'System-Risk' Flood Task Force

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Current scientific methods and engineering practice in flood risk assessment do not consider the full complexity of flood risk systems. Fundamental spatio-temporal dependencies, interactions and feedbacks need to be addressed to comprehensively quantify the effects of measures at various levels, ranging from local technical to high-level policy options.

As each flood is unique, each event offers an unparalleled opportunity to collect data and to gain insights into system’s behavior under extreme conditions potentially revealing exceptional circumstances, unexpected failures and cascading effects, and thus a chance to learn and to improve methods and models.

To make use of this the Marie-Skłodowska-Curie European Training Network ‘System-Risk’ (www.system-risk.eu) establishes a Flood Task Force (FTF) that aims to learn about successful practical approaches, but also potential pitfalls and failures in the management of real flood events. The FTF consists of an interdisciplinary group of researchers who will apply in situ their latest methods and knowledge of e.g. how the event developed, how the risk management responded, and what the consequences were. This multi-layered perspective is intended to deepen the understanding of the complexity of flood risk systems as for instance in terms of interactions between hazard, the natural and the built environment, societal institutions and coping capacities. This contribution gives an overview of the conceptual approach to the System-Risk FTF.