



Multi-hazard and risk informed system for Enhanced local and regional Disaster risk management



MEDiate Newsletter #4 – November 2024

The MEDiate Project towards enhancing societal resilience:

- Improve assessment of disaster risks and strengthen disaster risk governance to manage disaster risks
- Develop a decision support system (DSS) for disaster risk management of multiple interacting hazards and impacts

GIVE US YOUR FEEDBACK!







WORKSHOPS & INTERNAL MEETINGS









STAKEHOLDERS WORKSHOPS: 2nd PAR Cycle



OSLO

On June 6th, the first workshop took place in Oslo, organized by the Agency of Emergency Planning and NORSAR. It focused on the risk and resilience assessment framework, gathering feedback from various stakeholders, including local police and emergency response agencies. A historical case study from the 1987 flooding event illustrated the approach, and a demo of the web-based decision-support system was presented for feedback.



MÚLAÞING

On June 7th, the stakeholder workshop in Iceland took place. The second PAR cycle provided a valuable opportunity to engage with stakeholders, gathering their insights and preferences. They offered constructive feedback on how best to advance the project. The introduction of the DSS generated significant interest, and everyone is eager to see it in action.

ESSEX

On June 19th, a workshop for the MEDiate project was held at the Central Baptist Church in Essex, organized by Anglia Ruskin University and Essex County Council. The workshop focused on how to assess risks and impacts in Essex and discussed the region's key natural hazards and socio-economic vulnerabilities. Stakeholders contributed to shaping the decision-making tool for multi-hazard risk assessment, including representatives from local authorities, businesses, and communities.



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NICE

On June 26th, the MEDiate Project was showcased at workshops in L'Artistique, Nice, organized by Métropole Nice Côte d'Azur and Ville de Nice, along with NORSAR, R2M Solution, and BRGM. The event highlighted the importance of collaboration in enhancing disaster preparedness and building resilient communities.



Safeguarding Futures Through Early Warning Systems Disaster Risk Management: Insights from the MEDiate **MedEWSa Projects**



On May 28th, 2024, a webinar titled "Safeguarding Futures Through Early Warning Systems and Disaster Management: Insights from the MEDiate and MedEWSa Projects" was held online. Organized by the European Emergency Number Association (EENA), the session focused on the MEDiate project and its contributions to disaster risk management. It featured expert presentations on the theme "Multi-hazard and Risk-informed System for Enhanced Local and Regional Disaster Risk Management". Abdelghani Meslem from NORSAR provided an overview of the MEDiate project and its innovative results. Gemma Cremen from University College London discussed a dynamic multi-hazard risk and resilience modeling framework, while Matthew James Roberts from the Icelandic Meteorological Office emphasized the need for integrated multi-hazard approaches in light of climate change. The webinar was attended by public safety professionals, including authorities, policymakers, responders, and urban planners.



3rd International Conference on Natural Hazards and Risks in a **Changing World: Addressing Compound and Multi-Hazard Risk**

From June 12-13, 2024, Amsterdam hosted the 3rd International Conference on Natural Hazards and Risks in a Changing World, organized by MYRIAD-EU, Risk KAN, and NatRiskChange. The conference brought together experts to advance understanding of natural hazards. A key highlight was Christopher J. White's presentation from University of Strathclyde, titled "Reclassifying Historical Disasters: From Single to Multi-Hazards." This talk provided insights into the threats posed by multi-hazard events and introduced a method for identifying such events over the past 123 years using the EM-DAT disaster database. The study found floods, storms, and earthquakes as the most common primary hazards, with landslides as the main secondary hazard. Additionally, a poster presentation by Marcello Arosio from IUSS Pavia and colleagues focused on the compound occurrence of heat waves and drought in Nice, France. The conference facilitated valuable discussions and networking, contributing to global efforts in managing natural hazard risks.





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WCEE2024

The MEDiate Project was showcased at the 18th World Conference on Earthquake Engineering (WCEE2024) in Milan from June 30 to July 5, 2024. Presentations included Chen Huang on costoding conthaughts impacts

Presentations included Chen Huang on cascading earthquake impacts, Gemma Cremen on multi-hazard risk assessment, Florencia Victoria De Maio on infrastructure resilience, and Pierre Gehl on fragility models for buildings. The project highlighted key advancements in disaster risk reduction and resilience.



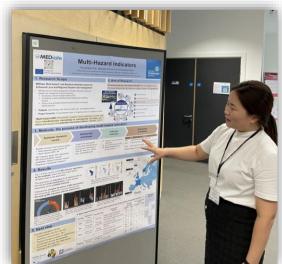
- DAMAGE STATE-DEPENDENT FRAGILITY MODELS FOR REINFORCED-CONCRETE BUILDINGS EXPOSED TO FLOOD AND SEISMIC HAZARDS DIEDDE CEUI
- INTEGRATED RISK AND RESILIENCE ASSESSMENT OF CRITICAL INFRASTRUCTURES AFTER CASCADING EFFECTS - FLORENCIA VICTORIA DE MAIO
- ASSESSING THE CASCADING IMPACTS OF EARTHQUAKE AND THE TRIGGERED QUICK-CLAY LANDSLIDE IN ALNA, NORWAY - CHEN HUANG
- A NOVEL FRAMEWORK FOR ASSESSING MULTI-HAZARD RISK AND RESILIENCE IN A CHANGING WORLD - GEMMA CREMEN



30 JUNE-5 JULY 2024



4th UK National Climate Impacts Meeting



The MEDiate project was showcased at the 4th UK National Climate Impacts Meeting in Newcastle on September 5th and 6th. Dr. Christopher J. White and colleagues presented on "Complex, Interacting Climate Risks," while YoungHwa Cha highlighted a poster on multi-hazard risk communication in disaster management.

Supported by The Royal Meteorological Society, the event facilitated discussions among academics, industry professionals, and policymakers on climate adaptation and net-zero planning. The MEDiate team emphasized multi-hazard issues and introduced their project, including a poster on a multi-hazard indicator.

MEDiate Project Featured at Sustainable Places (SP2024)

The MEDiate project was featured at <u>Sustainable Places (SP2024)</u>, taken place from September 23rd to 25th, 2024 with an online presentation. Florencia Victoria De Maio and co-authors from RINA-C and NORSAR presented "Building Resilience through Cascading Impact Analysis: A European Perspective".

The event provided an excellent platform for the MEDiate project to showcase our latest findings. RINA-C was also present on-site, engaging with participants and communicating the objectives of the MEDiate project.



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MEDiate Webinar hosted by the UNESCO CHAIR in Disaster **Risk Reduction and Resilience Engineering platform**

The MEDiate Project was showcased during a recent webinar hosted by the UNESCO Chair in Disaster Risk Reduction and Resilience Engineering took place on September 25, 2024, focusing on "Multi-hazard Interaction, Cascading Impacts, and Indicators".

The session featured insightful presentations from Christopher White of the University of Strathclyde and Marcello Arosio from Istituto Universitario di Studi Superiori (IUSS), Pavia, as part of the MEDiate project.

This webinar explored new approaches understanding multi-hazard interactions, cascading impacts, and relevant indicators developed within the MEDiate project, funded by Horizon Europe.



Multi-hazard interaction, cascading impacts, and indicators



MEDiate

Chris White -University of Strathclyde Marcello Arosio -September 2024































Moderator



MEDiate Project webinar at the Europe and Central Asia Regional Platform for Disaster Risk Reduction 2024 in Montenegro

The MEDiate project participated in the Europe and Central Asia Regional Platform for Disaster Risk Reduction (DRR) held in Montenegro this November.

A webinar titled "Multi-hazard and Risk-informed System for Enhanced Local and Regional Disaster Risk Management" took a place on November 6th, 2024.

The webinar aimed to:

- Promoting a shift in disaster risk management from single, hazardspecific approaches to more integrated, multi-hazard perspectives.
- Sharing the latest research and innovation outcomes in disaster risk management with the wider DRR community.
- Encouraging cross-sector collaboration in multidisciplinary teams.
- Strengthening civil society engagement in disaster risk reduction.

In addition to the webinar, the MEDiate project featured a marketplace booth showcasing tools and initiatives related to disaster risk reduction and climate change adaptation. This provided an excellent opportunity for collaboration, innovation, and knowledge sharing among DRR stakeholders. **Check Out The**

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MEDiate at the Multi-Hazard DRR Academy for Early-Career **Researchers and Practitioners**

At the recent Multi-Hazard DRR Academy, from 23-26 October 2024, Elisa Nobile (PhD candidate, IUSS Pavia), representing the MEDiate project, introduced groundbreaking research on multi-hazard risks intensified by climate change. This study presents new indicators that simplify complex risk data, supporting better decision-making across sectors.

Focusing on four key multi-hazard pairs—coastal and river flooding, heat and drought, precipitation, and precipitation with landslides—the indicators track co-occurrence trends, joint return probabilities, and spatial risk mapping in Norway, France, the UK, and Iceland.

This work empowers clearer, actionable insights to boost resilience against climate-driven risks across Europe.



MEDiate Annual Meeting, hosted by Deltares in Delft



The recent MEDiate General Assembly, held on October 24th and 25th at Deltares in Delft (NL), was a dynamic event that brought together all partners for valuable discussions and collaboration. Each partner actively contributed, providing essential feedback to refine the MEDiate DSS platform. Together, we also planned the next series of stakeholder workshops, incorporating hands-on exercises aimed at strengthening decision-making across the project's test sites. Exciting progress lies ahead as we continue building tools to enhance resilience and informed action.

WHAT'S NEW?

Project Mid-term Review

We are proud to announce that MEDiate has successfully met most of its objectives and milestones to date, highlighting significant progress in our journey! Following our midterm review, all deliverables from the 1st Reporting Period have been officially accepted. The official feedback from our Project Officer confirms that MEDiate is firmly on track, with the project achieving its key goals and milestones for the period.

We invite you to visit our website to explore these accomplishments and the innovative work driving us forward.



SAVE THE DATE

INQUIMUS 2024 - Climate and Disaster Risk Storylines 4-6 Dec



Bolzano (IT)



3rd PAR Cycle Stakeholder Workshops

Spring 2025



4 Testbeds



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MEDiate & RELATED PROJECTS

THE MYRIAD PROJECT





The Multi-Hazard DRR Academy for Early-Career Researchers and Practitioners, taking place in Barcelona, Spain, from 23-26 October 2024.

The Academy brought together 40 young professionals for interdisciplinary learning and collaboration, focusing on innovative approaches to disaster risk reduction (DRR). Projects like Paratus, The-HuT, Directed, and MYRIAD-EU contributed to thematic breakout sessions.



The myriad Project interactive dashboard to support the evaluation of pathways in complex systems was recently launched!



THE PARATUS PROJECT



PARATUS Consortium Meeting 2024 in Barcelona

21 From 23 to October. the PARATUS consortium held its annual General Assembly at the Universitat Politècnica de Catalunya (UPC) in Barcelona, Spain. The partners engaged in productive discussions, analysed recent and explored extreme events methodologies risk to improve assessment and response strategies. Read the news to discover more!



MEDiate

This Project received funding from European Union's Horizon Research and Innovation Programme call HORIZON-CL3-2021-DRS-01 under Grant Agreement N° 101074075

GET IN CONTACT



Stay tuned for more news as part of the same initiative!

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