

Management of High Impact/Low Probability

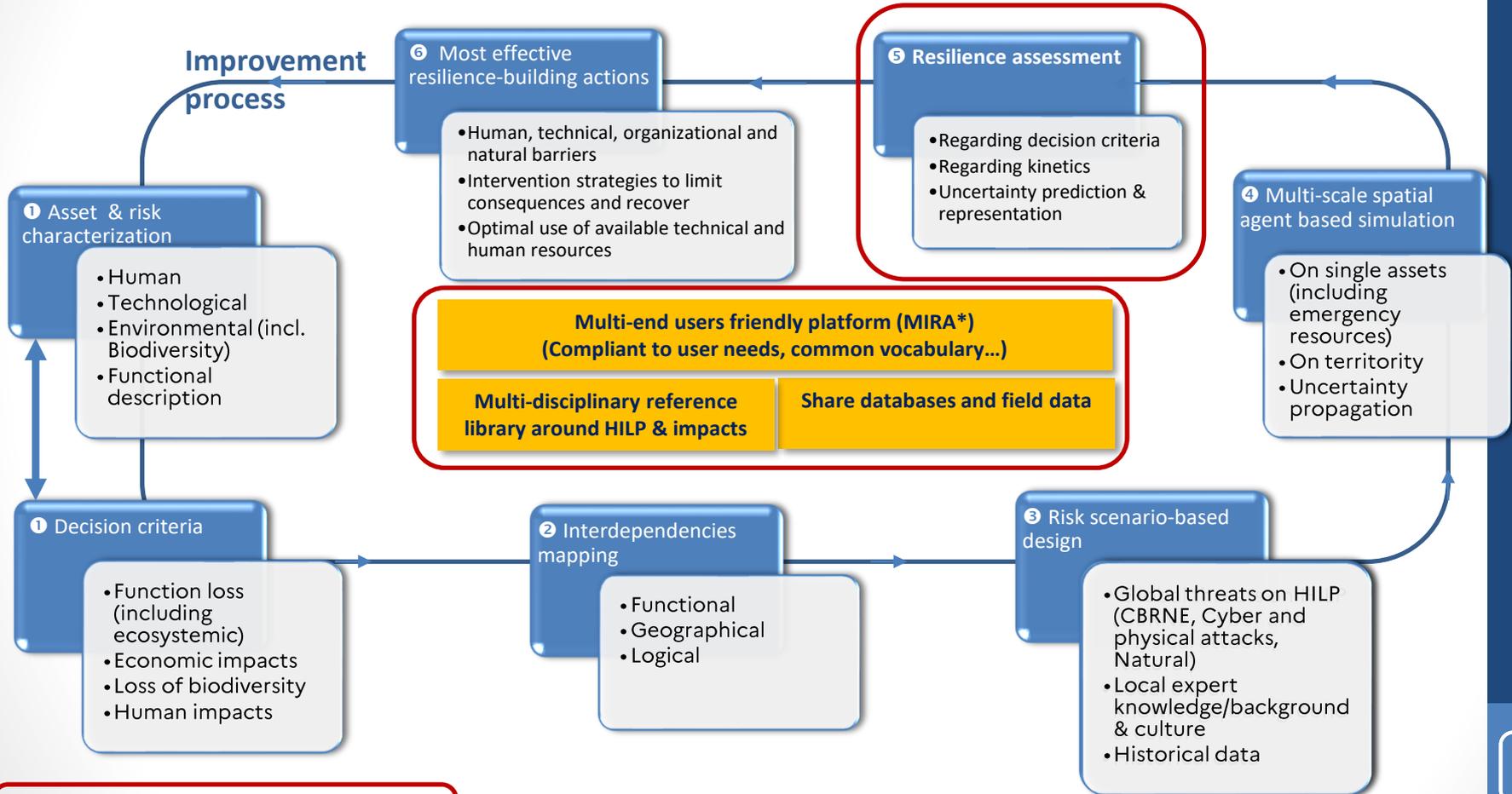
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- *Ineris - French National Institute for Industrial environment and risk*
- *Role: Project coordinator or WP leader*

- Proposal activity:

HORIZON-CL3-2022-DRS-01-02: Enhanced preparedness and management of High-Impact Low-Probability or unexpected events

Ineris benefits from decades of experience in the field of the assessment and prevention of chronic and accidental risks or risks resulting from malicious acts linked to industrial activities. Its multidisciplinary expertise covers the entire risk chain, which enables it to address safety and the protection of the environment and populations from all angles, technical, organizational and human.

Objectives of HILP project



Examples of Ineris contributions

*Integrated dynamic risk monitoring platform

Project participants

- Looking for partners, **R&D experts** and **Uses cases/End-users** with the following expertise/ technology/ application field:
 - **Territory management**
 - **Critical Infrastructures (CI) management**
 - **Emergency planning and management, Crisis management**
 - **First responders management**
 - **NGO's, Representatives of local populations**
 - **Environmental sciences: Prediction and modelling of major natural events**
 - **Characterization and evolutions of Ecosystems, Resilience of ecosystems**
 - **Characterization and risk analysis of Hazardous installations, Critical infrastructures**
 - **Social sciences, Historical analysis and ontology of risk, Socio-technical systems analysis**
 - **Security analysts (Cyber-security, physical threats, NRBCE)**
 - **Geographic Information Systems, Mapping**
 - **Modelling of complex systems (Multi Agent; Simulation, interdependencies, cascading effect, resilience)**
 - **Crisis management: Emergency plans, Recovery plans,**
 - **Platform development: Tools suppliers, Ergonomics**
 - **Communication tools and know-how**

Ineris proposes to coordinate this project but can also contribute to another project as WP leaders/partners

Today, the maturity of our consortium can be graded as 4 over 10. We have potential French use cases and associated partners but are looking for other European use cases and R&D skills.

Thanks for your attention

Which partners is Ineris looking for ?

R&D Experts

Use cases/End-users

For information, some details on the partners sought by Ineris and on Ineris' expertise (excluding oral presentation)

Item	Ineris expertise	Searched Partners
❶ Asset characterization and Decision Criteria	Safety report, environmental risk assessment, Environnemental consequences of major hazards	Territory managers, CI (Critical Infrastructure) managers, NGOs... Risks assessment, on communication...
❷ Interdependencies mapping	Risk mapping tools (Sigalea©) Land use planning Physical Phenomena modelling Resistance of infrastructure	Prevision of major natural events in the context of climate change, (CI) interdependance modelling
❸ Risk scenario-based design	Safety/ security assessment ; NaTech modelling and support to regulation	Modelling of major natural events (cyber)-security assessment tools Territory managers, CI managers
❹ Multi-scale spatial agent based simulation	PhD on uncertainty (2018) Dynamic Hybrid modelling tool (Pycatshoo©)	Territory managers, CI managers Spatialized risk scenarii modelling tools
❺ Resilience assessment	FP7 CASCEFF : development of a generic model for characterizing a cascading effect methodology . This model will be applied to the test cases of our project	Emergency planners and managers, CI managers, first responders
❻ Most effective resilience-building actions	ANR Rescue about preparedness to disruptive event in crisis situation (start 2022) The Emergency Situation Response Unit (CASU)	Emergency planners and managers, CI managers, first responders Preparedness plan, Crisis management, recovery plan
Multi User Platform	FP6 TOSCA with MIRA (integrated dynamic risk monitoring) platform : an integrated web-based risk management tool, for Hazardous installation – typically SEVESO Plants. MIRA digitalizes all the data related to risk studies, plans and procedures, system design and uses them to manage risks dynamically in operation by combining them with real activities field data to provide relevant information to the different actors involved in major risk management .	Ergonomists, Tool suppliers End-Users (Territory managers, CI managers, Emergency planners and managers, first responders...)