European Commission

JRC TECHNICAL REPORT

DRMKC Communication and Outreach activities

Including an updated status of the DRMKC Website

Santini M., Guana, R., M., Spagnolo, L., Dausse, P., Corbane, C.

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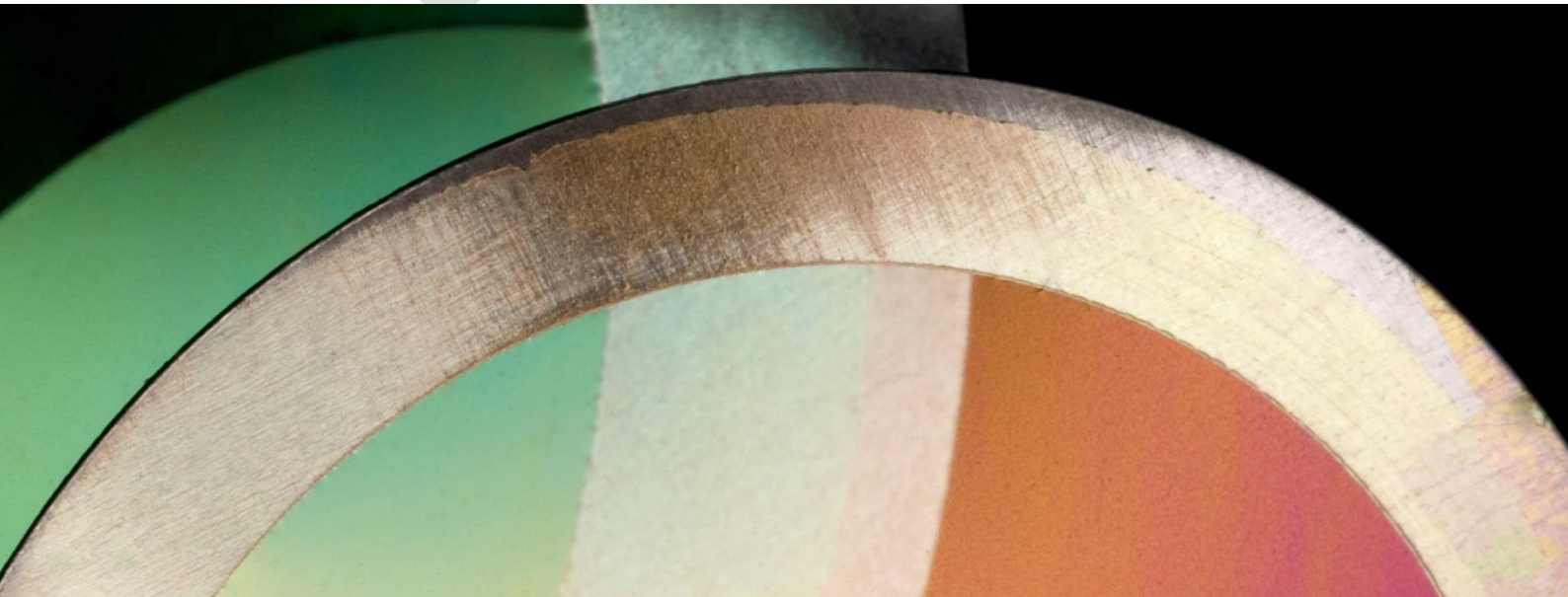

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Authors

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Abstract

The aim of this report is to provide an overview of the DRMKC activities in 2021 related to communication and outreach in different formats and through diverse channels (including websites and hybrid events). Details on the changes introduced to the DRMKC website are provided including major updates and new contents. Beyond the developments that were done in the direct context of the DMRKC website, additional activities, pertaining to collaborations the DRMKC has with different networks and communities, were also carried out over the year. The report focuses in particular on the developments done in the contexts of the "Knowledge for Policy" and the "Union Civil Protection Knowledge Network platform. The report also covers ongoing work on the development of a taxonomy for Disaster Risk Management aligned with the Knowledge Network Platform and across the different pages of the DRMKC website. This activity fuelled by a multi-stakeholder collaboration including UNDRR-ISC-CODATA- DG ECHO-DG HOME and in the future WHO, will allow automated classification of DRM projects, facilitate the querying of information in the different databases of publications, news, projects, etc. and the alignment with other taxonomies and terminologies such as the one proposed under the Risk Data Hub.

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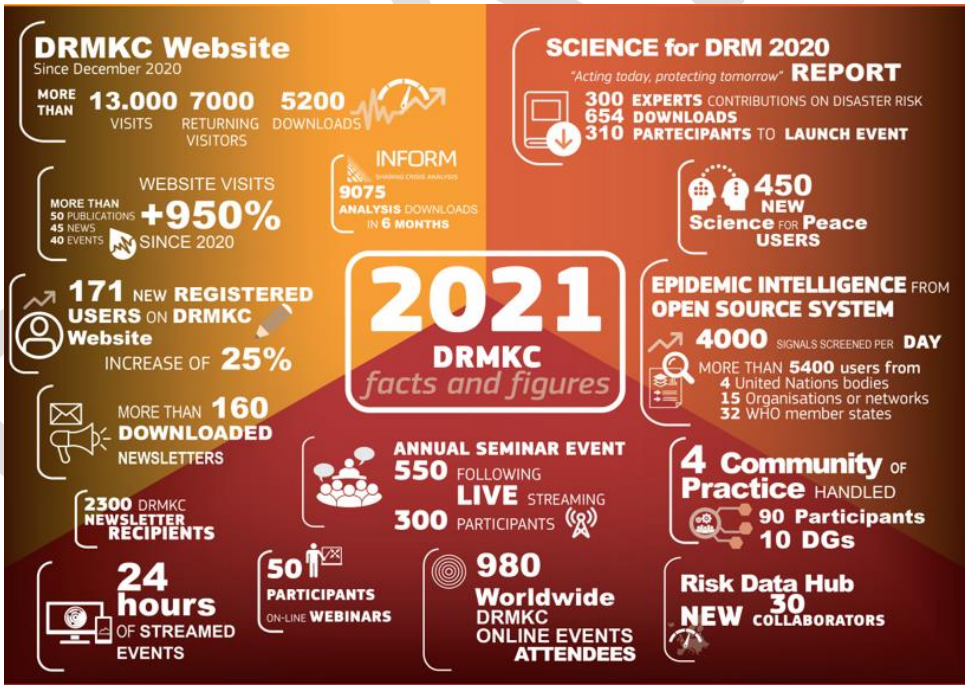
Introduction

The Disaster Risk Management Knowledge Centre (DRMKC) mission of integrating and consolidating existing scientific multi-disciplinary knowledge for better coordinated DRM policies, can only be achieved through effective communication and outreach. To achieve this goal, it is not enough to produce content and data, it is also needed to develop a shared knowledge system, able to support, communicate widely and be understood by all the actors involved in DRM. For that purpose the DRMKC is developing and maintaining different instruments to achieve an efficient communication.

The aim of this report is to provide an overview of the DRMKC activities in 2021 related to communication and outreach in different formats and through diverse channels (including websites and hybrid events). Details on the changes introduced to the DRMKC website are provided including major updates and new contents. Beyond the developments that were done in the direct context of the DMRKC website, additional activities, pertaining to collaborations the DRMKC has with different networks and communities, were also carried out over the year. The report focuses in particular on the developments done in the contexts of the "Knowledge for Policy" and the "Union Civil Protection Knowledge Network platform. The report also covers ongoing work on the development of a taxonomy for Disaster Risk Management aligned with the Knowledge Network Platform and across the different pages of the DRMKC website. This activity fuelled by a multi-stakeholder collaboration including UNDRR-ISC-CODATA- DG ECHO-DG HOME and in the future WHO, will allow automated classification of DRM projects, facilitate the querying of information in the different databases of publications, news, projects, etc. and the alignment with other taxonomies and terminologies such as the one proposed under the Risk Data Hub.

The key achievements in 2021 in terms of communication and outreach including also the access to the resources and datasets hosted on the DRMKC website are summarized in the following infographic.

Figure 1: Key achievements in 2021, in terms of communication and outreach including also the access to the resources and datasets hosted on the DRMKC website



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Navigation map for the website

Following the revamp of the DRMKC website in 2020, the DRMKC continued investing in the further update and expansion of its website, which is currently the main platform informing the partners, the networks and the community on all recent developments in the DRM sphere.

In continuity with past years, the work of the year 2021 was focused on the aspect of the appearance and user friendliness of the website improving the navigation, the uniformity of the pages, within the rule of the Europa Component Library (i.e. visual identity).

The navigation of the site is a crucial aspect to allow the users to find easier and faster the information needed. After a deep analysis of the current and foreseen contents, we felt the need to re-organize the DRMKC website navigation, to make them more easily available for the users.

Different options are come out from several meetings held within the team, which was also trying to anticipate what changes we could expect once the UCPKN platform would have been up and running. Another important aspect considered was the need for (1) consistency and (2) complementarity between the DRMKC website and the Knowledge4Policy and Union Civil Protection Knowledge Network ones.

The following table shows the analysis performed by the DMRKC team around the contents and the possible alternatives for navigating the DRMKC website. In particular, under the three columns we see:

- The navigation map of DRMKC website in 2020
- The first option designed as an alternative navigation map
- A second option for a change to the navigation map of 2020

Table 1: comparative table of the navigation map options for DMRKC website

Current (as of 2020)	Option 1	Option 2
• **Overview** o About o Events o Join us o News o Publications o Latest Events o Newsletter o COVID-19 o Disaster Risk Management Knowledge Centre Information Day • **Partnership** o DRM Networks o Annual Seminar • **Knowledge** o Gaps Explorer o Project Explorer o Science for DRM	• **Home** • **Overview** • **Partnership** o Operational Services & Platforms o DRM networks & communities • **Knowledge** o Project Explorer o Gaps Explorer o Science for DRM o Scientific Output o Learning Material o Support System (Horizon Europe) o Covid-19	• **Home** • **About** • **Services & tools** o INFORM o Risk Data Hub o EIOS o GCRI o **Service catalogue (with contacts):** o **Link to** CEMS o **Link to** GDACS o **Link to** GHSL o **Link to** JRC resilience dashboard o **Link to** Critech Covid page o **Link to** WebCritech page (IDSL, TAT,…) o Link to Re-Open EU

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o Scientific Output • **Innovation** o INFORM o Risk Data Hub o Support System o Epidemic Intelligence from Open Sources (EIOS) o Global Conflict Risk Index (GCRI)	• **Innovative platforms (&tools)** o INFORM o Risk Data Hub o EIOS o GCRI • **News** o All news o Newsletter • **Events** o DRM advertised events o DRMKC featured Events o DRMKC Annual Seminars • **Documents** • **Get involved** o Receive our Newsletter o "Become a contributor" o "Current opportunities" o Contacts	o RAPID-N o ... • **DRM networks & communities** • **Knowledge base** o Project Explorer o Gaps Explorer o Science for DRM o Scientific Output o Learning Material o Support System (Horizon Europe) • **News** o All news o Newsletter • **Events** o DRM advertised events o DRMKC featured Events o DRMKC Annual Seminars • **Documents** • **Get involved** o Receive our Newsletter o "Become a contributor" o "Current opportunities" o Contacts

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In the past, the contents of the website were organized on a structure based on the three main sections (Knowledge, Partnership, Innovation), in which DRMKC website has always been divided. However, this subdivision created conceptual problems in the past and the present as well (e.g. the division between "knowledge" and "innovation" is never obvious and is changing over time).

The final choice for the revision of the DRMKC website navigation map was based mainly on option 2, with some variations, mostly inspired by the approach adopted for the DRMKC Info Day event, where we showcased all the available knowledge/tools from the whole Unit (not only DRMKC team projects) and we highlighted the "operational services and platforms" which the users can immediately benefit from.

The main areas of the new navigation map for DRMKC website are:

1- **"Initiatives & Services", the old "Partnerships"**, where we re-organized and better distinguished between *tools* and *networks*. Therefore, in this area we now find: all DRMKC team tools; tools from the whole

unit (under “more service tools”); DRM networks and, highlighted by itself, the Union Civil Protection Knowledge Network

2- **"Knowledge"** where we put all the DRM knowledge reviews types of products (Project explorer, Gaps explorer, Science for DRM reports, Scientific output, Learning corner, Support System-Horizon Europe);

3- **“Events & News”** are more visible and better grouped. Here, we distinguished among “DRM advertised events” (planned and implemented by DRM stakeholders outside DRMKC), “DRMKC featured events” (organized and managed by DRMKC), a dedicated sub session to the “DRMKC annual seminars”, all news, Newsletters.

4- **“Get Involved”**, i.e. the area where the DRMKC website users can learn how to become an active member of DRMKC. Here they can find how to “receive our Newsletter” and “become our contributor” (with guidelines to do so). They also can look for “current opportunities” to work with the Commission and how to contact DRMKC.

Despite the above-mentioned changes, the 3 keywords (knowledge, partnerships, innovation) are still valid, because they quickly express our mind set and way of working (with the advantage that we can keep all the visuals of DRMKC as they are, without need for changes), but the content distribution in the website is more understandable and user friendly while providing a more comprehensive picture of all DRM knowledge and tools available in JRC (beyond our team and also -in perspective- beyond our Unit and DG, as the DRMKC is made of 12 DGs).

Figure 2. Navigation map for the website

Source: JRC, Eurostat, 2016.

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New components: Scientific output, Learning corner, Gaps explorer and NRA

The most relevant new contents produced for the DRMKC website are:

1. The **scientific output** section, i.e. a selection of papers, reports, and policy briefs covering different research domains and policy areas produced by the scientists of the Joint Research Centre. The DRMKC strives to boost the transfer of research outputs to end-users and to facilitate the task of making sense of existing knowledge fostering knowledge and innovation for mitigating disaster risks and coping with hazards.

2. The **learning corner** section, a collection of learning opportunities to increase your know-how in the very many different areas of DRM. These opportunities are about methodological and conceptual approaches, guidelines, good practices, and how-to explanations coming from the EU services, the international DRM network, academia, and practitioners. Most important are the series of CONRIS (Cooperation Network for Risk, Safety & Security Studies) trainings on DRM, based on "Science for DRM" reports.

3. The **Gaps Explorer**, a tool developed to provide targeted recommendations, tailored to different stakeholder profiles – Policy-Makers, Practitioners, and Scientists – based on thematic reviews. It section has been updated with the introduction of the new section based on the conclusions of "Science for disaster risk management 2020: acting today, protecting tomorrow" report.

4. The **report "NRA version 1"** is the second in the series of reports "Recommendations for National Risk Assessment for Disaster Risk Management in EU". It is a key activity of the EC Disaster Risk Management Centre to join national, regional, and global efforts to acquire a better risk governance structure through evidence, science, and knowledge management. The aim of this report is to support the use of the new "Reporting Guidelines on Disaster Risk Management, Art. 6(1)d of Decision No.1313/2013/EU," (2019/C 428/07) by relevant national authorities. This report explains the purpose and objective of each step of the reporting to give meaning and motivation to demanding risk governance processes at the national level and beyond. Union Civil Protection Mechanism Decision No 1313/2013/EU requires EU Member States and UCPM participating states to report to the Commission on their disaster risk management activities to support formulating an EU risk management policy that would complement and enhance the national ones.

Figure 3. Scientific output page

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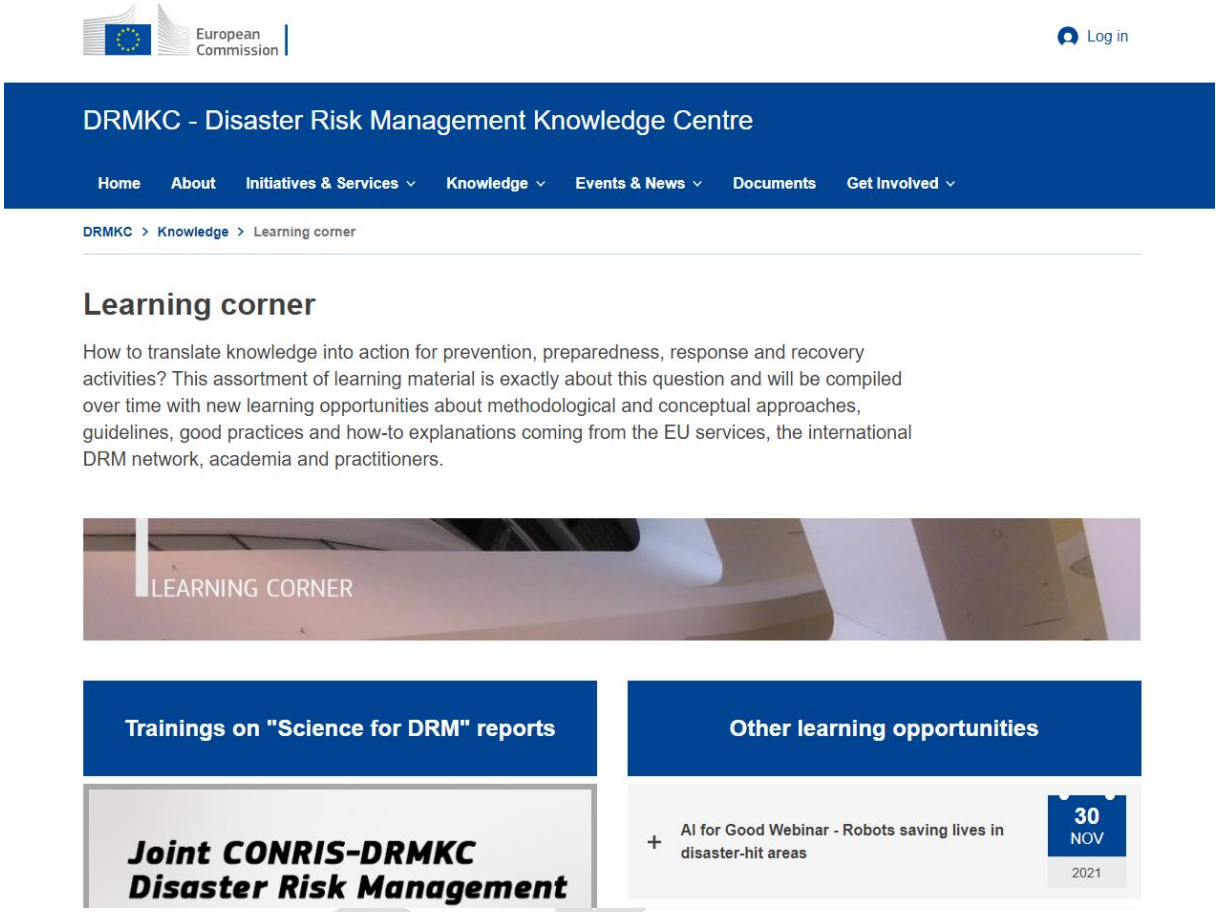
Figure 4. Learning corner page



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DRMKC featured events in 2021: 5th DRMKC annual Seminar, DRMKC Info Day and Science for Disaster Risk Management 2020

Three main events were realized during the year. In order of date, the events are:

1- The **launch of the "Science for Disaster Risk Management 2020: acting today, protecting tomorrow".** The second of its series, this report was produced with the collaboration of more than 300 experts in disaster risk management and summarizes the state of relevant science from a European perspective. It is aimed to be the start of a continuing process, the beginning of a wider, worldwide partnership to summarise knowledge globally, and make it available to the disaster risk management community. The virtual launch event was on 23 March 2020, Commissioners Gabriel and Lenarčič intervened and it was followed by 472 participants from 58 EU and not EU countries.

2- The **"Disaster Risk Management Knowledge Centre Information Day"** on 15 June 2020. First of this kind of events for DRMKC, it aimed at providing an overview of the operational services, methods and data that can support MS/PS in their work in Disaster Risk Management. The material presented was selected from a wide range of tools, datasets and methods available at the Joint Research Centre and tailored to the needs of MS/PS, who were consulted on the format and on the content of the Information Day during the fifth meeting of the Knowledge Network Preparatory Working Group. This virtual event was organized in close collaboration with DG ECHO (Knowledge Network Unit, B3), with the active contribution of all team leaders from the Unit and 65 participants from more than 20 MS/PS attended the virtual event, while 251 followed the web streaming of it. Participants expressed their interest for having further DRMKC Info Days in the future and selected a list of topics of interest for future implementations. The first DRMKC Information Day was a good opportunity to bring together many of the systems, tools and data developed by the JRC that can support the activities of MS/PS. It was a preparatory event among the events paving the way to the launch of the Knowledge Network at the end of the year.

3- The **5th Disaster Risk Management Knowledge Centre (DRMKC) Annual Seminar** (again, in virtual format)**,** on 17-18 November 2021, after two years of break caused by the COVID-19 pandemic. Those two years brought significant changes to the risk landscape: the COVID-19 crisis was accompanied by a series of natural disasters that hit Europe and the world in particular during summer 2021. These concomitant disasters require from us to oversee, anticipate and manage these crises in a more coordinated way. In this evolving risk landscape science has gained a place of honour and become more central to policy making. This is the case particularly for disaster risk management where the role of Science and Policy Interface has become prominent. The 5th DRMKC took place in this context where higher ambitions are expected from Science. Compared to the previous annual seminars where the DRMKC was progressively working towards establishing its role as the main entity at the interface between Science and Policy in the field of Disaster Risk Management, this year's seminar, confirmed the place of the DRMKC as the Science Pillar of the newly established Union Civil Protection Knowledge Network. The annual seminar brought together scientists, practitioners, policy makers and civil protection authorities across Europe to launch a new phase of dialogue between Science and Policy and to start building together the knowledge base for supporting the activities and actions of the Science Pillar of the Knowledge Network. We had more than 200 registered participants, from more than 40 European and non-European countries. The 5 sessions of the annual seminar were followed by 154 subscribed participants. In addition, we recorded a maximum of 552 connections to the livestreaming.

For all the above-mentioned events, dedicated web pages were created where the users could find the information on the event before (agenda, links for the streaming connection, subscription) and all the outputs after (presentations, videos of the streaming, and the conclusion report of the event).

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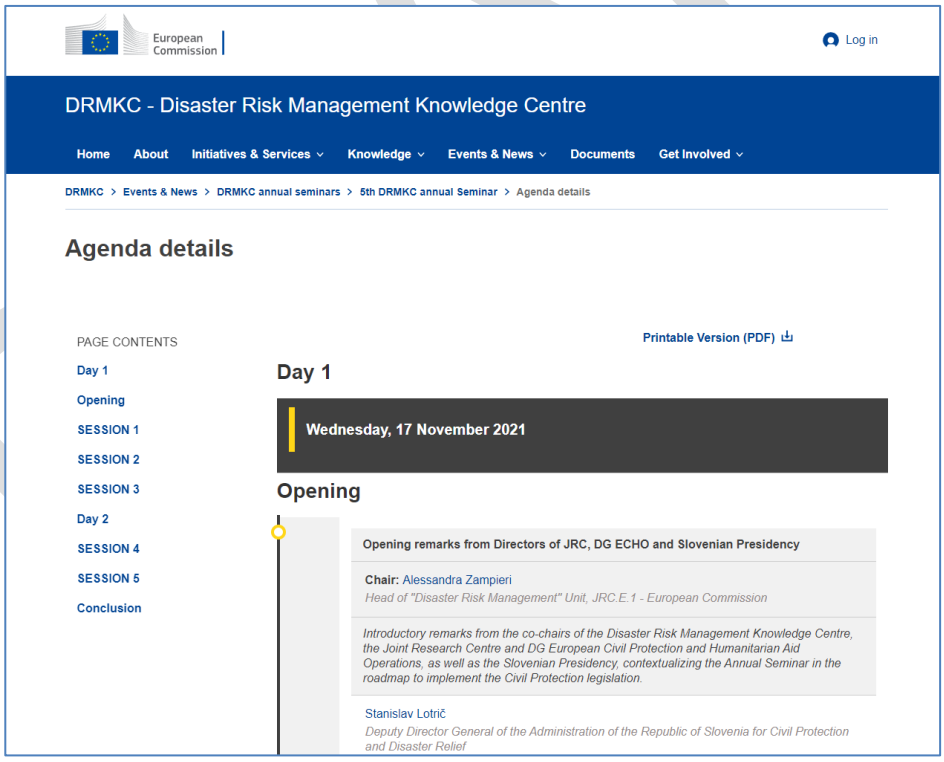
Figure 5. Disaster Risk Management Knowledge Centre Information Day page

Figure 6. Agenda details of 5th DRMKC annual Seminar page



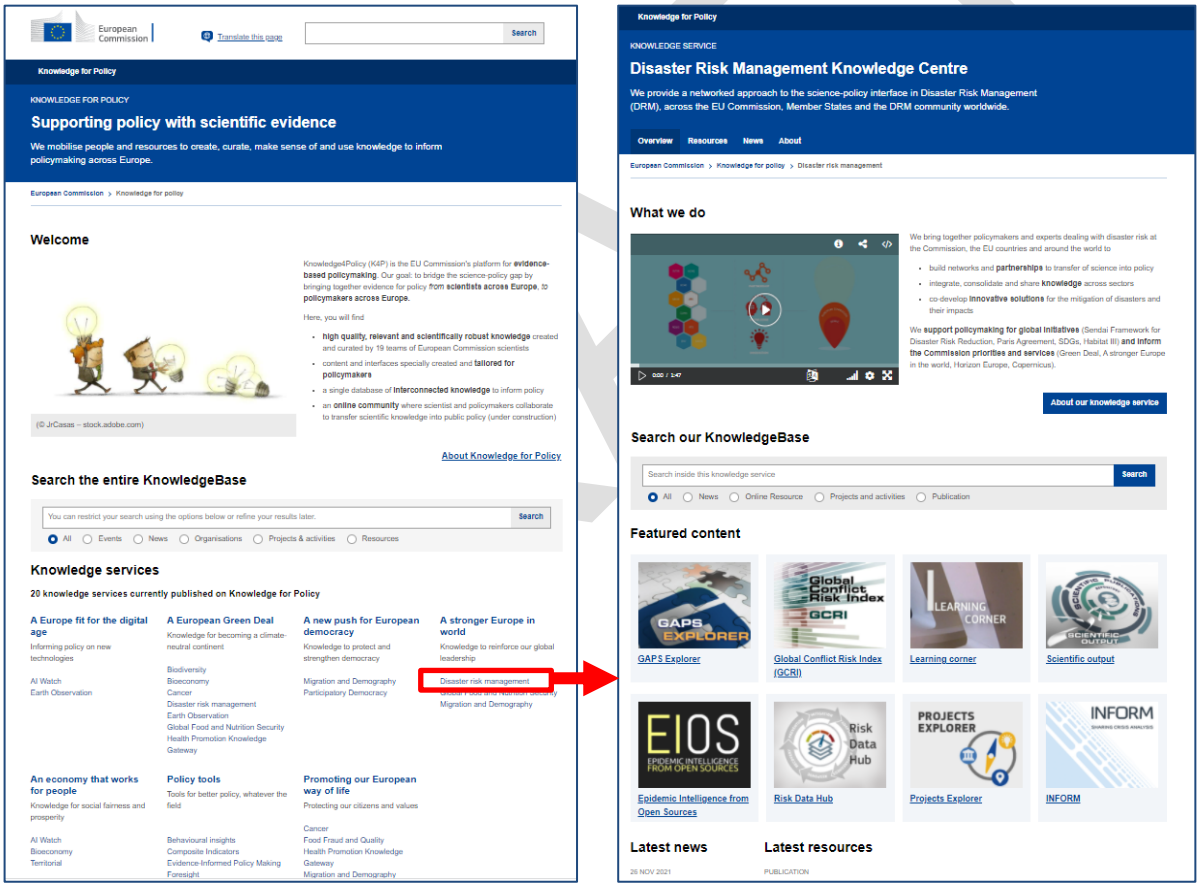
Collaboration with “Knowledge for Policy” and the “Union Civil Protection Knowledge Network platform”

The DRMKC is integral part of two initiatives (and corresponding platforms): the “knowledge for policy” and the “Union Civil Protection Knowledge Network”.

Knowledge4Policy (K4P)[1] is the EU Commission's platform for evidence-based policymaking. The goal of the platform is to bridge the science-policy gap by bringing together evidence for policy from scientists across Europe, to policymakers across Europe. This is done for all the European policy areas.

Our contribution to the platform, in the Disaster Risk Management domain, has been designed and implemented with the aim of keeping the coherence with the DRMKC website and, at the same time, to ensure complementarity between the two sources. Therefore, the DRM contents provided by DRMKC for the K4P platforms are also reflected in our website, where additional details can be found. So, we continued throughout the year to share information and update the content of K4P, in parallel to the changes of DRMKC website. A particular attention was put to find solutions to make this work easier and, as much as possible, automated.

Figure 7. DRMKC section in the K4P platform



The Union Civil Protection Knowledge Network (based on the Decision of the Commission ((EU) 2021/1956)) aims to strengthen the Union Civil Protection Mechanism in aspects of Preventing, preparing for and responding to disasters. It brings together civil protection and disaster management actors to work together, collaborate and learn from each other with the objective of strengthening the EU’s overall ability and capacity to deal with disasters. The Union Civil Protection Knowledge Network platform[2] was launched on 7 December, during the Union Civil Protection Knowledge Network Day, and is organized around two ‘pillars’: the Capacity Development pillar and the Science pillar. As of today, the contents of the last pillar in the Union Civil Protection Knowledge Network platform are totally built upon the components of the DRMKC. The “Science

[1] https://knowledge4policy.ec.europa.eu/home_en
[2] https://civil-protection-knowledge-network.europa.eu/

& Research" section of the platform (i.e. the Knowledge Network Science Pillar") in fact, has been populated with contents provided by DRMKC and, beyond a generic description of what is the Science Pillar and the DMRKC, points (only, for the moment) to the following DRMKC components:

Under "Knowledge Gaps":

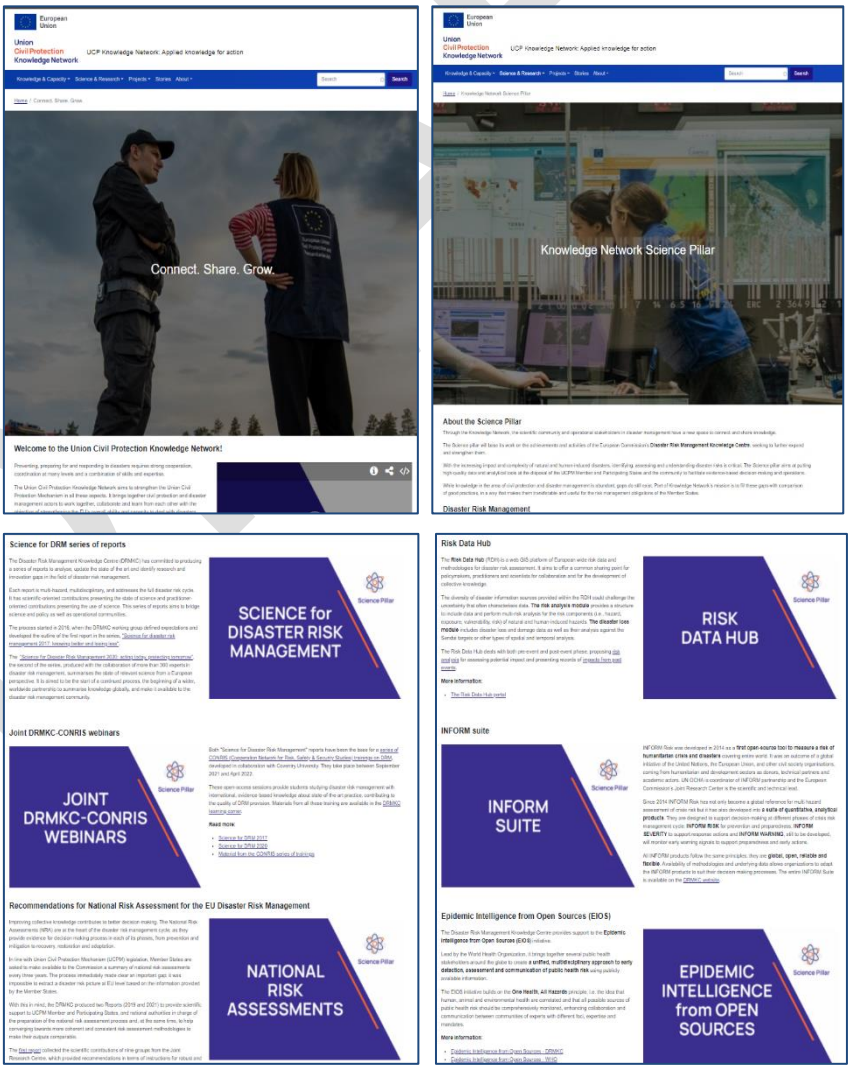
- DRMKC Science for DRM series of reports
- Joint DRMKC-CONRIS webinars
- Recommendations for National Risk Assessment for the EU Disaster Risk Management
- Gaps Explorer

Under "Data & Tools":

- Risk Data Hub
- INFORM suite
- Epidemic Intelligence from Open Sources (EIOS)
- Global Conflict Risk Index – GCRI

The DRMKC has been selected by the Commission and the MS/PS as the lead of the Science Pillar for the Union Civil Protection Knowledge Network, therefore the collaboration with ECHO and DIGIT on the implementation of the UCPKN platform will continue in the coming years, always with an eye to ensure complementarity (and avoid redundancy) with the DRMKC website.

Figure 8. UCPKN platform, with DRMKC components in its Science Pillar sub section



DRM Taxonomies

In all the main events organized by DRMKC in 2021, a constant requirement was emerging from multiple DRM stakeholders: the need for harmonising the existing DRM terminologies. Moreover, we –as DRMKC team- identified a need for a classification of content of the website to better support faceted search and analysis of information. The same emerged as a need on the Union Civil Protection Knowledge Network side, who asked for an effort in this direction, to coherently organize the contents of its IT platform.

Therefore, we initiated a comparative analysis of some of the most used existing vocabularies in the DRM domain and beyond. Vocabularies taken into account until now are:

Table 2: list of vocabularies considered until now in the comparative analysis performed by DRMKC

1	UNDRR terminology 2009	https://www.undrr.org/publication/2009-unisdr-terminology-disaster-risk-reduction
2	UNDRR terminology 2017	https://www.undrr.org/terminology
3	Paper "Analysing changes in disaster terminology over the last decade"	https://www.sciencedirect.com/science/article/pii/S2212420919301268
4	UCPM legislation	https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02013D1313-20210101&from=EN
5	DG ECHO website for UCPM	https://ec.europa.eu/echo/index_en
6	JRC technical report under preparation for RDH/DLD terminology	link to be added once published
7	JRC technical report "Recording Disaster Losses"	https://op.europa.eu/web/eu-law-and-publications/publication-detail/-/publication/abf21558-76ff-4f2c-a961-201ccaa34735/language-en
8	EM-DAT glossary	https://www.emdat.be/Glossary
9	DesInventar database	https://www.desinventar.net/
10	European CBRNE Glossary (EN17173)	https://ec.europa.eu/home-affairs/sites/default/files/what-we-do/policies/crisis-and-terrorism/securing-dangerous-material/docs/cbrn_glossary_en.pdf
11	DRIVER + terminology	https://www.driver-project.eu/driver-project/terminology/
12	UNDAC field handbook	https://reliefweb.int/report/world/un-disaster-assessment-and-coordination-undac-field-handbook-7th-edition-2018
13	Millennium Ecosystem Assessment glossary	http://www.millenniumassessment.org/documents/document.776.aspx.pdf
14	— UNDRR/ISC Hazard Definitions & Classification review 2020	https://www.undrr.org/publication/hazard-definition-and-classification-review

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15	— The Digital Europa Thesaurus (DET)	http://publications.europa.eu/resource/dataset/det
16	— The European Science Vocabulary (EuroSciVoc)	https://op.europa.eu/it/web/eu-vocabularies/euroscivoc
17	— UNBIS Thesaurus of the Dag Hammarskjöld Library, United Nations Department of Public Information	http://metadata.un.org/thesaurus
18	— Sustainable Development Goals (SDGs) taxonomy	http://publications.europa.eu/resource/dataset/sdg

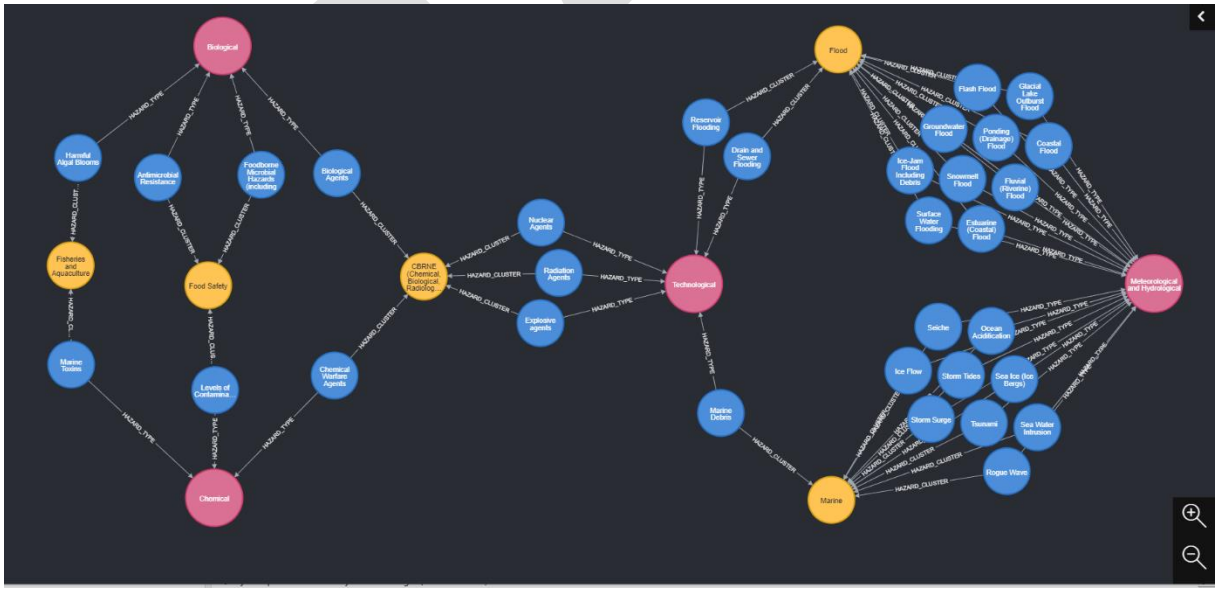
The initial output of the analysis is available at the following BitBucket repository:

https://citnet.tech.ec.europa.eu/CITnet/stash/projects/DRMKC/repos/drmkc-taxonomy-analysis/browse

In particular the figure 7 shows some of the concepts in the UNDRR/ISC Hazard Definitions, displayed as a graph, where hazards clusters (yellow circles) are connected to more than one hazard type (pink circle) by means of some interlinked specific hazards (blue circles).

Information was mapped from the report into a machine-readable form (JavaScript Object Notation - JSON format) and then eventually inserted into a Neo4j[3] graph database.

Figure 9. Graph of UNDRR/ISC Hazard Definitions



The ultimate goal of the analysis and subsequent redesign process is to build an ontology of concepts covering the different aspects of the DRM domain (see figure 8).

Findable, Accessible, Interoperable and Reusable (FAIR) vocabularies encoded in Simple Knowledge Organization System (SKOS) and/or Web Ontology Language (OWL) would allow for:

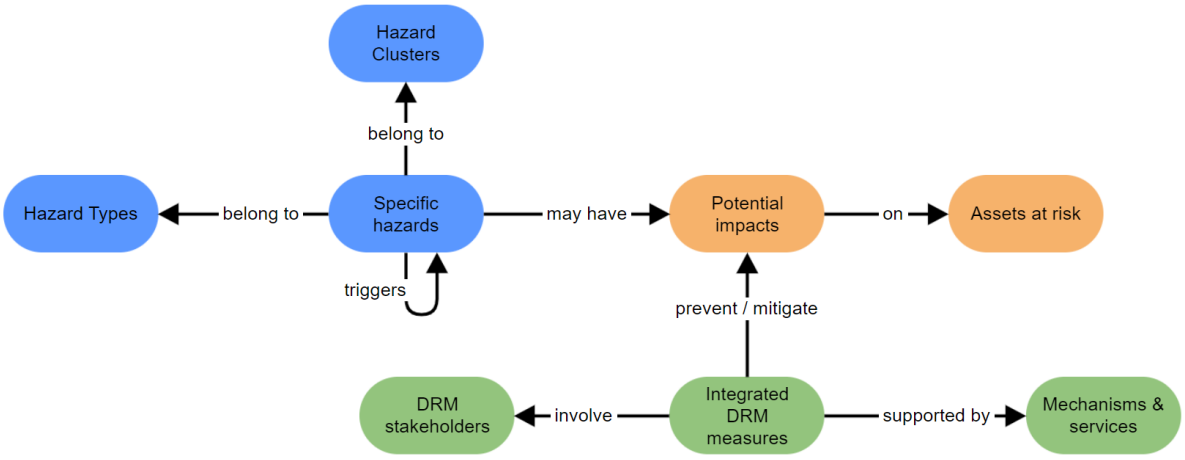
— Easier integration across the DRMKC website and other systems such the UCP Knowledge Network platform.

[3] https://neo4j.com/

— Connection to the aforementioned existing vocabularies

— Future machine learning works (e.g. automatic classification of content, pattern discovery) .

Figure 10. Graph of key concepts considered for a DRM ontology



The work is ongoing and is already creating constructive interactions with key DRM stakeholders, like UNDRR, WHO, ECHO and HOME. We foresee a parallel approach on this: on one side, we will try to derive a quick, preliminary list terms to be used in the context of both, the DRMKC website and the UCPKN platform; on the other hand, we will nourish and continue to collaborate in the partnership with the mentioned key stakeholders, for a longer-term joint work on a new line of research in the field of knowledge management.

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Newsletter

In 2021 we issued 3 DRMKC newsletters. In Annex 1 we detail the table of contents of each one of them.

The structure of these Newsletters has been changed with respect to the one of previous ones, which were called "Bulletins" (published until May 2020) and were providing much more detailed information about a wide range of initiatives, including those from DRM stakeholders beyond the Commission.

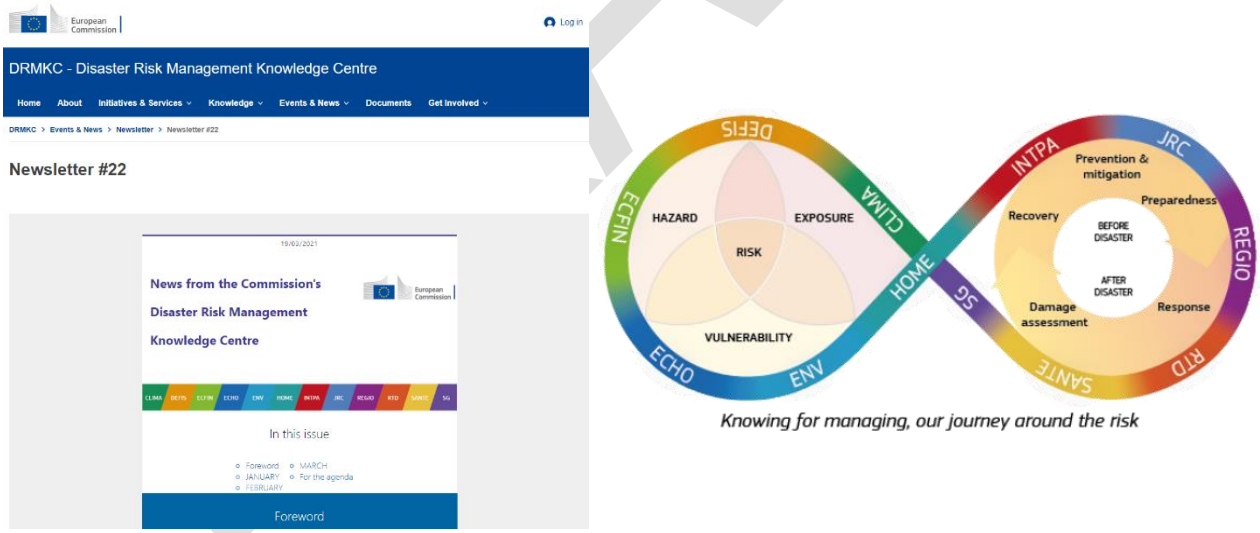
As of this year, DRMKC decided to focus on the publication of News from the Commission, to highlight the intense DRM efforts put in place by its 12 Directorates General engaged in the DRMKC. This choice was also in coherence with the (at the time) envisaged publication of the Union Civil Protection Knowledge Network Newsletter. To guarantee complementarity and avoid duplication, we decided to limit the News of the DRMKC Newsletters as mentioned, while the UCPKN Newsletter would have focused on contribution from the DRM community outside the Commission.

Therefore, the DRM Knowledge Centre regularly gathered representatives from 12 Directorates General (CLIMA, DEFIS, ECFIN, ECHO, ENV, HOME, INTPA, JRC, REGIO, RTD, SANTE, SG) and agreed with them on a selection of their activities to be included in the DRMKC Newsletter, with contributions from the different departments.

To highlight the collaborative effort in producing the DRMKC Newsletters, a specific visual was also designed, in which all the 12 Directorates General are appearing, with their respective colours (see figure 7). This visual is kept in each number of the DRMKC Newsletter.

The engagement of the various Directorates General in this activity grew over time and we plan to continue in this effort, which proved to be appreciated by the users, as we recorded 160 downloads of our Newsletters from the website (a quite important figure, considering that our 2300 subscribers receive them in their inbox).

Figure 11. DRMKC visuals for the Newsletter, with all the Directorates General represented



Program of main DRMKC communication and outreach activities in 2022

The main DRMKC outreach and communication activities in 2022 have been planned as shown in the timeline of figure 10. We plan to:

- organize and implement 3 main DRMKC events, the Rish Data Hub hands-on workshop (April), the second DRMKC Info Day (June) and the 6th DRMKC Annual Seminar (October). All these events will be essential for the Union Civil Protection Knowledge Network Science Pillar, as shown in Fig. 13, where they are hightlithed among the main milestones of the Knowledge Network agenda for 2022;
- Publish 3 DRMKC Newsletters (February, July, November) and be contribute to the Union Civil Protection Knowledge Network Newsletters, being the editors for its "Science corner" (March, June, Spetember, December);
- Organize and implement at least 3 meetings of the DRMKC Community of Practice (January, May, Spetember). Further meetings will be organized upon need and, in parallel, the needed meetings of the DRMKC Steering Committee.
- Throughout the year, as already done in 2021, we will continue collaborating with, contributing to, and coordinating with: (1) the Knowledge for Policy platform, (2) the UCPKN platform, (3) the Knowledge Centers roundtable and the respective Communities of Practice.

All the above have been planned in coordination with the agenda of the UCPKN (see figures 12- 13). All the communication and outreach events of the DRMKC will in fact be milestones of the UCPKN agenda and are timed so as to avoid overlapping and, on the contrary, ensuring the maximum possible synergie and mutual support.

In addition to the mentioned main activities, DRMKC will also be involved in many other events, organized by its partners, as shown in figure 12.

Finally, we plan to publish a Compendium of E.1 Science for Policy Briefs on DRM, tentatively within June 2022, with the aim to present it to MS/PS at the Civil Protection Forum on 28-29 June 2022. This is in line with the initial step (Integration, consolidation and strengthening) agreed with MS and the Commission in the Science Pillar concept paper, as it will allow to gather, organize and update in one coherent compendium valuable Science for Policy briefs produced over the last years in a scattered manner.

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*The MS/PS requested the Network to **build on existing activities**, therefore it is proposed that the development of the Science pillar takes place in two stages… **As the first step**, the DRMKC should be integrated into the Network's scientific pillar as its founding element…The initial stage will also focus on **consolidation and incremental development of well-known existing projects and initiatives***

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Figure 12. DRMKC outreach and communication activities planned for 2022

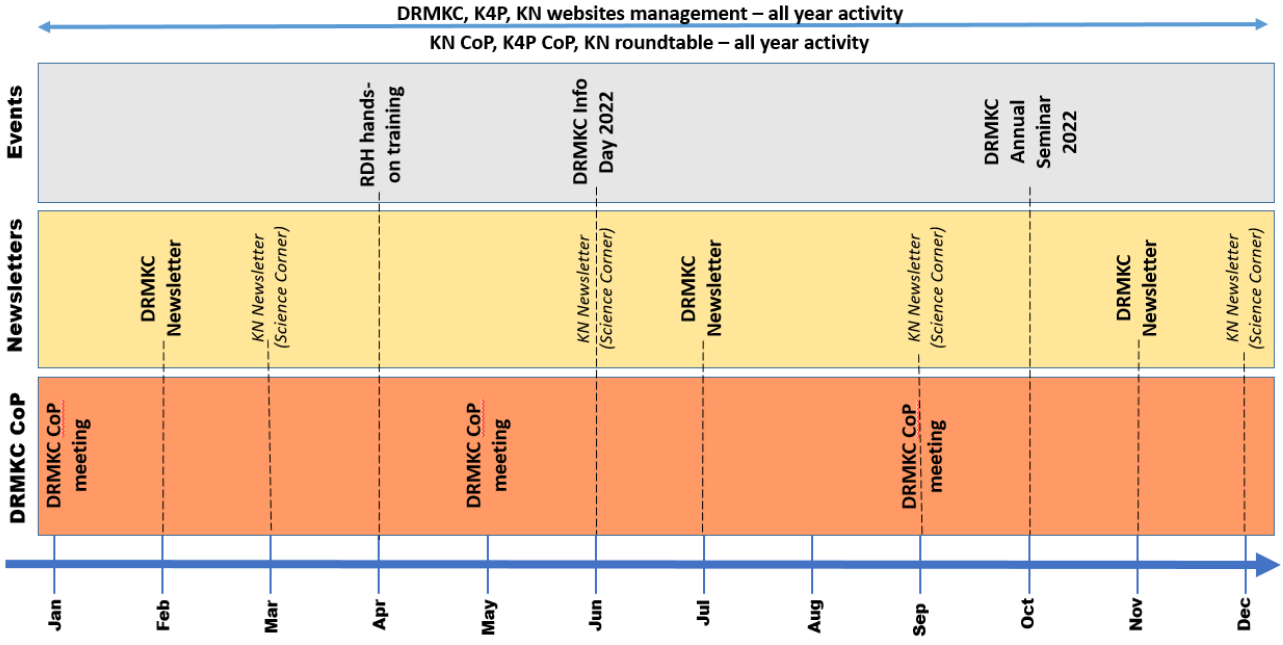

Figure 13. UCPKN agenda for 2022, with DRMKC events as milestones for the Science Pillar

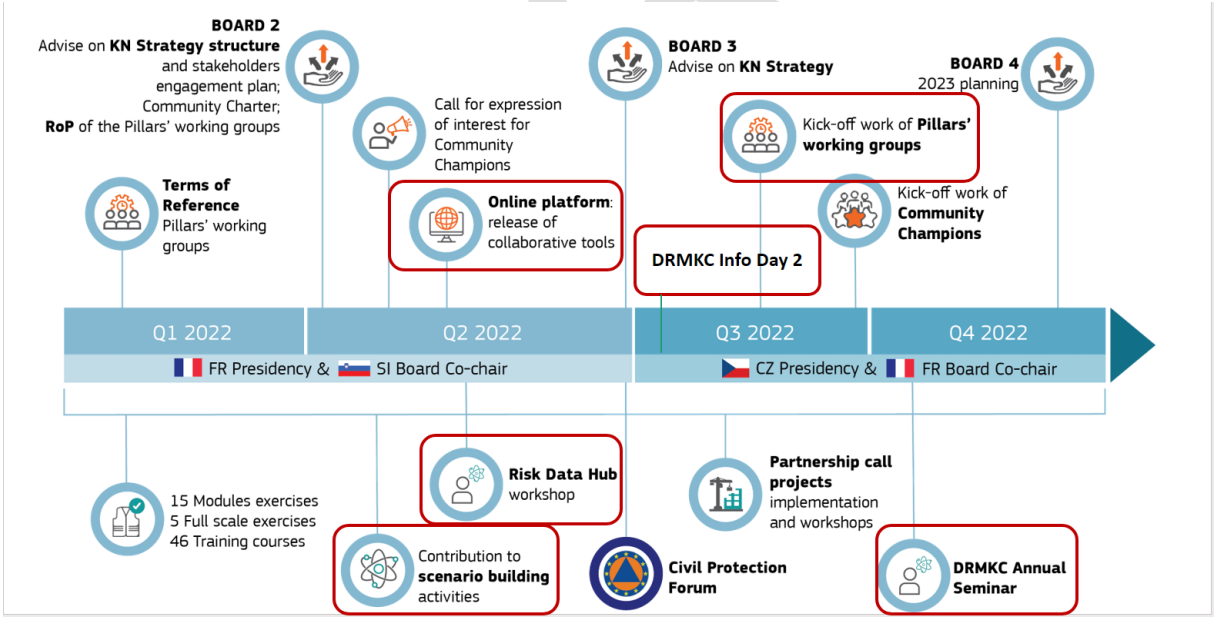

Figure 14. RC.E1 2022 High level events

Annex 1 – table of contents of DRMKC Newsletters published in 2020

March 2021 - Newsletter #22

- Launch of the "Atlas of the Human Planet 2020"
- ROADMAP project kick-off
- Report on Public Finances in Economic and Monetary Union 2020, with a section on integrating DRM in national fiscal frameworks
- GWIS (Global Wildfire Information System) country profile
- The COVID19 scenario analysis toolbox
- Online - the new version of "Recommendations for National Risk Assessment for Disaster Risk Management in EU: Where Science and Policy Meet"
- EU climate adaptation strategy adopted
- Earth Observation Toolkit for Sustainable Cities and Human Settlements
- Support to wildfire management in the Amazon and Latin America and the Caribbean (LAC) region
- Regional tsunami NEAMWave21 exercise: participation of the European Commission
- New outlook for EU's global aid delivery challenged by COVID-19
- Community of European Research and Innovation for Security (CERIS) Disaster Risk Societies (DRS) – Scientific support to the Sendai Framework for Action (FWA) workshop
- Science for Disaster Risk Management 2020 Launch Event on 23 March
- EU MODEX 10 Years Anniversary Show on 27 March

June 2021 - Newsletter #23

- New knowledge centre to apply insights from space to EU policy-making
- Thinking the unthinkable: a perspective on Natech risks and Black Swans
- Hospital fires from intense use of oxygen for Covid-19 patients
- New risks: feedback from the IAA PLANETARY DEFENSE CONFERENCE 2021
- New space regulation adopted, find out the news about Copernicus portfolio
- New "scientific outputs" in the DRMKC website
- Copernicus Emergency Management Service (CEMS) - The Mapping Activation Viewer
- Integrated techniques for seismic and energy retrofitting of buildings
- The value of "smart" disaster risk management investments in the recently published study "Economics of Prevention and Preparedness"
- GAR Special Report on Drought 2021 calls for global action to increase resilience to droughts
- JRC annual drought report "Droughts in Europe and Worldwide 2019-2020
- Communication from the Commission on the early lessons from COVID-19 pandemic
- INFORM report 2021 now available

October 2021 - Newsletter #24

- The Copernicus Emergency Management Service (CEMS) forecasts, notifies and monitors devastating floods in Germany, Netherlands, Belgium and Switzerland
- European Commission adopts new EU Forest Strategy for 2030
- Strengthening the Synergies between Agriculture and Flood Risk Management in the European Union
- A summer of disasters: DRMKC support to EU's crisis response
- Current Practice in Flood Risk Management in the EU

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- 100th activation of the Copernicus Emergency Management Service, Risk and Recovery Mapping (CEMS RRM), 3 August
- Disaster Risk Reduction and Space-based Applications - CERIS workshop (15 September 2021)
- DRM seminars from Coventry University based on JRC flagship report "Science for disaster risk management 2020: acting today, protecting tomorrow"
- WMO Atlas of Mortality and Economic Losses from Weather, Climate and Water Extremes (1970-2019)
- Is climate change really happening? Learning from the past to look into the future (29 Sept 2021)
- Hands on training sessions on economics for disaster prevention and preparedness
- INFORM Risk Index 2022 official release is OUT
- Industrial accidents: Commission report shows improvement in preventing major accidents involving dangerous substances
- A Crisis Management Dashboard for the European Commission

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List of new contents on the DRMKC website

SCIENTIFIC OUTPUT

https://drmkc.jrc.ec.europa.eu/knowledge/scientific-output

LEARNING CORNER

https://drmkc.jrc.ec.europa.eu/knowledge/learning-corner

DRMKC INFODAY

https://drmkc.jrc.ec.europa.eu/events-news/drmkc-featured-events/disaster-risk-management-knowledge-centre-information-day

CIVIL PROTECTION KNOWLEDGE NETWORK

https://drmkc.jrc.ec.europa.eu/initiatives-services/union-civil-protection-knowledge-network

DRMKC ANNUAL SEMINAR

https://drmkc.jrc.ec.europa.eu/events-news/drmkc-annual-seminars/5th-drmkc-annual-seminar

SCIENCE FOR DISASTER RISK MANAGEMENT

https://drmkc.jrc.ec.europa.eu/knowledge/science-for-drm/science-for-disaster-risk-management-2020

NEWSLETTERS

https://drmkc.jrc.ec.europa.eu/events-news/newsletter/newsletter-24

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