

SAF€RA's 7th joint call

May 2022

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The 2022 joint call for proposals

▷ Title: Industrial safety implications of platform work, the Green Deal, and advanced materials for energy storage

 \triangleright Topics:

- T1: Industrial safety in the context of the sustainability imperative
- T2: Safety of advanced materials in energy conversion and storage applications
- T₃: Evolving workplaces and safety in the platform economy
- ▷ Budget available: approx 1.8 M€
 - in-cash + in-kind funding





Industrial safety in the context of the sustainability imperative



T1: Industrial safety in the context of the sustainability imperative

- ▷ Changes to industrial activity:
 - increased production and use of renewable energy sources
 - tolerance of intermittent electricity supply
 - · development of power-to-X pathways to store excess electricity capacity
 - improvements to energy efficiency of processes and transport mechanisms
 - use of new energy carriers including e-fuels
 - CO₂ sequestration
 - reduction of waste
- \triangleright Contexts:
 - onshore and offshore industrial equipment
 - transport infrastructures
 - energy distribution infrastructures



T1: Industrial safety in the context of the sustainability imperative

- $\,\vartriangleright\,$ Challenges related to sociotechnical system safety:
 - modified scope of safety / environmental regulations and associated competent authorities
 - increased competition between safety and sustainability imperatives
 - more explicit acknowledgement of risk-risk tradeoffs
- \triangleright Projects expected concerning
 - safety assessment of new technologies, processes, materials & use cases (technical & methodological perspectives)
 - Decision processes & regulatory mechanisms for risk-risk tradeoffs, including implications for existing safety regulators and HSE specialists
 - Case studies illustrating innovative approaches to safety in the new economic & industrial environment





Safety of advanced materials in

energy conversion and storage applications



T2: Safety of advanced materials in energy conversion and storage applications

- ▷ Advanced materials for energy production, conversion, storage (batteries, supercapacitors) to meet sustainability imperative
 - catalysts, anti-catalysts, membranes, electrolytes, electrodes
 - contribute to increased energy density, lower cost, lower lifecycle environmental impact
- \triangleright Challenges:
 - better understanding of toxicological effects (including of nanostructured materials, composites)
 - characterize behaviour in energy systems (eg. performance of battery management systems, thermal runaway threats) and associated risks



T2: Safety of advanced materials in energy conversion and storage applications

- \triangleright Projects expected concerning
 - Guidelines for risk assessment (process safety, toxicology, environmental risks)
 - Improving testing, labeling and certification activities
 - Investigation of lifecycle management, in particular decommissioning and disposal



Evolving workplaces and safety in the platform economy

TOPIC

T3: Evolving workplaces and safety in the platform economy

- $\,\triangleright\,\,$ Platform-mediated work / algorithmic management
 - after "Nikeification" move from career to jobs, an "Uberization" process from jobs to tasks
- ▷ Non-standard forms of "work without employment" and without labour-law protections
 - limitations on working hours
 - employer-funded training
 - working conditions obligations
 - employer risk assessment obligations
 - workplace accident compensation mechanisms



T3: Evolving workplaces and safety in the platform economy

- \triangleright New threats:
 - stress due to evaluation by client-employers, productivity surveillance, job insecurity
 - alienation due to digital intermediation
 - limits on worker ability to organize
- Projects expected concerning effects on safety management and on industrial safety
 - effect of limits to on the job learning / social learning
 - use of data on tasks, geographic location of workers to generate risk indicators (psychosocial, physical)?
 - regulatory/legislative: dimensions of labour law and environmental protection legislation rendered inapplicable, and possible new mechanisms to reduce risks



Participating funding organizations



Austrian Research Promotion Agency (FFG) VUBP – Occupational Safety Research Institute Finnish Institute of Occupational Health (FIOH) Finnish Work Environment Fund (FWEF) Finnish Safety and Chemicals Agency (Tukes) Ineris INAIL TNO MESTD OSALAN

Austria Czech Republic Finland Finland Finland France Italy Netherlands Serbia Basque country



Call timeline

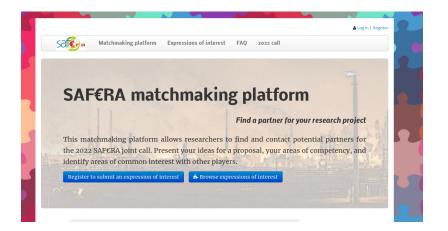
Joint call officially launched	2022-05-19
Pre-proposal deadline	2022-09-05
Full proposal deadline	2022-12-01
Funding decisions	2023-02-28
Projects start	2023-04

More info: call.safera.eu



Online matchmaking platform

https://matchmaking.safera.eu/





Documents

https://call.safera.eu/2022

- ▷ Guidelines for proposers
- \triangleright Guidelines for evaluators
- \triangleright Pre-proposal form
- ▷ Skeletons for mid-term report and final report





