European Commission

Disaster
Risk
Management
Knowledge
Centre

Ensuring the uptake of science in DRM policy formulation and implementation.

European
Commission

Why?
Disaster risk: a growing problem

2005   2015

2005-2015 Globally

- ▸ 700,000 deaths
- ▸ 1.4 million injured
- ▸ 23 million homeless
- ▸ 1.5 billion affected
- ▸ € 1.2 trillion economic losses

Exposure is growing

- ▸ Interconnected economy
- ▸ Population growth
- ▸ Urbanisation

2005-2015 EU

- ▸ 80,000 deaths
- ▸ € 95 billion economic losses

European Commission

Why?
Challenges in the Use of Science in DRM

3 types of needs

Networks are fragmented: Silos and Overlapping initiatives

Science needs testing to allow further developments and transfer

Knowledge is fragmented: Research results are not exploited. Science doesn't reach policy and operations

Why DRMKC?
Disaster risk knowledge: policy context

Union Civil Protection Mechanism

Article 5.1(a)

"Improve the knowledge base on disaster risks and facilitate the sharing of knowledge, best practices and information, including among Member States that share common risks"

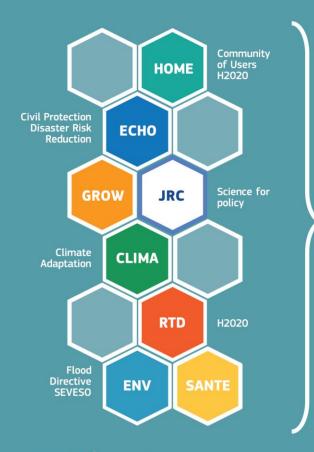**Sendai Framework for Disaster Risk Reduction**

2015-2030

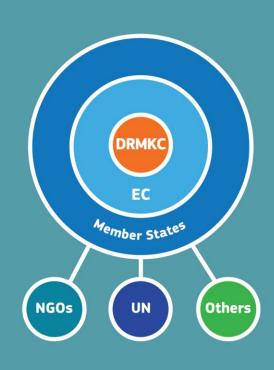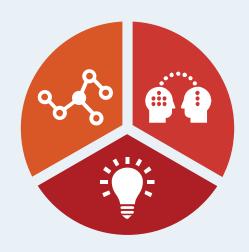Call for stronger role of science and building risk knowledge

UN World Conference on Disaster Risk Reduction
2015 Sendai Japan

Why DRMKC?

EC Directorates

DRMKC

Serving

What?

DRMKC 3 key pillars

PARTNERSHIPS	KNOWLEDGE	INNOVATION

Improving **science-based advice** through networks and partnerships

Improving the use and **uptake of research and operational knowledge**

Advancing technologies and capacities in disaster risk and crisis management

What?
Action Plan - 6 Objectives

How?
1. Hazard Scientific Partnerships

PARTNERSHIPS

- **24/7 situation awareness at EU level**
- **Coherent science-based advice**
- **From MS to MS and EU**
- **Impact-based early warning**
- **EU and global operations**

- *Examples*
  - **Aristotle Project**
  - **EFAS (Floods), EFFIS (Fires) – Copernicus**
  - **Global Informal Tsunami Monitoring System**
  - **Global Flood Partnership**
  - **Global Disaster Alert and Coordination System**

European Commission

How?
2. Science-policy interface

PARTNERSHIPS

Networks of networks
- **Coherent science-based advice for policy**
- **Disaster risk**
- **EU (UCPM) and global (Sendai)**
- **Multi-sectorial, across policies (climate change, flood directive, solidarity fund, INSPIRE, SEVESO...)**

Examples
- **Sendai targets and indicators: drawing from many networks in EU (deadline 30/11)**
- **National Risk Assessment**
- **Disaster Risk Capacities Assessment**
- **Loss and Damage Data WG**
- **Disaster Prevention Expert Group**
- **INFORM Index for Risk Management**

How?
3. Pooling of research results

How?
4. Identification of needs, gaps and dissemination

▶ **Systematic analysis of research needs and gaps**

▶ **Analysis of state of science**

▶ **Dissemination**

    Topical Newsletters

    State of Science in Disaster Risk Management (bi-annual)

• **In practice**

    First report in 2017

    JRC: editorial team

    Lead chapter authors, author teams: call for authors

KNOWLEDGE

How?
Dissemination of Information: DRMKC Website

How?
5. Risk Management Support System

INNOVATION

▸ **Share best practices among MS**

▸ **Facilitate the use of existing expertise for meeting risk management obligations**

Topical Newsletters

State of Science in Disaster Risk Management (bi-annual)

• **In practice**

MS identifies need

Project outline developed together with JRC

Appropriate expertise is found

Project is executed

(Around 10-15 projects in 2016)

How?
5. Risk Management Support System

Risk Assessment

Disaster Loss Data

Risk Management Capability assessment

Science-Policy Interface

Early Warning

Share best practices among MS

How?
6. Network of Crisis Management Labs

INNOVATION

▶ **Test crisis management technology and practices**
　　Experimental approach
　　Test market ready solutions
　　Identify needs for further research, industrial
　　development, or training/awareness

• **Examples**
　　JRC European Crisis Management Laboratory:
　　7 experiments
　　GDACS Crisis Centre Interoperability Benchmarks

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http://drmkc.jrc.ec.europa.eu/

http://drr.jrc.ec.europa.eu/Loss-Data