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

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

4 July 2017
Why?

Challenges in the Use of Science in DRM

3 types of needs

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

Science needs testing to allow further developments and transfer

Networks are fragmented: Silos and Overlapping initiatives
DRMKC Large scientific community for DRM

**EC Directorates**
- DEVCO
- HOME
- ECHO
- GROW
- JRC
- CLIMA
- REGIO
- RTD
- ENV
- SANTE

**DRMKC**
- **1** Hazard Scientific Partnerships
- **2** Science Policy Interface
- **3** Pooling of Research Results
- **4** Identification of research needs and gaps
- **5** Networks of Laboratories
- **6** Support System

**Serving**
- EC
- Member States
- NGOs
- UN
- Others

**What?**
What?

Disaster Risk Management Knowledge Centre

1. Partnership
   Improving science-based advice through networks and partnership

2. Knowledge
   Improving the use and uptake of research and operational knowledge

3. Innovation
   Advancing technologies and capacities in disaster risk and crisis management

**Where knowledge begins**
Fostering EU-level disaster science networks in support to the European Response Coordination Centre (ERCC) and Member States.

**Where knowledge applies**
Improving the science-policy interface by providing science-based advice to policy development services and support to Member States for policy implementation.

**Where knowledge meets**
Pooling of information and granting access to scientific results and expertise to boost transfer of research outputs to end-users.

**Where needs are identified**
Disseminating knowledge, research results and information looking for identification of research needs and gaps in disaster risk and crisis management.

**Where gaps are filled**
Implementing a Support System for Member States providing scientific and technical advice for harmonized development.

**Where innovation is tested**
Developing dedicated technologies and capabilities to support different types of emergency management operations and disaster recovery processes.
How?

1. Hazard Scientific Partnerships

**Sharing Science**
- Fostering EU wide scientific networks
- From MS to MS and EU
- Sharing of competences and resources
- Promoting EU science at global level

Examples
- EFAS (European Floods Alert System),
- EFFIS (European Forest **Fires Information System**)  
- EDO (European Droughts Observatory)
- Global Informal **Tsunami** Monitoring System
- NATECH risk: Natural-hazard triggered technological accidents
- Global **Flood** Partnership
- Global Disaster Alert and Coordination System
- Aristotle project
- ....
How?

2. Science-policy interface

Networks of networks
- Coherent science-based advice for policy
- Disaster Risk Reduction and Risk Management
- EU (UCPM) and Global (Sendai) dimensions
- Multi-sectorial, across policies (climate change, flood directive, solidarity fund, INSPIRE, SEVESO...)

Examples
- Support to Sendai Framework
- National Risk Assessment
- Disaster Risk Capacities Assessment
- Loss and Damage Data WG
- Disaster Prevention Expert Group
- INFORM Index for Risk Management
National Risk Assessment
- 29 NRAs reviewed by experts on Natural and Man-made hazards
- JRC Collaboration with UNISDR on a Global NRA Guideline focused on Developing countries
- EU NRA Guideline to be published in 2018

How?
2. Science-policy interface
How?

2. Science-policy interface

**Loss Data Challenge**
- Multi-sectorial activity
- 2 International WS in 2016 with MS: policy makers, practitioners, scientists and private sector
- Collaboration with OECD and UNISDR
- Active collaboration with CLIMA and ECHO
- Request to provide support to building capabilities
- LossDatabase project starting in 2017

*The roadmap for harmonized loss data.*
Three key documents prepared in consultation with member states:

- Recording Disaster losses (July 2013)
- Current status and best practices (November 2014)
- Guidance for disaster loss data recording (April 2015)

- Fair and efficient compensation
- Disaster Recovery
- Recording of impact
- Measuring Disaster Risk Reduction DRR progress
- Identifying the cause
- Focusing DRM actions
- Modeling future losses
- Planning DRM programs
INFORM Index for Risk Management

- Open source risk-assessment for humanitarian crisis and disasters
- Increasing request: development of Sub-national INFORM
- Acknowledged tool for prioritizing using risk level and trends
- 2017 Index includes new GHSL for exposure
- Interconnected with Global Conflict Risk Index, EU Aid Explorer, GDACS, GloFas...
- Inspiration for the development of the future Crisis Severity Index

**How?**

2. Science-policy interface
DRMKC National Loss Database: You Can't Manage What You Don't Measure
How?

3. Pooling of research results

**Project explorer**
- Structured information regarding more than 680 past and on-going DRR and DRM related Projects
- Pool of experts
- Information regarding networks behind projects
- Developed to facilitate new networks
- Where the Output becomes a new Input
- Statistics available: optimizing resources and facilitating prioritization of funding
How?

3. Pooling of research results

Dissemination of Information: DRMKC Website

All DRM information in one place
*Foster a community* of policy makers, practitioners and scientists
Keep stakeholders informed: news, events, newsletter
Project browser providing innovative way to link projects, institutions and themes
*User contributors can add their own information*
How?

4. Identification of needs, gaps and dissemination

State of Science in Disaster Risk Management
Bi-monthly Newsletters
5. Risk Management Support System

Support Service
Facilitate the use of existing expertise for meeting risk management obligations
March 2016-2017
- 4 contracts
- 2 Workshops
- 1 training
- ...

How?

Share best practices among MS
6. Network of Crisis Management Labs

- 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
Thank you for your attention!

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