels. Expanding capacity for insurance programmes is an area requiring further attention from the regional partners.
- In considering the need to deepen insurance capacity, the National Platforms need to better engage the insurance sector for its expertise in assessing and pricing risk. Very limited progress has been reported in this area. As many European insurers do not limit their underwriting to national markets, this is an area where regional partners can engage and provide support to the national platforms. The European Forum for Disaster Risk Reduction can engage insurance companies with pan-European operations to provide technical expertise, particularly to those countries with more modest resources supporting their National Platforms.

- Regional organizations have achieved progress in including DRR into their policy and strategy papers. It is now important to ensure that these efforts will translate, as done in the past, into suitable and coherent programming for the benefit of complementing national efforts.
- There is a need to bring resources to the local level while at the same time highlighting for national actors the success of local municipalities in creative approaches to move the DRR agenda forward even when resources are limited. The EC should explore possibilities of support to such efforts particularly in the view of the Climate Change Adaptation strategy developed for European Countries. A number of approaches may be envisioned to achieve this result, such as, perhaps, a handbook of success stories from the Resilient Cities Campaign.

#### Local level

- Consider how the local reports may advance DRR, in addition to their benchmarking function. The original intent of the local reporting tool was to be responsive to the third focus area for the 2012 - 2015 phase of the Resilient Cities Campaign: to develop an instrument for benchmarking and reporting progress against baseline measures at the local level. The initial set of reports suggests they may offer a wider range of uses to advance DRR. The local reporting may identify cities that could join working groups dedicated to common areas of concern, such as, for example, addressing the challenges of aging urban infrastructure. They may also highlight innovative approaches that could be replicated in different national contexts. The European Forum for Disaster Risk Reduction should give time and attention to the first set of local reports, as it did to the first national peer review of a country on the HFA implementation, to solicit input from all stakeholders as to how best utilize the local reports, in addition to their aid in benchmarking progress at the local level. The cities have invested considerable time and effort to develop thoughtful responses to the self-assessment tool; the result can be a more effective resource for DRR than was originally envisioned. The EC should ensure that such efforts toward exchanges among the local level on building resilience to disasters are met with facilitation of such exchanges.
- Examine how the 2011 2013 local reports may guide the development of a Post-2015 DRR framework. As consultations for the Post-Hyogo Framework for DRR are underway, an examination of the first set of local reports may suggest how the Post-2015 framework should be developed to ensure that it is well adapted to the local level. The Lo-

cal Government Self-Assessment Tool [LGSAT] was developed in the context of the Resilient Cities Campaign, which will continue in its present form beyond 2015. Nevertheless, the local reports should be examined not only in the context of the Resilient Cities Campaign, but also in the context of the Post-2015 consultations as the reports are, in effect, seven case studies of how the Hyogo Framework applied to the local levels and where gaps may exist.

#### 4.4 Looking ahead to 2015

As the Hyogo Framework for Action concludes in 2015, countries are reflecting on how best to continue the progress they have made in DRR. At the World Conference on Disaster Reduction in Japan in 2015, a new instrument will be agreed and put forward to the United Nations General Assembly for endorsement. In the 2011 – 2013 HFA country reports, governments had the opportunity to express their views on key elements of a Post-2015 Framework.

Many of the countries agreed on the need to make DRR the responsibility of every individual through more effective public engagement. In its national report, Slovenia emphasized the need to systematically contribute to disaster resilience by introducing DRR culture as a way of life in which the actions of each individual are important. Armenia stated the need for focus on the responsibilities of all segments of society by building a "relevant living culture" for DRR. Portugal suggested better public information and citizen participation. Finland stated it succinctly: "To promote the slogan: Disaster risk reduction is not a job of somebody, it is the job of everybody." Poland recommended that the new framework provide for the incorporation of a risk culture into daily practice. Greece favoured a framework that developed better policies for risk awareness. Croatia identified the need for raising awareness of DRR. Norway and Serbia believe it is essential that the new framework better address DRR at local levels where the effects of disasters are first experienced.

A number of countries, including Monaco and the UK, proposed embedding a DRR framework within the Millennium Development Goals. France supported better integration of the protection of cultural heritage within the new framework. Sweden stated its preference that the new framework should provide for the continuation of the national platforms, for clear indicators for progress, for better adaptation from the national to the local level, for clearer integration of climate change adaptation and DRR, and for broader participation in the peer review process. Belarus views the new framework as an effective mechanism to facilitate international cooperation.

Other countries, such as Bulgaria and the UK, pointed out that more work remains to be done within the current HFA and perhaps the framework should continue as it is, with the UK suggesting a more flexible reporting instrument than the HFA monitor. Italy and Turkey, among other countries, favour better engagement of the private sector in the successor to the HFA. Switzerland expressed a preference for better understanding of risks, through assessments and Georgia favoured a focus on addressing the underlying causes of disasters. Croatia identified the need to ensure DRR funding is explicitly sourced to ensure that the new framework can be sustained.

As this is the last set of regional synthesis reports to be published in advance of agreement on a successor to the HFA (the World Conference on Disaster Reduction is tentatively scheduled for January 2015), it is hoped that this report will inform the consultations for how best to continue DRR work in the Post-2015 framework.









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