



EUROPEAN COMMISSION

DIRECTORATE-GENERAL FOR EUROPEAN CIVIL PROTECTION AND HUMANITARIAN AID
OPERATIONS (ECHO)
Strategy and Policy
Prevention and Preparedness Capacity Building

ECHO.B.3/EM/AB

Outcomes: Scientific Research Needs Exercise

Background

The Disaster Risk Management (DRM) Science and Planning Working Group of the Union Civil Protection Knowledge Network¹ “shall provide technical input on the implementation of initiatives that strengthen the application of research in civil protection and disaster risk management planning and operations, scientific knowledge, and innovative technologies”.

To this end, a scientific research needs assessment was carried out with UCPM Member and Participating States between 6-27 November 2023. Its aim was to predominantly provide input to the 2025 Horizon Europe programming. The results of the exercise have an advisory character and do not represent a binding consensus.

UCPM Member and Participating States’ staff were asked to anonymously assess their research needs (from 1-very low needs to 5-very strong needs) for the 5 Union Disaster Resilience Goals (DRGs)² and 16 hazards. These hazards had previously been identified with the support of civil protection DGs from Member States as well as Commission experts for the scenario-building initiative under Article 10 of Decision No 1313/2013/EU. Additionally, staff were asked to indicate their interest in topics of Horizon Europe’s Disaster Resilient Societies, Resilient Infrastructure and EU Mission Adaptation to Climate Change 2023-2024 work programmes. No limits were set on who or how many could answer to the survey.

Results

A total of 93 answers were submitted to the survey. The averages of all replies were used for relative comparison of the prioritisation of the hazards and DRGs. The highest ranked natural hazards were floods (4.12/5), wildfires (4.02/5) and health threats (3.88/5). With scores of 4.06, 3.90 and 3.80 out of 5 respectively, the effects of cyber security incidents, blackouts and energy disruptions as well as population displacements in emergencies were the ranked highest among the human-induced hazards.

¹[Terms of Reference: Union Civil Protection Knowledge Network Disaster Risk Management Science and Planning \(E03828/1\)](#)

² European Commission communication: ‘European Union Disaster Resilience Goals: Acting together to deal with future emergencies’, [COM\(2023\) 61 final](#)

The prioritisation of hazards from this survey shows a similar assessment as to that in the ‘Overview of natural and man-made disaster risks the European Union may face’³, which measures the most common risks in National Risk Assessments in the EU. Major differences are a higher prioritisation of cyber security incidents, ranking second highest out of the 16 hazards (with an average of 4.06/5) and a relative lower prioritisation of nuclear emergencies on rank 11 of 16 (with an average of 3.58/5) compared to the EU overview of risks.

A strong interest was indicated in subjects covered by the DRGs, with all five phases of the DRM cycle receiving average answers between 3.94 (DRG #4 Respond) and 4.31 (DRG #2 – Prepare) out of 5. With average standard deviations smaller than 1.10, there was a good level of consensus among the answers on the prioritisation of hazards and DRGs.

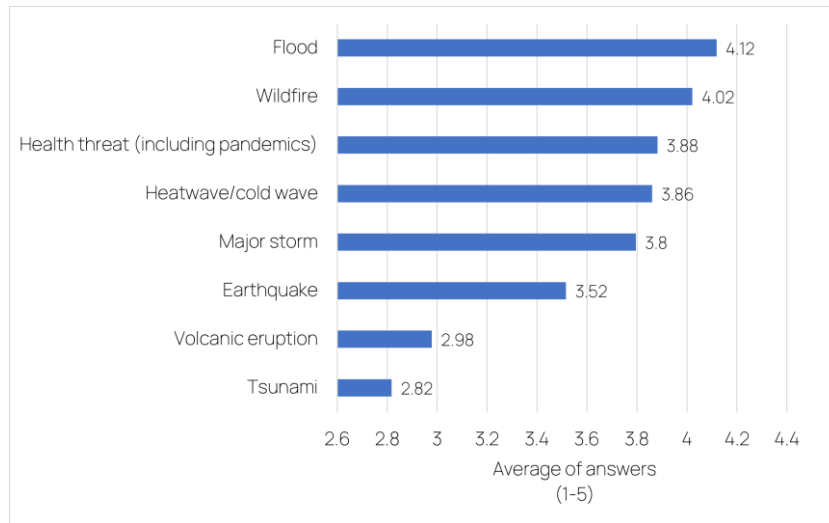
The final question of the survey examined interest in topics of current Horizon Europe programming. For 14 out of 18 topics listed in the survey, interest was indicated by at least 30% of respondents. The topics which allow for a broader range of activities gathered more interest than those focusing on more closely defined areas of research, with the largest amount of interested indicated in the topic “Testing and demonstrating transformative solutions to protect critical infrastructure from climate change, mainstreaming nature-based solutions” from the EU Mission: Adaptation to Climate Change work programme.

Please see the Annex for the full outcomes of the survey.

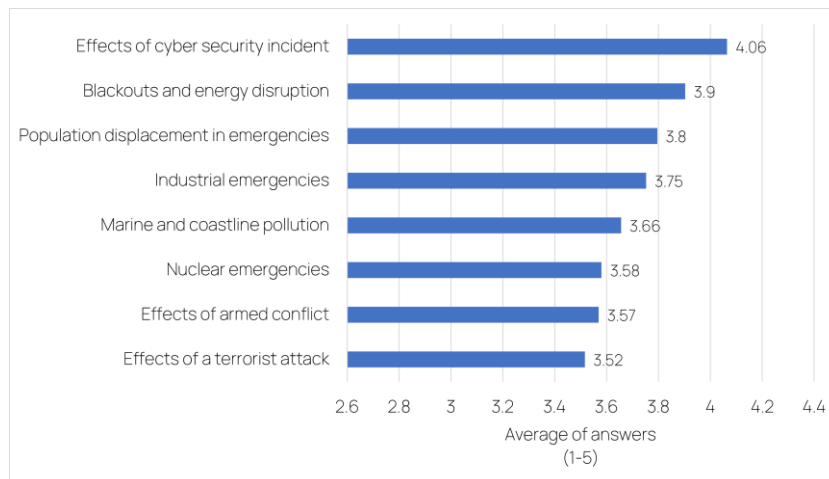
³ European Commission, DG ECHO, *Overview of natural and man-made disaster risks the European Union may face – 2020 edition*, Publications Office of the European Union, 2021, <https://data.europa.eu/doi/10.2795/1521>

ANNEX – Survey Results (N=93) (scale: 1-very low needs to 5-very strong needs)

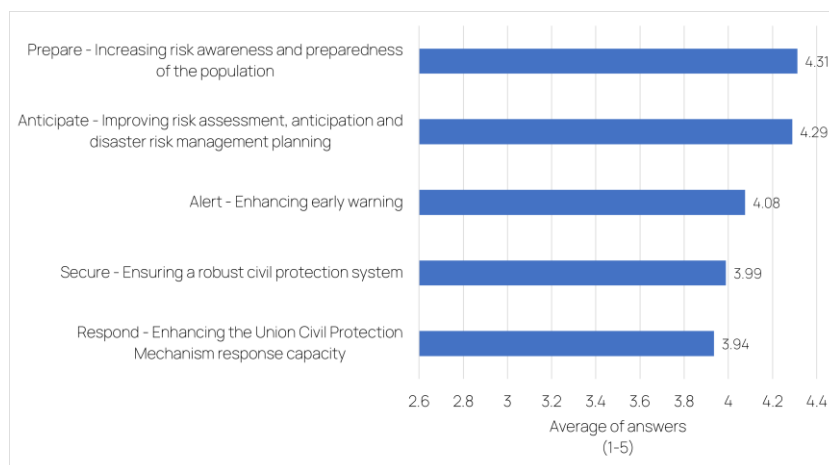
1a. How do you assess the research needs for the following natural hazards?



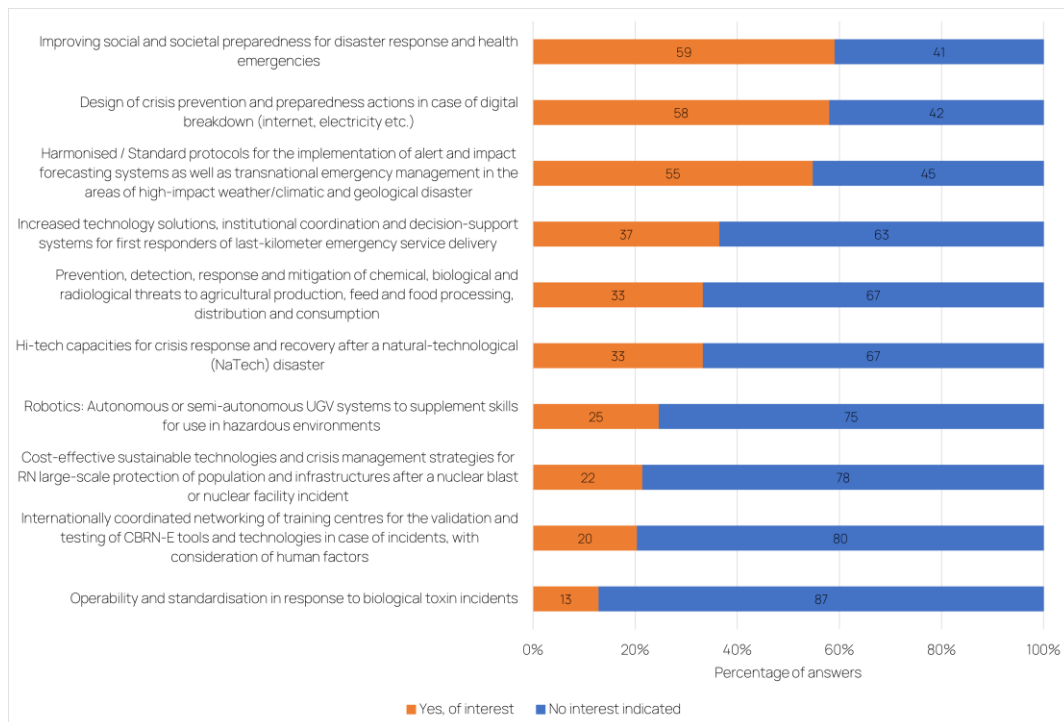
1b. How do you assess the research needs for the following human-induced hazards?



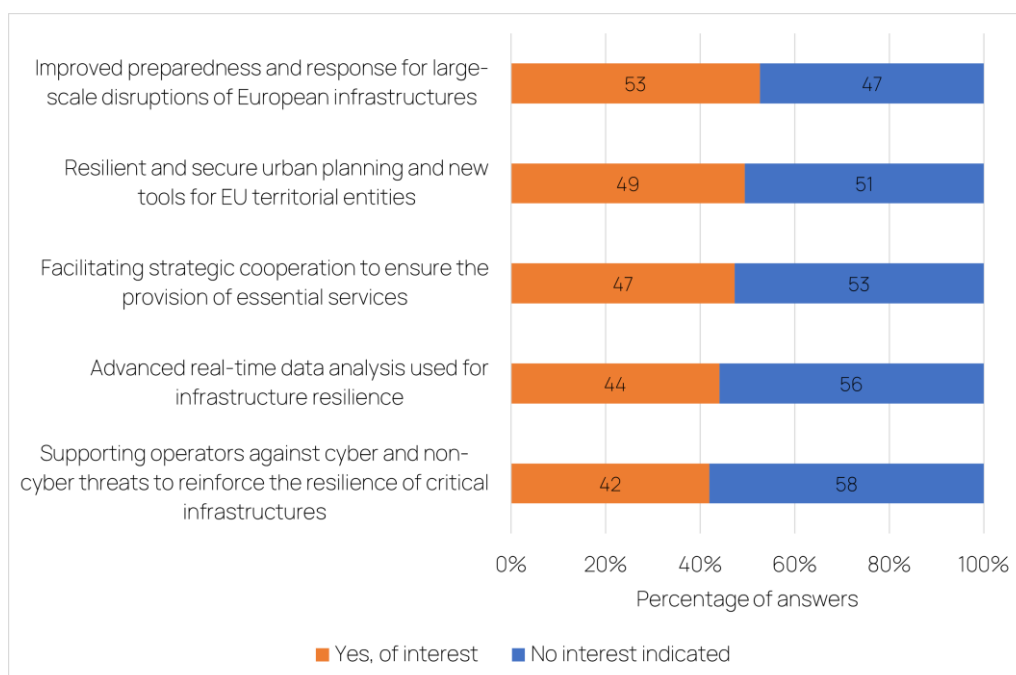
2. How do you assess the research needs on subjects covered by the following Disaster Resilience Goals?



3a. The 2023 and 2024 Horizon Europe work programmes⁴ of the **Disaster Resilient Societies (DRS)** destination under Cluster 3: Civil Security for Society include ten different research topics. Below these topics are listed in a random order. **Please indicate which of the following, if any, current Horizon research topics represent an area of research need for you. Multiple answers are possible.**

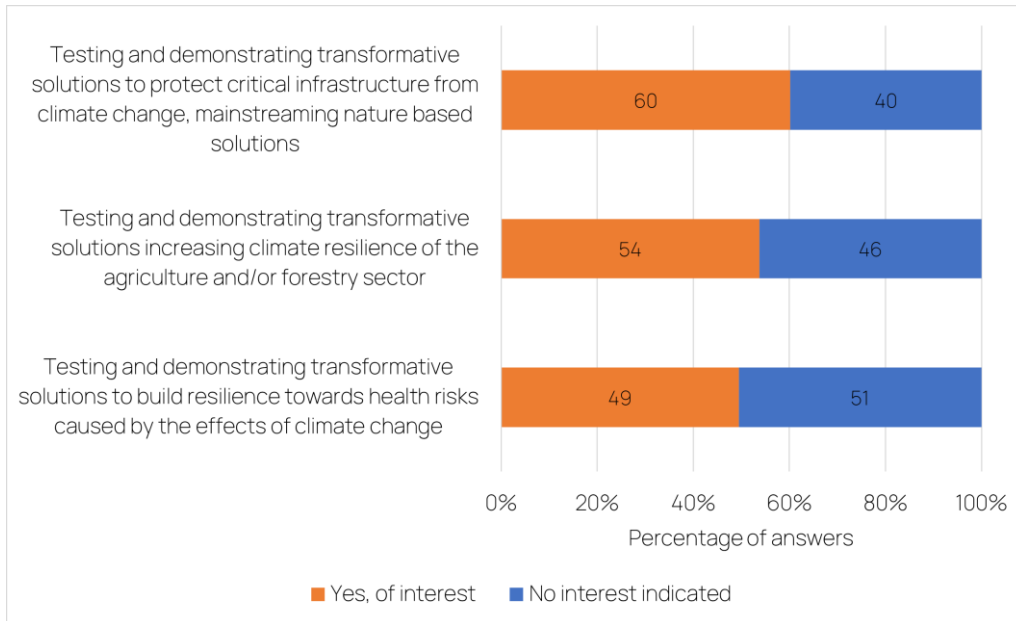


3b. The 2023 and 2024 Horizon Europe work programmes⁴ of the **Resilient Infrastructure (RI)** destination under Cluster 3: Civil Security for Society include five different research topics. **Please indicate which of the following, if any, current Horizon research topics represent an area of research need for you. Multiple answers are possible.**



⁴ [Horizon Europe Work programme \(2023-2024\) – Cluster 3](#)

3c. The EU Mission on Adaptation to Climate Change⁵, which is part of the Horizon Europe programming, includes three different topics in the 2023 and 2024 work programmes. Please indicate which of the following, if any, current EU Mission: Adaptation to Climate Change topics represent an area of research need for you. Multiple answers are possible.



⁵ [Horizon Europe Work programme \(2023 – 2024\) - Missions](#)

