

Union Civil Protection Knowledge Network

DRM Science and Planning working group meeting

18/09/2024

DG ECHO.B3 Prevention and Preparedness Capacity Building



Agenda



15.00	Welcome and introduction to the work plan
15.10	Comments or additions to the work plan by MS/PS
15.40	AOB (any other business) and next steps

REMINDER: Please contact us later if need for changes in the list of current appointed contact points to the working group (@ <u>ECHO-CP-KNOWLEDGE-NETWORK@ec.europa.eu</u>)







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Union Civil Protection Knowledge Network

Background

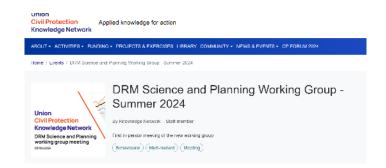
To summarise

- <u>3 June 2024:</u> First in-person meeting of the UCPKN DRM Science and Planning working group; presentation to MS/PS of the draft scoping paper
- Two topics identified as the priority thematic focus of the working group and DG ECHO (2024–2025):
 - Topic 1: Multi-risk and cascading issues of disasters
 - Topic 2: Insights from behavioural sciences for DRR
- Three topics identified as cross-cutting themes:
 - Open Science and Open Data for DRM
 - Al to predict, prevent and respond to disasters
 - + Climate Resilience
- New Commission priorities incoming
 - > Draft scoping paper amended into a work plan













Objective and structure of the Work Plan

Topics and deliverables as areas of work on research & innovation during 2024-2025

- DG ECHO, with the support of the <u>DRMKC</u>, relevant EU services and the expertise of the DRM Science and Planning working group
- ... intends to focus on areas of work on research & innovation during 2024-2025 to help the UCPM achieve its policy objectives, the <u>Union Disaster Resilience</u> <u>Goals</u> (DRGs), and drive innovation within the UCPM.
 - The work plan proposes concrete deliverables and their timelines
 - Topics are not limited to a single hazard or domain; they will consider climate change
 - The work plan is divided into the two priority thematic topics of interest and indicative EU deliverables
- The plan is a living document which will incorporate the priorities of the new Commission and will adapt to the evolving needs





TOPIC 1

Multi-hazard approach for tackling complexity of disasters

TOPIC 2

Behavioral insights for wholeof-society preparedness

CROSS CUTTING THEMES

Artificial Intelligence/Machine Learning
Open Science & Open Data
Climate Resilience

Annex A: a mapping of relevant EU initiatives Annex B: list of open data repositories



Introduction to topic 1



Multi-hazard approach for tackling complexity of disasters

- The complexity of disasters is characterised by an intricate interplay of various impacts; understanding key components of compound disasters requires moving from single hazard to multi-hazard approaches.
 - Additionally, need to look at the interactions between hazards of different nature
 - Influence of the changing climate and societal hazards as a part of the analysis
- The research undertaken should help to improve the approach and tools used for forecasting and early warning, in particular for landslide, earthquake, heatwaves, and Europe-level meteorological analyses.

- Both artificial intelligence (AI) and machine learning (ML) as force multiplier for the UCPM and DRM in the future when fully realised
- Likewise, open science and open data can boost multi-hazard resilient decisionmaking

TOPIC 1

Multi-hazard approach for tackling complexity of disasters

CROSS CUTTING THEMES

Artificial Intelligence/Machine Learning
Open Science & Open Data
Climate Resilience



Introduction to topic 2

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Prepare

- Behavioral insights for whole-of-society preparedness
- Inputting research on societal resilience beneficial to <u>preparEU</u>, one of flagship initiatives of the DRGs.
- A whole-of-society approach entails integrating DRM knowledge into education, developing community campaigns for awareness raising, and including all public and private institutions to collaborate in behavioural change.
- The intersection of open science and open data can be a powerful tool as it can ensure exchange of information to and from the population (e.g., crowdsourcing and other bottom-up approaches) and build trust

- Al and ML, such as sentiment analysis on social media for effective risk communications purposes, can support in finding the optimal communication strategies for better preparedness and adaptation.

TOPIC 2

Behavioral insights for wholeof-society preparedness CROSS CUTTING THEMES

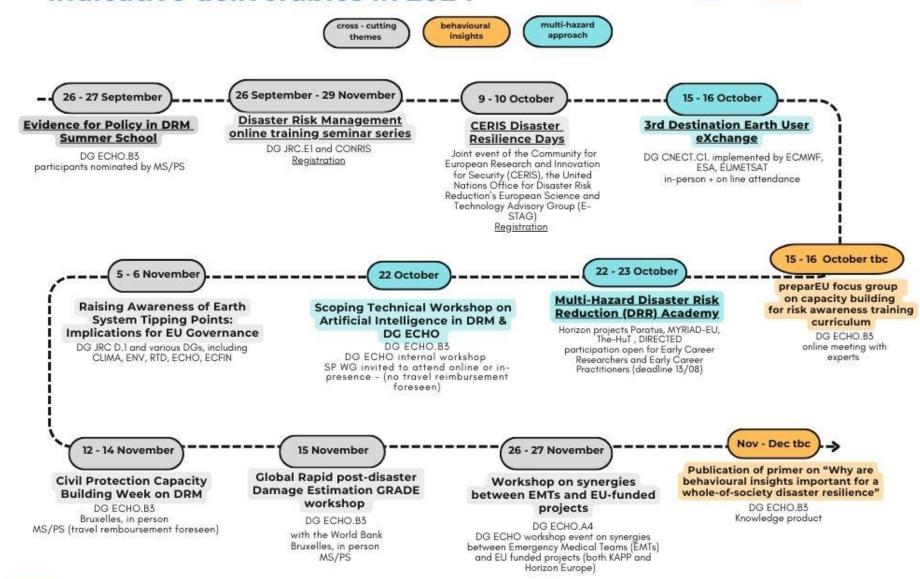
Artificial Intelligence/Machine Learning
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Indicative deliverables in 2024









Tentative deliverables in 2025

cross - cutting

A set of pilot services and demonstrators

will be implemented to showcase the

added benefit of DestinE capabilities, including for DRM users



multi-hazard



insights approach themes January tbc Q1 tbc Q1 tbc June tbc Disaster Loss Data workshop with Possible High-Level Research & 4th Destination Earth User Studies on citizen response GRADE / The World Bank Innovation Event on a MultieXchange and disaster preparedness DG ECHO.B3 **Hazards Approach and Artificial** DG CNECT.C1, implemented by ECMWF, ESA, behaviour with the Global Rapid Post-Disaster EUMETSAT Intelligence Damage Estimation (GRADE) team of the DG JRC's Competence Centre on in person (possible locations include Vienna, DG ECHO.B3 World Bank, tentatively ERCC Analytical Austria) + on line attendance Behavioural Insights follow - up of the scoping workshop of team, DG JRC and research projects Studies testing citizen response and their 22.10.2024 - UCPKN DRM Science and susceptibility to (mis)information during tbc Planning working group in-person meeting disasters (travel reimbursement foreseen) Possible 2nd cycle of the scenario-building initiative DG ECHO.B2 Q1 - Q2 tbc Q1 - Q2 Q1 tbc under the UCPKN DRM Science Possible hosting of a meeting of and Planning Substantive input to the 2026-Risk communication hub and the UN Global Initiative on Al for working group, 2027 Horizon Europe work preparEU training pathway based on MS/PS Natural Disaster Management programme needs DG ECHO.B3 DG ECHO.B3 DG ECHO.B3 An open risk communication repository of DG ECHO will consider and discuss with DG ECHO will input and mainstream needs knowledge on risk awareness and the chair of the current UN Focus Group on of the UCPM, based also on MS/PS communication is intended to be built Al for Natural Disaster Management (FGfeedback, on the work programme for AI4NDM) whether their meeting (as the Horizon Europe 2026-2027 (Cluster 3 Civil focus group will be elevated into a UN Security for Society and EU Mission: Global Initiative in November 2024) could Adaptation to Climate Change, topics be hosted in Brussels available for proposals in 2026-2027) EU Preparedness - - -September tbc tbc tbc days tbc Definition of the concept of the **Destination Earth Impact** Possible start of co-organising **Evidence for Policy in DRM** Sector Pilot Services and EU Preparedness Day(s) with a the 4th international Summer School possible first implementation of Machine-Learning conference on Natural Hazards DG ECHO.B3 Demonstrators the initiative in 2025 and Risks in a Changing World 4th iteration of the school, hosted in a different location DG ECHO.B3 DG ECHO B3 DG CNECT.C1. implemented by ECMWF DG ECHO could possibly co-organise and

behavioural



support the next edition of the research

conference to be held in Brussels and steer its agenda towards the work plan's

priorities









Theory of Change:

science and research enhance resilience & preparedness

policy and operational needs inform science and research

ACTIVITY	OUTPUT	OUTCOME	IMPACT
NBS for Europe seminar	Knowledge Page	Better knowledge of NBS capabilities	
Al in DRM workshop	State-of-the-Art + recommendations	Al supports DRM work successfully	Resilience & Preparedness of MS/PS & COM against disasters is enhanced
3 rd Destination Earth User eXchange	Training for MS/PS to use DestinE	DestinE is integrated into MS/PS systems	
Input to Horizon Europe programme	Topics adhering to disaster resilience needs	Innovation to create leaps of effectiveness	







Comments?

Some guiding questions





- Are there any new initiatives or projects that you believe should be included or considered as potential additional deliverables?
- 2. Do you intend to integrate any of the activities that have been proposed to your organization's daily calendar?
- 3. Additionally, do you have any plans to share information about these activities?
- 4. To enhance knowledge sharing, how would you prefer events and projects findings results to be communicated and disseminated? PDF or web reports, webinar recording (when possible), infographics, short videos ...?

