



Pooling knowledge and networks in disaster risk management

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## **Editorial**



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Over the last decades millions of people have been affected by natural disasters, with increasing consequences globally. Initiatives to improve preparedness and response to disasters have been launched recently at the EU and international levels, closely tied to actions to combat cross-border health threats and enhance global health security. Communicable diseases are a major cause of mortality in disaster situations, particularly in case of vulnerabilities arising from social, economic, or environmental factors. These diseases themselves can cause epidemics and pandemics which have the potential to overwhelm the capacity of health systems. Global trends, such as population growth, increased mobility or climate change further aggravate the impact on people's health. Crises such as the Ebola outbreak in West Africa and the current yellow fever outbreak in Angola and Congo expose severe shortcomings in the world's preparedness to respond to public health emergencies.

Three years ago, the European Council and Parliament adopted Decision 1082/2013/EU on serious cross-border threats to health, which provides the framework to improve preparedness and strengthen the capacity to coordinate response to health emergencies across the EU. The Decision supports cooperation between the Member States to prevent and control the spread of communicable diseases and other serious cross-border health threats, aiming to contribute to a high level of public health protection in the Union.

Under this framework, the Commission closely cooperates with EU Member States within the Health Security Committee, with relevant EU Agencies, and international organizations to coordinate preparedness and response planning, early warning, developing and implementing the joint procurement of medical countermeasures and monitoring preparedness across the EU. Beyond the EU health security framework, the Commission supports preparedness and response to health emergencies through global initiatives and contributes to the implementation of the International Health Regulations.

Another field of action is the European Medical Corps, a recently launched initiative to mobilise medical and public health experts for operations inside and outside the EU as a contribution to the Global Health Emergency Workforce.

The global threat of new and re-emerging diseases, such as the current Zika virus outbreak, requires the strengthening of health systems and the global health security framework. Enhancing preparedness and response capacities for disasters also necessitates cross-sectoral collaboration based on an all hazard, all-of society approach. Towards this goal, the Disaster Risk Management Knowledge Centre of the Commission provides an important science and policy interface in the area of disaster risk reduction. However, a strong inter-sectoral collaboration remains essential for stronger preparedness and response to inevitable disasters to reduce their consequences.

John F. Ryan



## 4th Meeting of the Community of Users on Safe, Secure and Resilient Societies



22 June 2016, BAO Congress Centre, Brussels © CoU

The Community of Users, with the enlarged scope of Safe, Secure and Resilient Societies has held its fourth meeting at the BAO Congress Centre in Brussels with around 130 participants

The first part of the meeting focussed on presenting projects and discussing relevant issues related to crisis management for natural hazards. The second part of the meeting concerned discussing citizen's involvement in crisis management and looking at ongoing network actions at national and European level. Finally, next steps have been discussed.

**Graham Willmott**, head of unit B4 DG Home welcomed all participants. He mentioned the extended scope of the CoU from Disaster Risk and Crisis Management to Safe, Secure and Resilient Societies. The CoU network is important for awareness raising and dissemination, but is also useful for other activities like proposal preparation and consortium building. Important is to bring the results of the different projects closer to end users, including practitioners. He indicated that discussions on the H2020 programme for 2018-2020 have already started.

**Philippe Quevauviller** presented the current situation concerning the CoU and the main contents of the FP7 mapping document. It now mainly focused on relevant FP7 projects, but will be extended with H2020 projects at a later stage. The updated version is expected to be available around September 2016. The mapping of projects in a single working paper has already revealed the synergy potential and possibilities to bring related projects together. The CoU is needed to create a critical mass of involved stakeholders at all levels. There is still a significant gap between the EU and national level, which needs to be filled per theme in order to reach the users.

The next CoU meeting on CBRN-E will be held on the 10th October 2016 back-to-back to a major exhibition fair organised by the EDEN project (11-12 October). Participants are requested to provide ideas and contributions for the agenda.

More info: https://www.securityresearch-cou.eu/

#### Hydro-meteorological Extreme Events

On the 23rd of June 2016, a side event on "High Impact Weather and Climate Induced Emergencies" was held as part of the Fourth meeting of the Community of Users on Safe, Secure and Resilient Societies. This event was organised under the umbrella of the H2020 innovation projects I-REACT (Improving resilience to emergencies through advanced cyber technologies) and ANYWHERE (Enhancing emergency management and response to extreme weather and climate events), which have been recently funded under the DRS-1-2015 call for crisis management to respond to extreme weather and climate events. Both I-REACT and ANYWHERE projects aim to leverage technological advancements to increase the resilience of

European citizens and assets to natural disasters. A first discussion was held on the mechanisms to incorporate the real needs of first responders, risk managers and policy implementation organisms, in the management of high impact weather induced emergencies.

The second theme was centred on building a Community of Users in climate and weather induced emergencies. Experiences from previous initiatives and current networks were discussed with the participation of JRC presenting the Community of Users of EFAS, the RISC-KIT project coordinator sharing experiences on the integration of stakeholders and end users of hydro-meteorological events in the coastal zone, and the online tool USHAHIDI was presented as a way to link citizens during disasters.

The third theme was focused on the market uptake of the DRS solutions, potentially those developed as part of I-REACT and ANYWHERE projects. The I-REACT partners AQUOBEX, specialised in technological solutions to floods, and geo-information specialists GEOVILLE discussed this issue, in addition to the ANYWHERE partner AIRBUS, that presented different technological solutions for DRR.

Overall, the event fostered synergies and collaborations between European projects in order to provide joint solutions to the management of disaster risks and crises of different kinds.

More info: http://anywhere-h2020.eu/



Climate change © Hemera



## INFORM Annual Partners meeting, 6-8 June 2016, Brussels

# INDEX FOR RISK MANAGEMENT

From the 6th to 8th of June, the third INFORM Annual Partners meeting was hosted by DG ECHO in Brussels. Index for Risk Management INFORM is a global, objective, and transparent tool for understanding the risk of humanitarian crises and disasters. The third INFORM release will be published in September 2016. It is open to everyone and is supported by most major humanitarian organisations.

The purpose of the meeting was to allow the INFORM partners to connect and take forward reflections on the INFORM partnership, methodology, ongoing and new initiatives at global, regional and national level and other past and future work that the INFORM group has been engaged with. The meeting brought together representatives of more than 20 organisations including UN Agencies, donors, NGOs and a number of relevant Commission services (JRC, ECHO, CLIMA).

#### The main focus areas of the meeting were:

**1.** the programme for implementation of INFORM Subnational to 2018;

2. the clarification of strategic direction;

**3.** the INFORM governance model and administrative mechanism.

The project is intended to improve shared analysis and decision-making in humanitarian and development sectors through the accelerated implementation and use of the INFORM Subnational index.

In particular, it aims to ensure that shared risk analysis is used across the humanitarian and development sectors, and that strategies and programmes are better aligned to address the location and types of risks.

INFORM partners have expressed a desire to formalise governance and administrative arrangements to ensure the organisational and financial sustainability of the initiative and to facilitate scaling up when/if required. This includes a governance model with a steering group.

Participants had a wide ranging discussion on the scope and strategic direction of INFORM, considering whether the INFORM process could be applied to additional products (climate change, separate DRR/conflict versions, a more dynamic or early warning focused version, and crisis severity).

More info: http://www.inform-index.org/

	RANK	NFORM RISK	3 YR TREND	HAZARD & EXPOSURE	YR TREND	la tura l	1um an	VULNERABILITY	3 YR TREND	Socio-Economic Vulnerability	Vul nerable Groups	LACK OF COPING CAPACITY	3 YR TREND	nstitutional	Infra structure
COUNTRY						5.5	10.0		m M		-		~ →	_	
Afghanistan Albania	3	7.9	$\rightarrow$	8.6 3.0	$\rightarrow$	5.5	0.3	7.2	ы Р	6.9 2.3	7.4	8.0	→ →	7.4 6.2	8.5
Algeria	111 37	4.8		6.3	$\frac{7}{2}$	3.6	8.0	1.7 3.5	- <del>7</del> - <del>7</del>	3.3	3.6	4.8 4.9	7	4.9	3.1 4.9
Angola	62	4.0	$\rightarrow$	2.3	$\rightarrow$	2.0	2.6	4.6	, K	4.5	47	7.1	7	6.6	7.5
Antigua and Barbuda	144	23	$\rightarrow$	2.0	$\rightarrow$	3.7	0.0	1.7	R	2.0	1.3	3.5	$\rightarrow$	4.7	2.1
Argentina	138	2.4	→	2.4	→	3.1	1.7	1.5	- >	1.9	1.1	3.7		5.0	2.1
Armenia	100	3.2	$\rightarrow$	2.1	$\rightarrow$	3.8	0.1	3.0	$\rightarrow$	2.4	3.6	5.0	$\rightarrow$	6.6	2.7
Australia	144	2.3	$\rightarrow$	3.4	÷	5.7	0.1	1.7	$\rightarrow$	0.6	2.7	2.1	$\rightarrow$	2.2	1.9
Austria	167	1.7	$\rightarrow$	1.3	→	2.3	0.1	2.2	$\rightarrow$	0.8	3.4	1.7	$\rightarrow$	2.2	1.2
Azerbaijan	80	3.8	К	2.3	Ы	3.8	0.5	4.6	$\rightarrow$	1.8	6.5	5.0	Ы	6.5	2.9
Bahamas	154	2.0	$\rightarrow$	1.7	$\rightarrow$	3.2	0.0	1.6	$\rightarrow$	2.3	0.9	3.0	$\rightarrow$	3.1	2.8
Bahrain	188	0.8	$\rightarrow$	0.1	$\rightarrow$	0.1	0.1	1.6	$\rightarrow$	1.9	1.2	3.0	$\rightarrow$	4.2	1.6
Bangladesh	20	5.9	7	7.2	$\rightarrow$	8.6	5.0	4.9	Я	3.9	5.7	5.7	$\rightarrow$	5.1	6.3
Barbados	170	1.6	$\rightarrow$	0.9	$\rightarrow$	1.7	0.0	1.7	Я	2.6	0.8	2.6	7	2.7	2.4
Belarus	161	1.9	$\rightarrow$	1.6	$\rightarrow$	1.8	1.3	1.2	$\rightarrow$	1.0	1.3	3.4	К	4.9	1.5
Belgium	180	1.2	$\rightarrow$	0.7	$\rightarrow$	1.4	0.0	1.8	$\rightarrow$	0.8	2.7	1.5	Ы	2.1	0.8
Belize	104	3.1	÷	2.7	→	4.8	0.0	2.2	<i>→</i>	3.2	1.0	4.9	К	5.4	4.4
Benin	89	3.5	÷	1.3	$\rightarrow$	1.2	1.3	4.6	$\rightarrow$	6.4	2.2	7.2	→	5.8	8.3
Bhutan	111	2.9	$\rightarrow$	1.5	$\rightarrow$	2.8	0.1	3.3	÷	4.9	1.2	5.0	Ы	4.2	5.7
Bolivia	100	3.2	→	2.2	→	3.4	0.7	2.8	$\rightarrow$	3.4	2.2	5.5	→	5.9	5.1
Bosnia and Herzegovina	70	4.0	7	2.9	→	3.8	1.8	4.8	7	2.6	6.5	4.6	→	6.0	2.8
Botswana Brazil	104 94	3.1	$\rightarrow$	1.5	→ ĸ	2.6	0.3	4.0 2.5	→ ⊼	4.3 2.5	3.6	4.9	⊼ →	4.9 4.9	4.9
		3.4	7 2		3 ->	3./	0.0	0.9	$\rightarrow$	1.0	0.8	4.1	→	4.9	4.5
Brunei Darussalam	182			0.3								4.7			
Bulgaria Burking Faco	134	2.5	→ 7	2.2	→ 7	3.1	1.1	2.3	7	2.0	2.6	3.2	R	4.2	2.0
Burkina Faso	37	4.8	R L	2.6	⊼ →	2.4		6.8	⊼ →	7.3	6.2	6.4	R	4.7	7.7
Burundi Cabo Verde	42 122	4.6 2.7	$\rightarrow$	2.2 1.1	→ →	2.5 2.0	1.8 0.1	7.0	ל צ	7.6 6.0	6.4 1.2	6.3 4.3	ы Н	6.1 4.0	6.5 4.5
Cabo Verde Cambodia	122	2.7	→ →	1.1	→ →	2.0	0.1	4.0	ы Э	6.0 4.1	1.2	4.3 6.8	$\rightarrow$	4.0	4.5 6.4
Cameroon	42	4.6	7	2.9	7	2.1	3.7	5.6	7	4.9	6.2	6.0	$\rightarrow$	4.8	7.0
Canada	122	2.7	$\rightarrow$	3.3	$\rightarrow$	4.9	1.4	2.4	$\rightarrow$	0.9	3.7	2.4	$\rightarrow$	2.3	2.4
Central African Republic	2	8.3	$\rightarrow$	7.8	$\rightarrow$	1.4	10.0	8.3	7 K	8.3	8.2	8.7	7	8.1	9.1
Chad	18	6.0	$\rightarrow$	3.2	ź	2.8	3.6	7.4	7	6.8	8.0	9.0	$\rightarrow$	7.9	9.7
Chile	104	3.1	$\rightarrow$	5.0	$\rightarrow$	7.4	0.9	2.1	$\rightarrow$	2.4	1.7	2.9	$\rightarrow$	2.9	2.9
China	56	4.3	÷	6.9	÷	8.2	5.1	2.9	÷	1.7	4.0	4.0	÷	4.2	3.8
Colombia	24	5.6	$\rightarrow$	6.9	→	6.7	7.0	5.9	→	2.8	7.9	4.2	→	4.3	4.1
Comoros	122	2.7	$\rightarrow$	0.5	$\rightarrow$	0.8	0.1	5.6	$\rightarrow$	7.6	2.4	7.1	Ы	7.8	6.3
Congo	89	3.5	К	1.1	$\rightarrow$	1.9	0.2	5.1	К	4.1	6.0	7.5	$\rightarrow$	7.6	7.3
Congo DR	8	6.9	Ы	5.3	ĸ	2.9	7.0	7.6	К	7.1	8.1	8.1	$\rightarrow$	7.8	8.3
Costa Rica	95	3.3	$\rightarrow$	4.0	$\rightarrow$	6.5	0.1	3.0	$\rightarrow$	2.8	3.1	3.0	$\rightarrow$	3.0	3.0
Côte d'Ivoire	42	4.6	$\rightarrow$	2.1	$\rightarrow$	1.5	2.7	6.0	я	5.9	6.0	7.6	$\rightarrow$	7.4	7.8
Croatia	138	2.4	$\rightarrow$	3.1	$\rightarrow$	5.3	0.1	1.4	Я	1.6	1.2	3.2	$\rightarrow$	4.4	1.7
Cuba	134	2.5	$\rightarrow$	3.8	$\rightarrow$	5.1	2.3	1.3	$\rightarrow$	2.3	0.2	3.3	Ы	4.1	2.4
Cyprus	117	2.8	$\rightarrow$	2.0	$\rightarrow$	3.6	0.1	4.4	$\rightarrow$	1.3	6.5	2.5	$\rightarrow$	3.0	1.9
Czech Republic	170	1.6	$\rightarrow$	1.2	$\rightarrow$	2.0	0.4	1.5	7	0.9	2.0	2.3	Ы	3.3	1.1
Denmark	187	0.9	$\rightarrow$	0.3	$\rightarrow$	0.5	0.1	1.7	$\rightarrow$	0.6	2.6	1.4	$\rightarrow$	1.9	0.9
Djibouti	52	4.4	$\rightarrow$	2.7	$\rightarrow$	4.5	0.5	4.7	$\rightarrow$	4.9	4.4	6.8	7	6.3	7.2
Dominica	129	2.6	$\rightarrow$	1.8	$\rightarrow$	3.3	0.0	2.9	Я	4.5	0.9	3.4	Я	3.9	2.9
Dominican Republic	87	3.6	$\rightarrow$	4.4	$\rightarrow$	6.6	1.0	2.2	7	2.7	1.6	4.8	$\rightarrow$	5.5	4.0
Ecuador	56	4.3	Я	4.5	$\rightarrow$	7.1	0.2	3.9	Я	3.3	4.5	4.5	Я	4.7	4.2
Egypt	42	4.6	Ы	6.1	Ы	5.0	7.0	3.4	7	2.7	4.0	4.7	Я	5.4	3.9
El Salvador	89	3.5	÷	3.5	<i>→</i>	5.8	0.3	2.6	<i>→</i>	3.7	1.3	4.7	$\rightarrow$	5.5	3.8
Equatorial Guinea	122	2.7	$\rightarrow$	0.8	$\rightarrow$	1.3	0.2	3.3	К	4.2	2.3	7.5	я	8.2	6.7
Eritrea	37	4.8	Я	2.5	7	2.9	2.0	5.6	К	6.3	4.9	7.9	я	8.2	7.5
Estonia	182	1.1	$\rightarrow$	0.5	7	0.9	0.1	1.3	Я	1.4	1.2	2.2	К	3.1	1.3
Ethiopia	13	6.4	<i>→</i>	5.4	<i>→</i>	3.8	6.7	6.7	7	6.7	6.6	7.3	К	4.7	8.8
Fiji	100	3.2	→ \	3.4	→ \	5.7	0.1	2.4	→ \	3.7	0.9	4.2	7	3.5	4.9
Finland	190	0.6	$\rightarrow$	0.1	$\rightarrow$	0.1	0.1	1.6	$\rightarrow$	0.8	2.4	1.3	7	1.6	1.0
France	122	2.7	$\rightarrow$	3.6	$\rightarrow$	3.8	3.3	2.6	א	0.9	4.0	2.0	$\rightarrow$	2.8	1.2
Gabon Gambia	129 111	2.6 2.9		0.9		1.5 1.4	0.2	3.0	ע ≻	3.0	3.0	6.3 5.4		6.6 4.9	6.0
Gambia Georgia	77	2.9	$\rightarrow$	0.8	$\rightarrow$	1.4	0.1	5.5	א	6.7 3.0	3.9 5.7	5.4 3.5	או	4.9	5.9
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Germany		1.9	7 7		7 7	1.3	1.4		_ <del></del> →	0.6	3.8		_ <del>7</del> →		6.4
Ghana Greece	110 129	3.0 2.6	7	1.3 3.7	→ →	1.3 5.3	1.2	3.7 1.9	7 7	4.1	3.3 2.4	5.4 2.4	→ →	4.3 3.6	6.4
Grenada	129	2.6	$\rightarrow$	3.7 0.9	→ →	1.8	0.0	2.1	л Л	2.9	1.3	3.8	$\rightarrow$	3.6 4.6	2.8
Guatemala	29		7	4.3	$\frac{7}{2}$	6.5	1.1		7	2.9	5.7	6.0	7		5.8
Guinea	29	5.1 5.1	7	3.5	7	3.1	3.9	5.1 5.1	7	6.2	3.8	7.6	7	6.1 6.3	8.6
Guinea-Bissau	70	4.0	7	1.2	7	1.7	0.6	6.6	7	7.8	4.9	7.9	K	7.9	7.8
Guyana	117	2.8	$\rightarrow$	1.5	<i>"</i>	2.8	0.1	2.7	7	4.1	1.0	5.6		6.2	4.9
Haiti	18	6.0	, R	4.6	$\rightarrow$	6.1	2.7	6.3	N R	6.9	5.6	7.6	$\rightarrow$	7.4	7.8
Honduras	50	4.5	7	3.9	÷	5.9	1.0	4.2	7	4.2	4.2	5.4	, A	6.0	4.8
Hungary	154	2.0	7	2.1	÷	3.5	0.4	1.7	7	1.6	1.8	2.1	7	2.8	1.3
lceland	180	1.2	$\rightarrow$	0.9	$\rightarrow$	1.7	0.0	0.9	$\rightarrow$	0.7	1.0	2.0	$\rightarrow$	2.0	1.8
India	24	5.6	→	7.4	→	7.8	6.9	4.7	→	4.0	5.2	5.1	7	3.8	6.1
	42	4.6	_ <del></del> →	6.5	<del>7</del> →	7.6	5.5	4.7	7	2.4	3.1	5.1	7	4.7	5.6
		4.6	$\rightarrow$	4.6	-7 ->	6.7	1.4	4.4	 →	2.4	5.6	4.9	7		4.0
Indonesia		_	7	8.5	<del>7</del> →	5.1	10.0	6.1	7	2.9	8.1	7.1	7		4.0
Indonesia Iran	42	72			-7 →	2.4	0.1	1.3	7	0.8	1.8	2.0	→ →		1.5
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Indonesia Iran Iraq Ireland	6 173	1.5	7	1.3			24	22	<u> </u>	12	_				
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Indonesia Iran Iraq Ireland Israel Italy	6 173 134 111	1.5 2.5 2.9	⊼ → →	2.9 4.4	ы +	3.3 5.1	3.6	2.2	$\rightarrow$	1.1	3.2 3.2	2.3 2.5	$\rightarrow$	3.3 3.7	1.1 1.0
Indonesia Iran Ireland Israel Italy Jamaica	6 173 134 111 117	1.5 2.5 2.9 2.8	7 → →	2.9 4.4 2.2	¥  →  →	3.3 5.1 3.9	3.6 0.2	2.2 2.4	→ 7	1.1 3.3	3.2 3.2 1.3	2.3 2.5 4.3	→ → л	3.3 3.7 4.5	1.1 1.0 4.0
Indonesia Iraq Iraq Iraland Israel Israel Jamaica Japan	6 173 134 111 117 149	1.5 2.5 2.9 2.8 2.1	7 → → →	2.9 4.4 2.2 6.2	2   →  →	3.3 5.1 3.9 8.5	3.6 0.2 1.8	2.2 2.4 0.9	→ л л	1.1	3.2 3.2 1.3 0.9	2.3 2.5 4.3 1.6	→ → л	3.3 3.7 4.5 2.0	1.1 1.0 4.0 1.1
Indonesia Iraq Iraq Irad Israel Israel Jamaica Japan Jordan	6 173 134 111 117 149 80	1.5 2.5 2.9 2.8 2.1 3.8	7 → → → →	2.9 4.4 2.2 6.2 2.1	→ → →	3.3 5.1 3.9 8.5 2.8	3.6 0.2 1.8 1.3	2.2 2.4 0.9 6.1	) л л л	1.1 3.3 0.9 3.6	3.2 3.2 1.3 0.9 7.8	2.3 2.5 4.3 1.6 4.4	→ → 지 기	3.3 3.7 4.5 2.0 5.7	1.1 1.0 4.0 1.1 2.8
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Indonesia Iran Iraq Iraq Isaael Italy Jamaica Japan Jordan Kazakhstan Kenya	6 173 134 111 117 149 80 149 16	1.5 2.5 2.9 2.8 2.1 3.8 2.1 6.2	⊼ → → → → → → →	2.9 4.4 2.2 6.2 2.1 2.2 5.8		3.3 5.1 3.9 8.5 2.8 3.5 4.2	3.6 0.2 1.8 1.3 0.6 7.0	2.2 2.4 0.9 6.1 1.0 6.1	→ л л л л	1.1 3.3 0.9 3.6 1.5 5.1	3.2 3.2 1.3 0.9 7.8 0.5 7.0	2.3 2.5 4.3 1.6 4.4 4.0 6.6	→ → オ ・ ・ ・ ・ ・	3.3 3.7 4.5 2.0 5.7 5.2 5.4	1.1 1.0 4.0 1.1 2.8 2.6 <b>7.5</b>
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Excerpt (Countries from A to K) of INFORM 2016 Full Results Table



## Meetings on the Zika virus disease



An emerging threat. Mosquito-borne diseases in Europe. Above *Aedes aegypti*.

#### Meetings on the Zika virus disease with the transport, tourism and health professionals sectors

On 20-21 June, three meetings with representatives from the transport and tourism sector and with representatives from European health professional organisations were organized by the European Commission (DG Health and Food Safety).

The aim of these meetings was to discuss preparedness and response of the different sectors to the Zika virus outbreak and how the sectors could actively be involved in preparing the EU better against the risks of a Zika virus introduction and spread to Europe.

Participants provided valuable feedback on awareness, measures in place and bottlenecks from the perspective of their sectors.

#### Key conclusions are:

• Guidance on disinfection methods for ship operators will be provided by EU SHIPSAN ACT, a Joint Action funded by the EU Health Programme.

• Organisations agreed to network to guarantee sharing of information and to inform the Commission, partners and sister organisations on measures taken with regard to Zika and vector control issues.

• The International Air Transport Association will assure information flow on Zika and vector control to all member airlines.

• Front line health professionals will inform the Commission and MS about their views and assessments with regard to possible bottlenecks, e.g. shortage of drugs, including specific immunoglobulins for the treatment of Zika virus related complications such as Guillain–Barré syndrome.

#### Meeting on Zika vector control measures in the EU

On the 8th of July 2016, the European Commission (DG Health and Food Safety) organised a meeting with Member States representatives and experts to review and discuss existing vector control schemes in Europe built on experience of countries with experience in this area.

The European Centre for Disease Prevention and Control (ECDC) presented an overview of the epidemic and the risk of a Zika virus introduction to continental Europe.

Member States reported about their experience in mosquito control, focusing on methods, ports of entry, good practice and scientific developments in vector monitoring and control. The use of insecticides – their availability, efficiency and regulatory aspects – was intensively discussed.

#### Key conclusions are:

• Vector control will stay on the public health agenda at EU level due to its cross-border nature.

• Strengthening intersectional collaboration between public health and other relevant sectors, i.e. trade, transportation and tourism is of key importance.

• The availability of biocides and licencing issues are of high importance and need to be addressed in the framework of existing legislation.

• Mosquito surveillance in Europe needs to be reinforced, not only in view of the ongoing Zika virus epidemic in the Americas and the Caribbean, but also in view of climate change and the introduction of potential vectors for other vector borne diseases to Europe.

• Existing good practices on vector control need to be shared and, with the technical support of ECDC, adjusted to the conditions of Member States in need.



Adult sampling/trapping backpack aspirator © ECDC



## Global Flood Partnership Conference: a multi-disciplinary group of scientists, operational agencies and flood risk managers focused on developing efficient and effective global flood tools



From 29 June – 1 July 2016, the 2016 Global Flood Partnership Conference was held at the Joint Research Center of the European Commission in Ispra, Italy. Fifty participants attended the conference coming from 15 different countries in 5 continents.

They represented 38 institutions including international organisations, private sector, national authorities, universities, governmental research agencies and non profit organisations.

The Global Flood Partnership is a multi-disciplinary group of scientists, operational agencies and flood risk managers focused on developing efficient and effective global flood tools that can address these challenges. Its aim is to establish a partnership for global flood forecasting, monitoring and impact assessment to strengthen preparedness and response and to reduce disaster losses.

The objective of the 2016 conference was to review the advances and success stories of the Partnership, to assess the challenges and opportunities ahead, and to discuss steps needed to further strengthen the partnership in order to address users' needs effectively.

The conference was organised with the first day focusing on the Partnerships achievements and presenting the activities of the different pillars of the Partnership. The second day focused on discussing research advances, and the third day on the future of the Global Flood Partnership.

During numerous presentations, posters and interactive sessions participants illustrated the progress that has been

made in scientific understanding and tools for global flood forecasting, monitoring, and assessment. Furthermore, the need for the Global Flood Partnership to convene researchers and practitioners in this space was also recognized. For example, during this conference, attendees debated the definition of a flood event, applicability and relevance of different global modelling products, and identified specific forecast products that could be used to trigger humanitarian action before a potential flood disaster. The Partnership evaluated the potential impact of existing flood tools for forecasting and monitoring, and also where improvements can be made going forward.

In light of this progress, it was concluded that the opportunity exists to make a greater impact in strengthening preparedness and response and reducing disaster losses. This will only be achieved by strengthening the engagement with users of flood risk information. Given the urgent needs of the global community, this will become a greater priority for the Partnership in coming years.

Giving these identified capabilities, the Global Flood Partnership has committed to better align research and modelling efforts with the objectives identified by practitioners working on flood preparedness and response. The GFP also concluded that through co-developing research priorities and tools with the flood risk management community there is a great potential to amplify research results.

More info: http://gfp.jrc.ec.europa.eu/GFP2016-Presentations



#### Meeting on lessons learned from emergency response on non-nuclear accidents



From left to right: S. Masuda (WPNEM), M. Wood (JRC), E. Lazo (WPNEM), O. Guzman (WPNEM), Z. Gyenes (JRC) © European Commission

The Major Accident Hazards Bureau (MAHB) of the European Commission Joint Research Centre organized a meeting with the OECD Nuclear Energy Agency (NEA) on the 28th and 29th of June 2016 in Ispra in the framework of the Committee on Radiation Protection and Public Health Working Party on Nuclear Emergency Matters (WPNEM) activities on lessons learned from emergency response to non-nuclear accidents.

Other JRC activities in the field of disaster risk reduction and management were introduced too, such as the eNatech (Natural hazard-triggered technological accidents) accidents database, the Disaster Risk Management Knowledge Centre (DRMKC) initiative and the studies performed by the Safety and Security of Buildings Unit.

Given that nuclear emergency situations are rare, learning has been much dependent on exercises, such as the INEX series for NEA. However, emergency situations caused by natural and non-nuclear technological disasters are more common and can thus be a source of lessons learned, particularly for evacuation and sheltering decisions.

For this the WPNEM has reached out to the OECD Working Group on Chemical Accidents, and to the JRC, who have been working together on chemical accident analysis for some time. The meeting in Ispra allowed NEA and the JRC to exchange experiences and interest in lessons learned from major accidents relating to emergency response, reported in the online major accident reporting system (eMARS) run by MAHB and the eNatech database.

The purpose of eMARS is to facilitate the exchange of lessons learned from accidents and near misses involving

dangerous substances in order to improve chemical accident prevention and mitigation of potential consequences. eNatech focuses on learning from Natech accidents.

JRC provides scientific, technical and operational support to the European Response Coordination Centre (ERCC – ECHO) by means of ad-hoc developed technologies for the Early Warning of the population, timely assessment of the situation using consolidated models and prompt elaboration of maps and technical reports. The European Crisis Management Laboratory (ECML) is also the reference point for the organization of tests and exercises at EU level in support to both DG ECHO and MS.

The Safety and Security of Buildings Unit has a long experience in seismic risk assessment and mitigation for buildings, lifelines and critical infrastructures, considering structural and socio-economic aspects as well as interdependencies between systems, and has participated in numerous post-earthquake field missions to collect information on the performance of the built environment and on the management of the emergency.

The parties agreed on the interest to continue collaborating in this field. It is hoped that a joint project, such as a workshop or an Expert Group can be formed with the NEA, OECD, and JRC to share experience and lessons

More info: https://emars.jrc.ec.europa.eu http://enatech.jrc.ec.europa.eu

## 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.



## Enhancing Synergies for disaster Prevention in the European Union: the ESPREssO Project

2015 has been an important year for the intergovernmental agreements on climate change and disaster management efforts. The Sendai Framework for disaster risk reduction and the COP 21 agreement are a significant improvement on the Hyogo Framework for Action and the Kyoto Protocol.

The Sendai Framework identified seven global targets to be achieved by 2030 to reduce the impact of disasters and integrate disaster preparedness efforts with climate change mitigation and adaptation.

The COP21 agreement has built on these objectives urging efforts to limit the global temperature increase to 1.5 degrees. It is now urgent to identify strategies for achieving the objectives of the agreements.

The UNISDR Science and Technology Conference on the implementation of the Sendai Framework held in Geneva last January was the first step towards doing so.

ESPREssO (Enhancing Synergies for disaster PRevention in the EurOpean Union) - a research project funded by EU under the H2O2O program - aims to contribute to these strategies approaching both themes of climate change adaptation and natural risk reduction. ESPREssO aims to support the European Commission and the JRC Knowledge Centre on Disaster Risk Management.

The project structure is built upon the central role of three main challenges:

**1.** To propose ways to create more coherent national and European approaches on Disaster Risk Reduction, Climate Change Adaptation and resilience strengthening;

**2.** To enhance risk management capabilities by bridging the gap between science and legal/policy issues at local and national levels in six European countries;

**3.** To address the issue of efficient management of trans-boundary crises.

ESPREssO will develop a Stakeholder Forum promoting effective mechanisms and interactions with the key players (e.g. scientists, authorities, users, civil protection, UNISDR platforms...).

A comprehensive approach to the ESPREssO objectives requires a strong, multi-disciplinary group. The ESPREssO consortium is formed by seven European partners having a sound expertise in legal and governance issues and natural risk management, socio-economic aspects and resilience, hard science, statistical approaches to multi-risk and resilience.

The group, led by AMRA Scarl, Naples, Italy, includes: GFZ, Potsdam, Germany; BRGM, Orleans, France; DeutschesKomiteeKatastrophenvorsorgee.V. DKKV – Germany; ETHZ, Zurich, Switzerland; University of Huddersfield – UK; Københavns Universitet – Denmark.

More info: http://www.espressoproject.eu/



Enhancing Synergies for disaster Prevention in the European Union © ESPRESss0



#### Science for DRM 2017 report 2nd workshop for Coordinating Lead Authors and Lead Authors



Workshop Participants at Milan Malpensa , 13-14 June 2016

On 13-14 June 2nd workshop of Science for DRM 2017 report was held at Milan Malpensa. Starting with formal presentations to fully inform authors about the context in which the whole report as well as respective subchapters must fit in, the workshop then continued with working groups organized by chapters to discuss the content.

By the end of the second day and as a result of the collaborative work taken place before and during the workshop the table of content of the Science for DRM 2017 report has progressed to a third level of detail and all the subchapters got the draft abstracts agreed by Coordinating Lead Authors and Lead Authors that were successfully submitted on 17 June. By mid-July JRC Advisory Group successfully accomplished the internal review phase. With common effort already more than 100 authors have been brought on board and at this point invited to prepare their first drafts until 30 September. Authors Team comes from 17 countries and more than 70 different institutions, mostly European.

The DRMKC IT team of JRC has meanwhile developed Science for DRM 2017 report web platform as an integrated part of DRMKC webpage to support the entire workflow of the report, especially submission, review and writing phases of the process. At the moment the access is given to the registered and authorized users consisting of JRC Editorial board, JRC Advisory Group and the authors.

It is not only used to upload the contributions but also to view all contributions at different stages of the process and have an option to contact the authors. As such it serves as an essential tool for creating links among the subchapters and avoiding overlaps already during the writing phase in order to efficiently produce a consistent, coherent and strongly cross-referenced report.

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

## **BENEFITS FOR DRM COMMUNITY**

## → Scientist

Identify future priorities for research by contributing to the flagship report on Science for Disaster Risk Management in the EU

Participate in multi-disciplinary cross-border scientific partnerships and turn your research into operational services and policy advice

Offer expertise to civil protection and disaster risk management authorities

## → Practitioner

Receive situation awareness and analysis for EU and global disasters

Join a Community of Users, collaborating with colleagues from other Member States to interface with researchers, without missing out on results

Access tested innovative solutions for crisis management and practical advice on adoption of new research and technology

## → Policy Makers

Discover good practice and science-policy interfaces in other countries or disciplines

Get an overview of research funding in disaster risk management

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## 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.



## Social Media in Crisis Management 2016 – SMCM 2016

JRC is organizing the 7th European Crisis Management Laboratory (ECML) workshop on Social Media for Crisis Management in order to discuss opportunities and challenges in relation to the use of social media in Crisis Management. In the last decade, social media tools (e.g. social networks) have changed the landscape of personal interactions and - to some extent - the relation between citizens and Institutions.

Recently some organizations have attempted to use Social Media also in the field of crisis management, from preparedness to disaster response. While people affected by natural disasters seek and share information through SNS (social networking websites), increasingly governments and response agencies could rely on social media to get first-hand information and, inter alia, coordinate relief efforts, as shown in 2010 during the Haiti earthquake or in the case of the Haiyan Tropical Cyclone in Philippines of 2013.

The aim of this workshop is to invite tool providers and end users (e.g. Civil Protection, First Responders, Coordinating Institutions, Early Warning Authorities) to explore the present and the future of technologies in this field. The number of participants is limited to 35. Participation is free of charge. Lunches, coffee breaks and social dinner are courtesy of JRC. Registration is mandatory for preparing entry permits to the JRC site.

#### Structure

The workshop is divided in two days. While on the first day, the participants will explore topics and/or explain case studies through presentations, on the second day a set of activities will be carried out.

These activities aim both to assess tools and to discuss options (e.g. technological innovations but also latest research developments) for the future. In doing so, the workshop will shed light on approaches to social media in the field of crisis management and on practical demonstrations alike.

#### More info:

https://ec.europa.eu/jrc/en/research-facility/european-crisis-management-laboratory



Workshop participants © European Commission

## Training for professionals in critical infrastructure protection



Participants to the Pilot Course © European Commission

ERNCIP (European Reference Network for Critical Infrastructure Protection) aims at providing a framework within which experimental facilities and laboratories will share knowledge and expertise in order to harmonise test protocols throughout Europe, leading to better protection of critical infrastructures against all types of threats and hazards.

The ERNCIP's Academic Committee has established in close collaboration with DG Home a "pilot course for Mid-Career Security Managers in Critical Infrastructure Protection and Resilience".

The organisation of the Course took 1.5 years effort in order to gather Operators' functional requirements as well as subject matter experts' availability. The Pilot Course took place in Brussels from the 21st to the 23rd of June 2016.

Starting with a more theoretical first day, the Course then offered presentations and discussions around real cases in the sectors of Energy and Transport with a strong focus on transboundary issues and cooperation.

The Course also provided a roundtable on Operator Security Plans and lessons learned from neighbouring-Member States exercises. In the afternoon of the final day of the course, a table-top exercise based on a cyber scenario took place involving all the 22 participants, the lecturers and the panel of Observers (composed of experts from Member States' governments, from academia and from the European Commission) and led to an intense discussion on the importance of training related to transboundary cooperation between governments and operators in order to raise awareness on specific events and accidents that should require a coordinated and multi-national intervention.

At the conclusion of the Course, the participants received a training certificate. A final report about this project, including the entire training package, will be released around mid-september 2016.

More info: https://erncip-project.jrc.ec.europa.eu/



## Signing of Collaborative Research Agreement with World Health Organisation



World Health Organisation (WHO) © WHO

After a long period of informal cooperation sponsored in the past by DG SANTE which focused on epidemic intelligence, risk assessment and monitoring of open source news data, the World Health Organisation (WHO) and the Joint Research Centre of the European Commission (JRC) have formalised their relationship by signing a Collaborative Research Agreement in August 2016.

#### The key objective of the agreement are:

**A.** To obtain the scientific data needed to support the early detection and risk assessment of public health events.

**B.** To improve the co-ordination and effectiveness of co-operation efforts between WHO's headquarters, regional and country offices and the JRC in the field of public health.

**C.** To promote mutual interest and co-operation in understanding and resolving challenges around hazard detection and risk assessment.

**D.** To deepen the understanding and use of the scientific, economic and social data relating to public health.

**E.** To support a common global platform to facilitate WHO's event-based surveillance including early detection of potential public health hazards and collaborative risk assessment processes.

#### The parties agreed on a series of actions, namely:

 Joint identification of public health issues to be investigated and the development of innovative and cost-effective approaches to improve detection and risk assessment.
 Collect, analyse and document jointly the business, functional and technical requirements to support a global common platform.

**3.** Initiate and maintain a dialogue on matters of public health emergency management exploring possibilities for developing research projects of mutual interest.

**4.** Set-up of a joint infrastructure to share and collaborate on artefacts related to this collaboration.

**5.** Jointly establish a training programme on the use of any resulting tools.

**6.** Exchange appropriate scientific and technological information.

The JRC will also work with both the WHO and the Global Health Security Initiative (GHSI) of the G7 countries and Mexico, to bring together their separate epidemic intelligence systems into one technical solution.

This will provide open source news information to identify health threats at a very early stage through the JRC's Medisys system, and generate truly actionable risk assessments based on appropriate contextual information made available quickly and easily to the analyst.

More info: http://www.who.int/en/

## 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.

## **Upcoming Events**



#### 17-21 October, Lyon (FR) FLOODrisk 2016

Following the successful FLOODrisk 2008 and 2012 conferences, held in Oxford (UK) and Rotterdam (Nether lands) and following the first round of implementation of the European Flood Directive, FLOODrisk 2016 will bring together researchers, policy makers and practitioners from across the world to share experience and progress made in flood risk research, policy and management practice.

#### **24-25 October, Vienna (AT)** PLACARD Foresight Workshop -How can foresight help to reduce vulnerability to climate-related hazards?

The Foresight CCA and DRR workshop will: **1)** Identify relevant long-term trends and possible surprises in developments of socio-economic or natural systems with implications for DRR and CCA, **2)** Explore the needs and priorities for improving interactions and maximizing synergies between the two communities in

Europe, **3)** Assess opportunities to tackle the challenges jointly. Develop recommendations for CCA and DRR policy- and decision-makers.

#### **26-28 October, Brussels (BE)** 8th EU Loss Data Workshop -Sendai and Paris Agreement

The objectives of the 8th meeting of the EU expert working group on disaster damage and loss data are: **1)** Discuss requirements for the 3rd and final meeting of Open-ended Intergovernmental Expert Working Group (OIEWG) on Indicators and Terminology for Disaster Risk Reduction, **2)** Present the results of the Loss Data

Challenge – Mapping Phase, **3**) Present the preliminary results of the Support Services of DRMKC, **4**) Highlight the role of National Institutions, EC, EURO-STAT, and other stakeholders to collect, share and analyse data in the short and mid-term.

#### 28 November, Ljubljana (SI)

Joint UNECE/OECD Seminar on Fostering implementation of the 2030 Agenda for Sustainable Development and the Sendai Framework for Disaster Risk Reduction 2015–2030 for industrial accidents prevention, preparedness and response

UNECE Convention on the Transboundary Effects of Industrial Accidents and the OECD Working Group on Chemical Accidents organize a Joint Seminar on Fostering implementation of the 2030 Agenda for Sustainable Development and the Sendai Framework for Disaster 2015-2030 Risk Reduction for industrial accidents prevention, preparedness and response on 28 November 2016 in Ljubljana, Slovenia. The main objective of the Seminar is to discuss how the work of UNECE and OECD on industrial and chemical accidents prevention, preparedness and response can contribute to achieving the sustainable development agenda, in particular the relevant Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development and the goals and priority actions set out in the Sendai Framework for Disaster Risk Reduction 2015- 2030.



#### **12 September, JRC Ispra (IT)** 7th International Tsunami Symposium

The Symposium will focus primarily on Tsunami Risk Analysis and Disaster Management, on the 16 September

2015 Illapel, Chile Mw8.3 Earthquake, and on the near and far field tsunami impacts, as well as on potential future impacts from tsunamis generated in Central and South America. It will follow a Plenary Tsunami Session of the main Conference organized by TSI, in which we plan to introduce to attending delegates for discussion, the need for a holistic approach in coping and addressing also the array of tsunami risks facing other vulnerable areas in all of the world's oceans and seas.

#### **16 September, Ljubljana (SI)** Stress tests for critical infrastructures against natural hazards.

The workshop aims at communicating the products developed during the project, namely new research results on natural extreme events and harmonized methods for risk assessment leading to the standardization and implementation in Europe of stress tests for various classes of CIs. It will present the results of applications from a large selection of CIs: petrochemical plants, hydropower dams, oil pipelines, gas networks, port infrastructures and industrial districts.

#### **20 September, Turin (IT)** 1st International Workshop on Resilience

How do we use resilience-based seismic engineering to steward our built environment and make it safer, resilient and sustainable in the future?It is the objective of this workshop to assess and develop strategies on how to improve community resilience against a major event.

#### **O9 November, Toensberg (NO)** Mutual Joint Visit Programme for Seveso Inspections on Explosive and Firework Sites

Together with the Norwegian Ministry of Civil Protection, the JRC will organise its annual workshop for Seveso inspectors under the Mutual Joint Visit Programme. This year's workshop will foster EU exchange on challenges and good practices for improving safety associated with explosive and fireworks manufacturing and storage.

#### **28-30 November, Ljubljana (SI)** Conference of the Parties to the UNECE Convention on the Transboundary Effects of Industrial Accidents

The ninth meeting of the Conference of

#### Read more and submit your events http://drmkc.jrc.ec.europa.eu/overview/Events

the Parties will take place on 28-30 November 2016 in Ljubljana, Slovenia and will provide an opportunity to review the work under the Convention and to determine future directions and priorities. In the framework of the 9th meeting of the Conference of the Parties, a Joint UNECE/OECD Seminar on Fostering implementation of the 2030 Agenda for Sustainable Development and the Sendai Framework for Disaster Risk Reduction 2015–2030 for industrial accidents prevention, preparedness and response will be held.

#### **29-30 November, Ispra (IT)** Space Weather Summit "Space Weather & Critical Infrastructures"

Numerous incidents have shown that critical infrastructures on the ground and in space, e.g. aviation, power grid, GPS, communications, etc., are vulnerable to the effects of solar storms. Of particular concern is extreme space weather that can trigger infrastructure failure and cascading events across national boundaries. The Joint Research Centre of the European Commission, jointly with the Swedish Civil Contingencies Agency (MSB) and the UK Met Office are organising a Space Weather Summit which will: 1) Raise awareness of potential space-weather impacts on critical infrastructures among the different stakeholder groups, 2)Present known vulnerabilities of different types of infrastructures and discuss resulting problem related to service disruptions and cascading effects, 3) Discuss how industry and government can prevent incidents and prepare for their consequences both from a sectoral and holistic point of view, 4) Identify remaining needs and gaps in risk reduction with respect to space-weather impacts and recommend a way forward, 5) Promote and support dialogue, exchange of information and coordination among the stakeholders to foster a holistic approach to disaster risk reduction associated with extreme space-weather events.

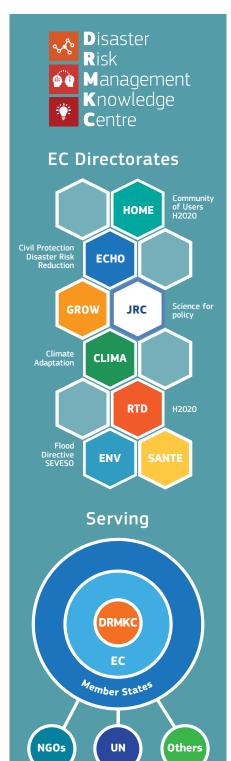


#### **12-16 September, Ferrara (IT)** RISC-KIT Summer School on Disaster Risk Reduction in Coastal Areas

RISC-KIT, a European project funded under the 7th Framework Programme of the European Commission, is developing a toolkit to improve resilience and preparedness in exposed areas to improve Disaster Risk Reduction (DRR) and to protect human life and investment. The toolkit includes a risk assessment tool, the Coastal Risk Assessment Framework (CRAF) that allows the user to determine which regions along a coastal expanse are most vulnerable to hazards. By identifying these risk "hotspots", end users can more efficiently focus their DRR measures and resources. The toolkit also comprises an online management guide that allows virtual learning and exchange for the development of disaster risk reduction (DRR) plans. The guide includes prevention, mitigation and preparedness measures with recommendations for their use in different socioeconomic, cultural and environmental scenarios.

#### **16-18 November, Sofia (BG)** First IFIP Conference on Information Technology in Disaster Risk Reduction (ITDRR 2016)

ITDRR-2016 provides an international forum for researchers and practitioners to present their latest R&D findings and innovations. The conference is especially focused on the various IT aspects and challenges of copying with disaster risk reduction. ITDDR-2016 invites experts, researchers, academicians and all other who are interested to disseminate their work. The conference establishes an academic environment that fosters the dialogue and exchange of ideas between different levels of academic, research, business and public communities.



The Disaster Risk Management Knowledge Centre (DRMKC) is aimed to enhance EU and Member State resilience to disasters and their capacity to prevent, prepare and respond to emergencies through a strengthened interface between science and policy. **CONTACTS: drmkc@jrc.ec.europa.eu - http://drmkc.jrc.ec.europa.eu/ - Editor: Brian Doherty**  Disaster Risk Management Knowledge Centre





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

## **DRMKC** website

The DRMKC website (http://drmkc.jrc.ec.europa.eu) is constantly evolving and improving, even if there is still a way to go to create the kind of truly integrated, interconnected resource we have in mind. We intend to use space in this and upcoming newsletters to keep readers informed of the latest developments in the evolution of the website.

Recent developments concern the projects section which is part of the Knowledge pillar and we hope soon to update this to make it easier to search for projects based on the organisations involved, the funding mechanism, the people taking part and their locations. Of course, the really interesting aim from the point of view of the DRMKC is to initiate and support collaboration between groups and projects and to promote the sharing of research results and products. The DRMKC website will therefore develop in this direction, with the intention of being a really accessible repository of contacts, networks and results.

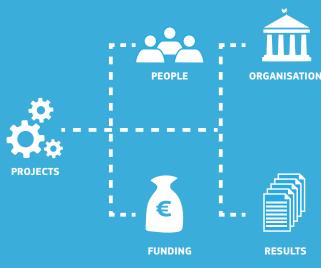
## **DRMKC Support Service**

Also recently updated on the site is the information related to the DRMKC Support Service, a key objective of the Innovation pillar. The presentation of the information has been greatly simplified and the current status of service requests is now available. The large quantity of visible text has been replaced by two questions, "What is it?" and "How can I activate it?". In time we will make it easier to manage internally as well as better integrated into the search and retrieval functionality of the website as a whole. The direct link is here: (http://drmkc.jrc.ec.europa.eu/laboratory/SupportSystem

## **Become our contributor**

For this reason, we would like to encourage greater participation in the site. To register, simply click on the Login link in the top right of the page (outlined in red in the picture) and follow the instructions. All current and new users will be given update rights to the News, Events and Documents section of the site simply by sending an email to **drmkc@jrc.ec.europa.eu** with subject "Request Contributor Status". This will allow users to publicise and share their work within the DRMKC.

When you have logged in and been granted the contributor role, the website will show links to create news and events, as well as links to documents explaining how to do it. We look forward to hearing from you.



**DRMKC Website workflow.** 

The Support System is the resource implemented States with technical advice in the field of disaste and good practice within the BU with the specific	r risk management. It aims to broke	
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**DRMKC Website, Support Service Request.** 



DRMKC Website, registration and request contributor status.