



# UNISDR

The United Nations Office for Disaster Risk Reduction

## The Role of National Platforms in reducing the risk of disasters in a changing climate.

[www.unisdr.org](http://www.unisdr.org)

**Forecasting Rainfall induced Hazards at European Scale**  
**Brussels, Belgium, 04 July 2013**

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# Impacts of Disasters since the 1992 Rio de Janeiro Earth Summit

In 1992, the United Nations organized a conference on environment and development in Rio de Janeiro, called the Earth Summit. The purpose of the conference was to rethink economic growth, advance social equity and ensure environmental protection.

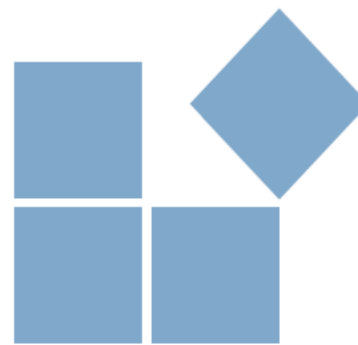
Twenty years later, the UN is organizing Rio+20, a chance to move away from business-as-usual and to end poverty, address environmental destruction and build a bridge to the future. Disaster risk reduction (DRR) plays an important part in this future of sustainable development.

Here's a look at the impact of disasters since the Earth Summit (1992-2012).



**4.4**  
BILLION  
AFFECTED

Roughly 64% of the world's population<sup>1</sup>.



**\$2.0**  
TRILLION  
DAMAGE (USD)

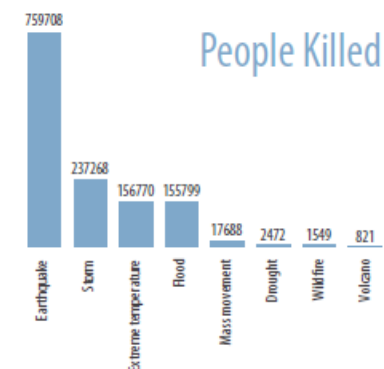
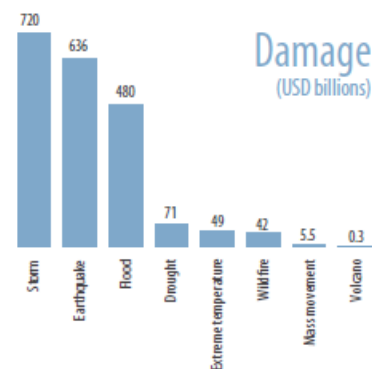
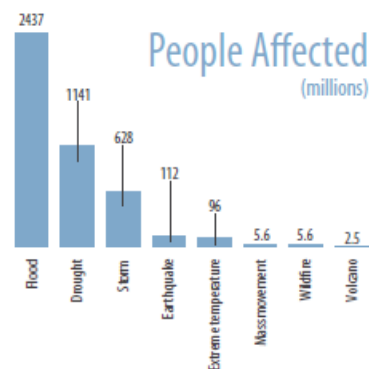
Approximately 25 years of total Overseas Development Aid<sup>2</sup>.



**1.3**  
MILLION  
KILLED

Comparable to over 1500 airplane<sup>3</sup> crashes.

## Impact by disasters



## Impact by top 10 countries



The United Nations Office for Disaster Risk Reduction

<http://www.unisdr.org>

Created on 11 June 2012

DATA SOURCES

EM-DAT - <http://www.emdat.be>: The OFDA/CRED International Disaster Database. Data version: 11 June 2012 - v12.07; Disasters: Natural Disasters as categorized in EM-DAT; Affected: The sum of injured, homeless, and people requiring immediate assistance during a period of emergency - it can also include displaced or evacuated people from disasters; Damage: Estimated figures; Killed: Persons confirmed as dead and persons missing and presumed dead.

<sup>1</sup> UN Stats - <http://unstats.un.org>: Estimated mid-year world population for 2010 is 6.9 billion.

<sup>2</sup> OECD - <http://stats.oecd.org>: ODA from 1986-2010 totals approximately USD1.7 trillion.

<sup>3</sup> Airbus - <http://www.airbus.com>: A380 maximum capacity is 853.

## Vulnerability in Europe

- In 2012, natural disasters caused \$160 billion in global economic overall losses.
- 2011 was the costliest year ever in terms of natural catastrophe losses with US\$ 380 billion in global economic losses. 302 disasters claimed 29,782 lives and affected 206 million people. 2005, the previous record year with losses of US\$ 220bn.
- Europe's 10-year average of disaster losses totaling US\$13.4 billion makes it the third most affected region in the world after the Americas and Asia.
- 2010 the biggest increase in disaster occurrence (+18.2%) compared to the decade's average;
- 2002 and 2011 there were 4130 disaster recorded, resulting from natural hazards around the world where 1,117,527 people perished and a minimum of US\$1,195 billion was recorded in losses.
- The Global Assessment Report on Disaster Risk Reduction released in 2011 indicates that in OECD countries the risk of economic losses is now growing faster than their average GDP growth;
- **Most of the damages are due to climatological and hydrometeorological events;**

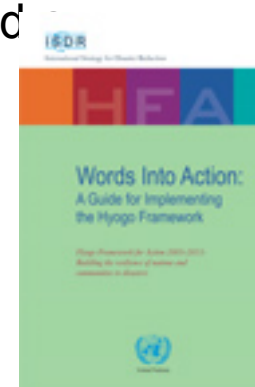
**Reduced number of Human but High Economic Losses**

## Hyogo Framework for Action 2005-2015:

Building the resilience of nations and communities to disasters

### Five priorities for action

1. **Governance:** ensure that disaster risk reduction is a national and local priority with strong institutional basis for implementation
2. **Risk identification:** identify, assess and monitor disaster risks and enhance early warning
3. **Knowledge:** use knowledge, innovation and education to build culture of safety and resilience at all levels
4. **Reducing the underlying risk factors** in various sectors (environment, health, construction, etc.)
5. **Strengthen disaster preparedness for effective response**



*Words Into Action: A Guide for Implementing the Hyogo Framework*

## HFA Focal Points and NPs in Europe Region

(as of 09 April 2013)

**Out of 49 Countries:**

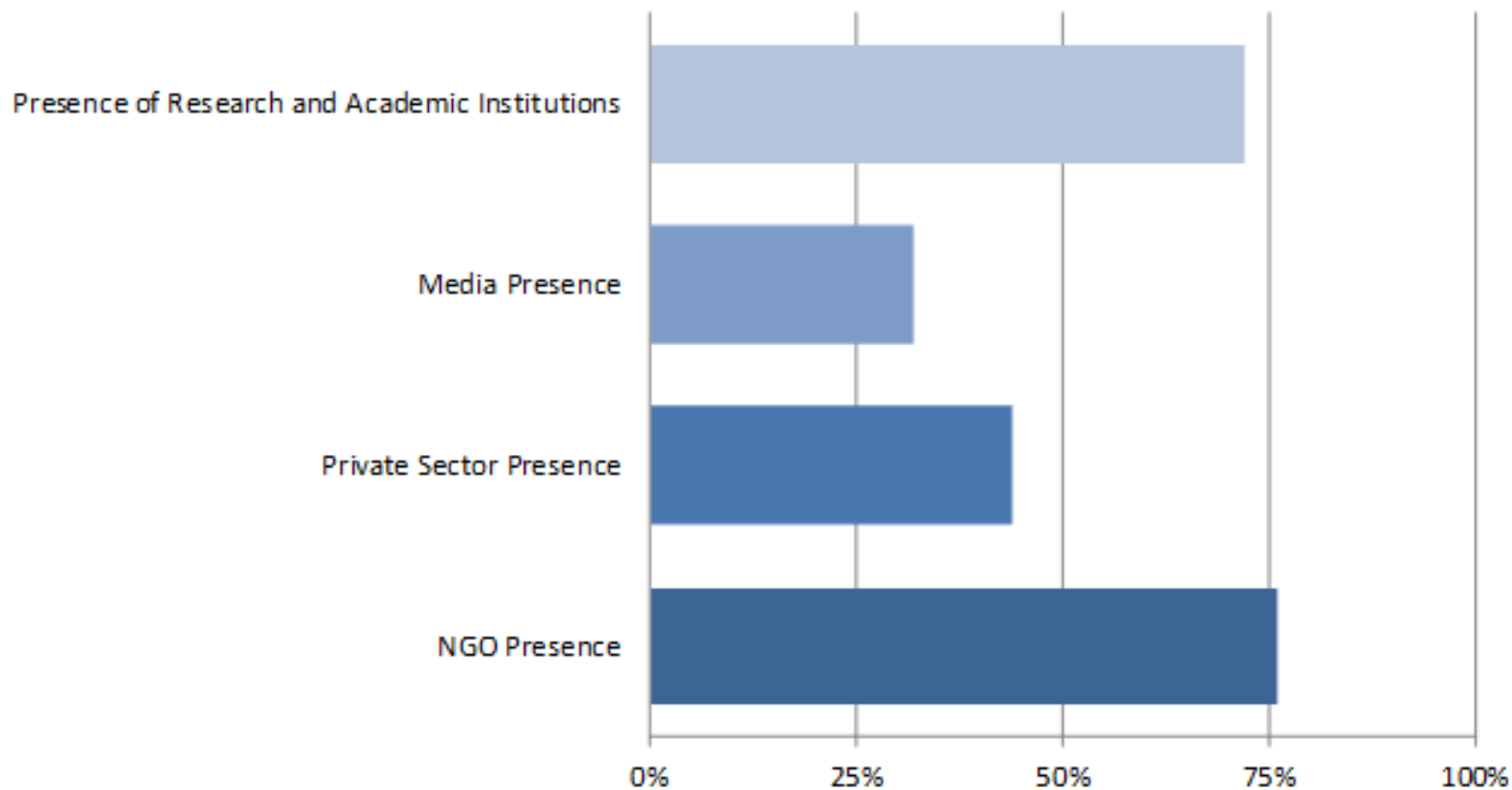
**38 have designated HFA Focal Points**

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, United Kingdom.

**25 Countries have developed a National Platform:**

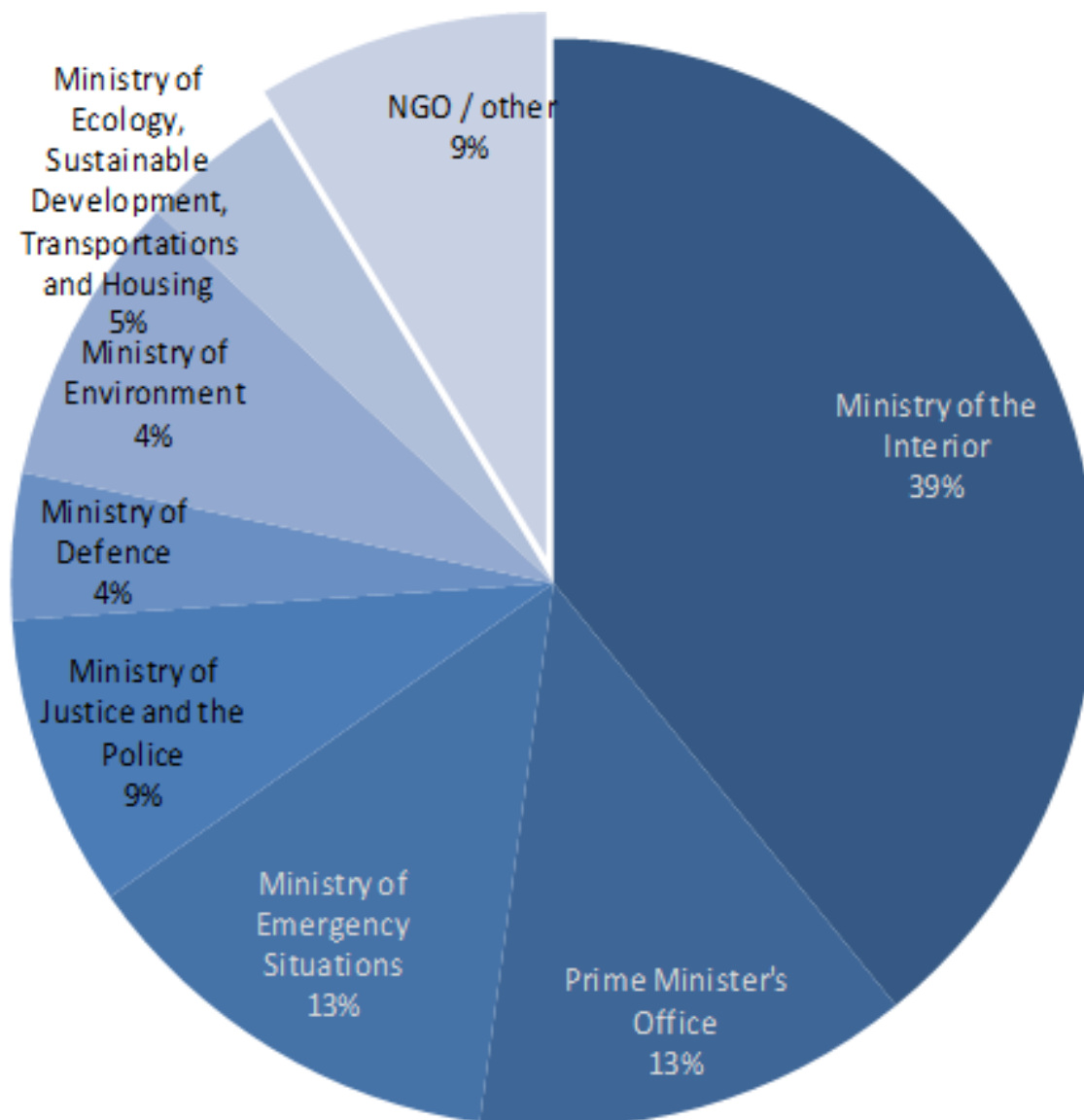
Armenia, Belarus, Bulgaria, Bosnia & Herzegovina, Czech Republic, Croatia, France, Finland, Germany, Greece, Hungary, Italy, Monaco, the Netherlands, Norway, Poland, Portugal, Russian Federation, Serbia, Spain, Sweden, Switzerland, the former Yugoslav Republic of Macedonia, Turkey, United Kingdom.

## Composition of the National Platforms



Out of 25 National Platforms, 19 include both civil society and 19 Academic and Research Institutions. Eight have media presence and 11 include the private sector.

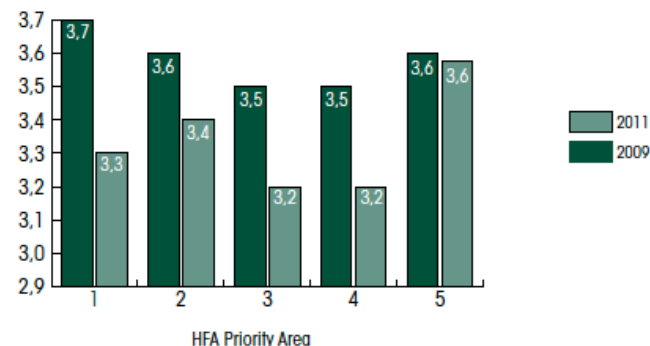
## Coordination of the National Platforms



## 2009-2011: Progress in the HFA implementation in Europe: main findings

- Countries with NPs or about to finalize their NPs, report significant and ongoing reliance in addressing DRR cross cutting issues, more than doubles in most instances compared to those countries without NPs. Clearly, **NPs are having an impact on mainstreaming DRR approaches.**
- While at a glance looks like countries have slightly reduced their advances in the set indicators, a deeper analysis of the qualitative information provided by the country and regional reports **reveals an evolution from a mindset of crisis and response to one of proactive risk reduction and safety.**
- The effectiveness of regional organizations. The 2011 HFA Europe report finds that the **European Commission and EU (together with other regional organizations) have been responsive to the needs identified in the 2009 report.**

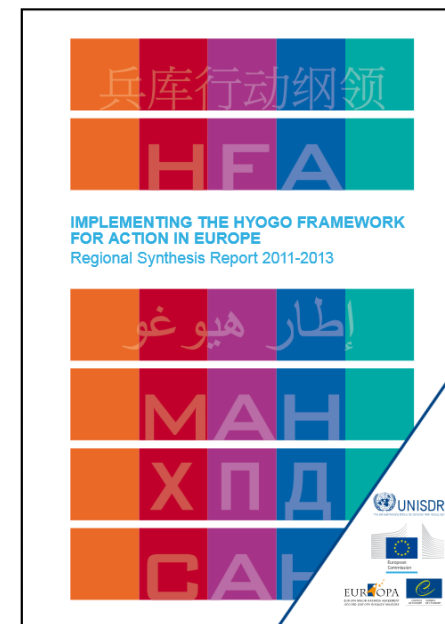
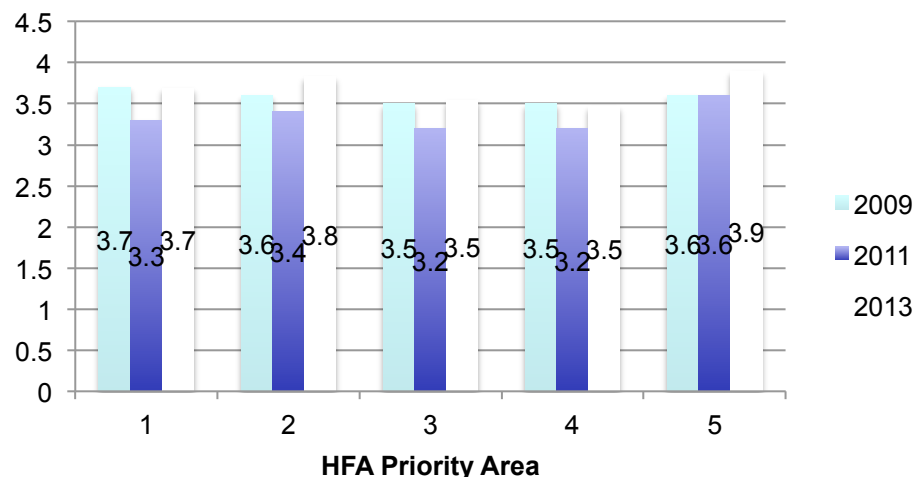
AVERAGE PROGRESS IN EACH PRIORITY AREA





## 2011-2013: Progress in the HFA implementation in Europe: main findings

### Average Progress in Each Priority Area



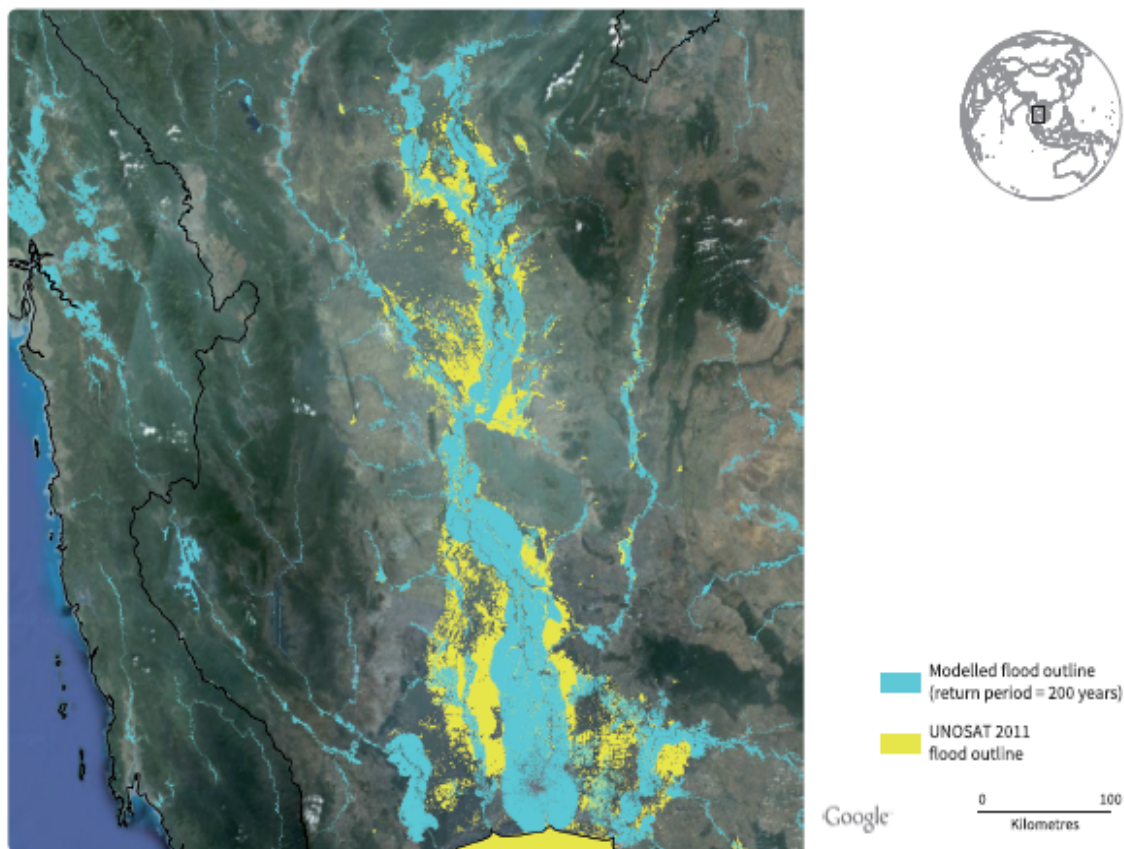
Careful examination of the country reports suggests more meaningful progress than that implied by the numbers. DRR challenges become greater every year: emerging threats that had not previously been identified, changes in technology that render state-of-the-art systems obsolete or less effective and migration patterns that shift populations to hazard-prone areas – all these factors conspire to make progress challenging. Much work is being done to stay current in best DRR practices, while the goal posts are moving.

## Modeling risks: the GAR flood model

GAR 13 proposes a pilot global flood risk model (to be fully developed by 2015) based on the analysis of the impact of past disasters and estimated probability of occurrence of disasters given the level of exposure and vulnerability in a given area.

The figure shows an application of the risk model in the case of the 2011 Floods in Thailand: the modeled results were largely coherent with the surface and depths of the floods actually recorded in different sites upstream from Bangkok.

Figure 3.2 Flood hazard for Thailand compared with actual flood footprint of 2011



(Source: GAR global flood model; UNOSAT<sup>®</sup>)

## Joint Disaster Management risk assessment and preparedness in the Danube macro-region



SEERISK is a transnational project funded by the South East Europe Transnational Cooperation Programme. The consortium consists of 20 project partners representing nine countries, including Austria, Bulgaria, Bosnia and Herzegovina, Croatia, Hungary, Romania, Serbia, Slovakia and Slovenia. The project stemmed from the EU Council conclusions on “Further Developing Risk Assessment for Disaster Management within the European Union” adopted in March 2011, which called for a common approach and harmonization on the prevention of disasters. The lead partner is the Hungarian National Directorate General for Disaster Management.

SEERISK’s aim is to tackle region specific risks and at the same time ensure awareness, strengthen preparedness and fill in institutional gaps. The project is a successful case study for trans-boundary cooperation on reducing risks.

## UK Flooding, Summer 2007

### What happened?

Nearly one month's rain fell over a 24 hour period, causing major flooding and damaging critical national infrastructure.

### What did we learn?

That most of us don't know whether 100mm (or more) of rain falling in a few hours is serious or not?

That we weren't all working together to prevent such disasters;

That early warnings need to tell us the **impacts** of the risk.



### What did the National Platform do?

It took the results of the high level review of the floods, and helped the Met Office and Environment Agency form **the Flood Forecasting Centre** and their early warning system.

This work was so successful that a new **Natural Hazards Partnership** between 15 Agencies has been formed to look at all natural risks to the UK.



## Germany Flooding, June 2013



Source: dpa

4 June 2013

City Wehlen (Saxony)



Source: dpa

13 June 2013

### What did the National Platform do?

- Collected and coordination of different scientific perspectives on the flooding
- Members of the National Platform got directly engaged in the relief efforts
- The Met Office continued issuing flood warnings
- The National Platform provided frequent information to the press
- As a direct follow-up: scientific initiatives will be launched to review the lessons learned especially in comparison to the 2002 flooding in order to provide decision makers with the most relevant information regarding flood management and protection.

## Mainstreaming DRR into CCA strategies and plan of actions

- IPCC Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation (SREX). – provided evidence-based knowledge to connect climate change with a changing frequency and severity of climate-related disasters and extreme events.
- UNFCCC Cancun Adaptation Framework set DRR as a means for adapting to climate change and quoted the HFA as the guiding tool.
- 2013 EU climate Change Adaptation Strategy considers reducing climate-related disaster risks as an essential action point for adapting to climate change in the EU.
- *National Platforms have to play a key role in coordinating efforts among different national institutions to assure that investments in DRR consider the present and future impact of a changing climate and relevant institutions such as the Ministries of Environment assure that DRR measures are reflected into national climate adaptation policies and action plans.*

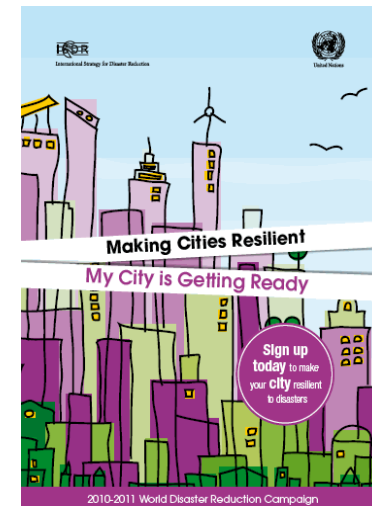
## United Nations Office for Disaster Risk Reduction (UNISDR) main functions

**Coordinate:** (How Organise: GP, RP, NP) international efforts disaster risk reduction and provide guidance for the implementation of the HFA and monitor its implementation.

**Advocate:** (Encourage - Climate Change, Education, Gender, MDG) for greater investment in disaster risk reduction actions to protect people's lives and assets.

**Campaign:** (Promote – Making Cities Resilient, Safe Schools and Hospitals Sasakawa Award)

**Inform:** (Provide – GAR, HFA Report, Terminology, PreventionWeb)



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



<http://www.unisdr.org/we/inform/publications/19846>

# *Thank you*

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