



Foresight tools for responding to cascading effects in a crisis

Contact

For more information about FORTRESS, please contact the project coordinator:

Dr. Leon Hempel

Technische Universität Berlin

hempel@ztg.tu-berlin.de

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The FORTRESS partners

The FORTRESS consortium is made up of thirteen partners from eight European countries.

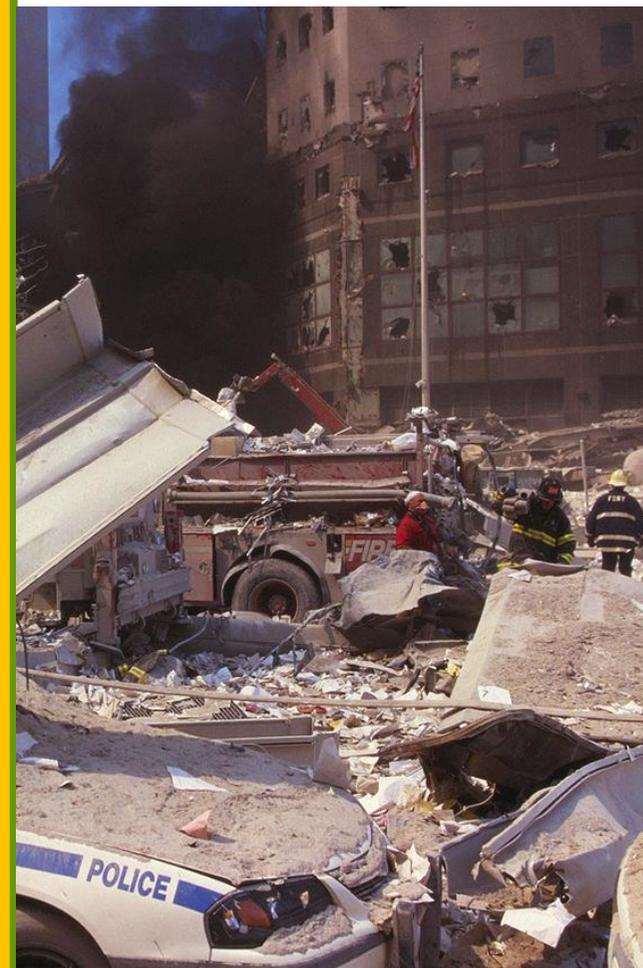


FORTRESS Events

During the project, FORTRESS will host events and workshops. To find out more, or to join our workshops, please visit our website: <http://fortress-project.eu>. Follow us on Twitter for further information and to stay up to date: [@FORTRESS_EU](https://twitter.com/FORTRESS_EU)



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FORTRESS is a three year project. It seeks to **improve crisis management practices** by **identifying the diversity of cascading effects**.



FORTRESS will:

- ★ Reconstruct past events to understand vulnerabilities and resilience within organisations. This is done by looking at several historical case studies, such as the 2011 earthquake and tsunami that hit Japan and the Fukushima Daiichi nuclear disaster that followed.
- ★ Understand the impacts of decision-making in crises. We will identify the decision making processes and their consequences in past crisis situations. By doing so, we aim to map decision points in a timeline of action and reaction.
- ★ Gather information on dynamic performances of interdependent infrastructures in crises. Examples include the dependency of drinking water provision on electricity networks: if one system fails, the other is affected.
- ★ Analyse multi-sectoral crisis management in practice via scenario-based exercises. The scenarios will include: cross-border flooding in the Netherlands and Germany, European-wide blackout, flooding in Paris, and a dam disruption on the Italian-French border.
- ★ Build a modeling platform and decision-support tool to enhance situational awareness and learning in a crisis.

FORTRESS will develop collaborative and accessible models of cascading and cross-border effects in different crisis situations. Partners will base the models on historical case studies and crisis scenarios. They will test the models using the **FORTRESS Scenario Builder**, which will feed into the development of the **FORTRESS Incident Evolution Tool** (FIET).

Partners will design the FIET by working with crisis managers to ensure that its functionality meets their needs in a cascading crises. The FIET will be designed to be used before and during a crisis and is thus a decision support foresight tool. As such, the FIET will be able to assist decision-makers in understanding the potential effects of their actions in training environments.

The utility, efficacy, and user-friendliness of the FIET will be tested with stakeholders during a test case scenario. The results of the test will feed into the **FIET training manual and demonstration and tutorial video**.

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