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Research brief: A review of current multi-risk governance practice in Europe



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A review of current multi-risk governance practice in Europe

Highlights

- We developed a report on **policies, policy-making processes, and governance for multi-hazard, multi-risk management**, which investigates and reviews the current multi-risk governance practice in Europe.
- We identified a need in current governance practices to increase awareness of intersectoral interdependencies, i.e., how risks in one sector can propagate or amplify risks in another, especially under multi-hazard conditions.
- To address this knowledge gap, we systematically categorised **sectoral interdependencies** and provided a structure to navigate the intricate landscape of multi-sector risks, establishing a foundation for more effective Disaster Risk Management (DRM) planning.

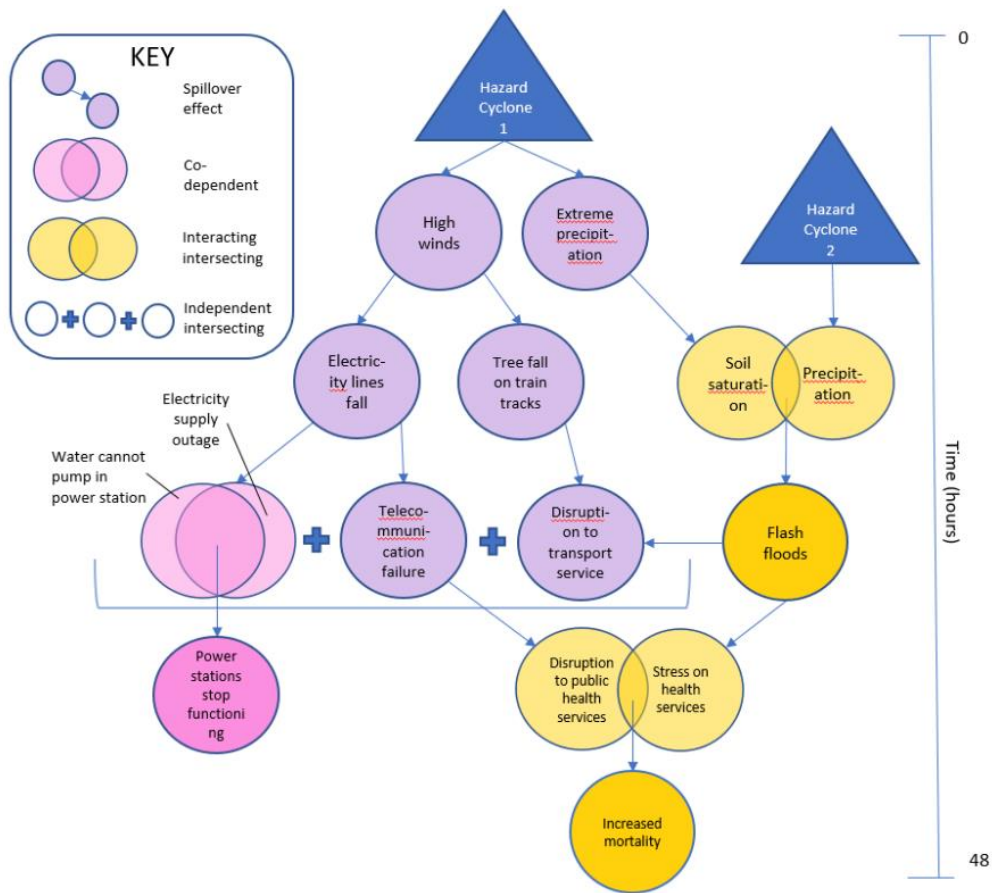
Recommendations

- Science should make the step from conceptual frameworks to testing and operationalising approaches (Science).
- For new approaches, keep in mind the purpose and application context of these tools (Science & Practice).
- Integrate processes of multi-risk assessment and management (Science).
- Make use of existing knowledge and link to existing processes (Science & Practice).
- Engage in projects and initiatives that consider multi-risks (Science & Practice).
- Integrate considerations of (multi-)risk governance in strategies and long-term planning (Practice).
- It is recommended that sectors gauge a fuller understanding of their function failure points and integrate operational thresholds and uncertainties into decision making to reduce spillover effects.
- Risk assessment needs to be widened to not only consider 'domino effects' but also intersecting risks, which can combine to cause exacerbated risk in the long-term.
- DRM planning needs to think not only about immediate impacts and shorter-term solutions, but also impacts in the long-term.
- DRM strategies should also be adaptable and dynamic as the trajectory of spillover effects for example, are highly unpredictable.
- Further attention should be brought to the local societal context, and its adaptive capacity to shocks.

Context

Multi-risk assessment and governance are by their nature highly interdisciplinary pursuits, characterised by complex and interacting processes. This inherent complexity can pose difficulties for policy-makers and practitioners. Similarly, the field of multi-sector risk is highly complex and relatively understudied. Understanding the dynamic interaction of systems and inherent systemic risk is a considerable scientific challenge but is one that needs to be addressed to effectively identify and prepare for hazard events. This work

aimed at contributing towards a more holistic approach to risk management built on an overview of the current multi-risk policy and governance and an in-depth understanding of sectoral interdependencies. As the MYRIAD-EU project delves into multi-hazard and multi-risk realms, it is imperative to comprehend the variegated ways in which sectors influence one another. By elucidating the typologies of interdependencies, we not only address this knowledge deficit but also pave the way for designing robust policies and strategies that can manage these intricate interplays. This structure, therefore, builds the foundation upon which subsequent stakeholder discussions and Disaster Risk Management strategies can be anchored, ensuring that they are informed, comprehensive, and adaptive to the dynamic nature of multi-sector risks



An illustrative example of a multi-hazard scenario (2 consecutive cyclones), including multi-sector interdependency typologies

Want to know more?

- **Full reference:** Schlumberger, J., Stuparu, D., Ciurean, R. L., Duncan, M., Mysiak, J., Khazai, B., Rimmer, J., Dochiu, C., Claassen, J., & Warren, A. (2023). D1.3 Report on policies, policy-making processes, and governance for multi- hazard, multi-risk management (Version 2). Zenodo.
- **Link to paper:** <https://doi.org/10.5281/zenodo.10001937>
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