

Informed Consent Form

You are invited to participate in a research study titled “*AGILE: Agnostic Risk Management for High-Impact Low-Probability Events– Tier 2 Stress Test.*” This study is being conducted by Ali Cheshomi (PhD researcher), under the supervision of Prof. Tina Comes and Dr. Nazli Yonca Aydin at TU Delft (TUD), in collaboration with the case study partners.

About the Research Project

AGILE is a Research and Innovation Action funded by Horizon Europe. It began in October 2023 and will run for four years. The project brings together 15 international partners, including research organisations (e.g. Delft University, Fondazione CMCC) and operational stakeholders (e.g. the National Commissioner of the Icelandic Police).

The aim of AGILE is to develop a comprehensive framework and practical tools to understand, anticipate, and manage High Impact, Low Probability (HILP) events, focusing on systemic risks and resilience. The project integrates established and innovative methods into a new, replicable stress testing methodology for risk and resilience. This stress testing methodology includes **three tiers**, which can be implemented independently or in sequence. It is being co-developed by a multidisciplinary group of researchers, first responders, and authorities. The methodology will be tested through workshops in the project’s case study areas.

In **Tier 2**, our goal is to enhance the resilience of physical critical infrastructure (CI) systems. We aim to analyse how the connections among these systems increase vulnerability to cascading failures. The focus is to identify and analyse interdependencies and feedback loops between systems to determine potential points of failure and cascading disruptions, and to identify possible solutions. To achieve this, Tier 2 integrates coordination and information exchange among different stakeholders and physical interdependencies via simplified system models.

Your Participation

To support the development of **simplified system models**, we will organize a **one-day workshop** followed by a **feedback session** the next day. The first day will last approximately 8 hours, and the second day around 3 hours.

During the workshop, you will be invited to participate in activities focused on **problem structuring** and **system mapping** using a **stylized case**. The **problem structuring** component aims to identify your key objectives, concerns, and proposed intervention measures as stakeholders in the context of **HILP events**. You will also be asked to help map interdependencies among the systems, specifically focusing on **physical interdependencies** among the CIs and the **flows of information and coordination** between different actors in the context of a crisis.

Please note that the primary focus of this study is on **cross-sector interconnections**, rather than internal dependencies within individual sectors.

Data Protection and Privacy

During the workshop, we will collect various types of data, including:

- Materials produced during the workshop (e.g., written notes, diagrams, and maps)
- Audio recordings of group discussions

The audio recording will be handled by Johanniter-Unfall-Hilfe e.v. (JUH, project coordinator), who will ensure accurate transcription and translation, as well as anonymization of the recordings. TUD will receive the anonymized transcripts in English for analysis. JUH will keep the audio recording and transcripts until the end of the project. The data may be reused for future educational or scientific activities on the topic HILP event management or stress testing.

TUD is in charge of collecting workshop material, collecting pictures of outputs and, based on the anonymous transcripts, synthesizing the results in the form of an internal AGILE report which will be made available to all AGILE consortium members. This report will also be shared with you, cleared from sensitive or confidential information, if applicable. TUD will also use the material for scientific publications and educational material, in which relevant insights will be presented in an anonymous and aggregated manner. Only data relevant to the stress test methodology will be made public. All other data will remain confidential, and only the AGILE consortium is allowed access and can use this information for project-related activities.

Participation in this study is entirely voluntary. You are allowed to withdraw from the stress test at any time without any consequences. You may also request that any or all of your contributions during the workshop be removed, up to four weeks after the stress test, by contacting Rabea.Schulz@johanniter.de.

The responsible researchers are Ali Cheshomi, Dr. Nazli Yonca Aydin and Prof. Dr. Tina Comes. You can contact them through email at A.Cheshomi@tudelft.nl, N.Y.Aydin@tudelft.nl and T.Comes@tudelft.nl.

I have read and understood the study information above, and I consent to participate in the workshop and to the data processing described before.