



iNTeg-Risk: Early Recognition, Monitoring and Integrated Management of Emerging, New Technology Related Risks

iNTeg-Risk Kickoff Meeting

T1.2.5 – A5: Safety and security of underground hubs with interconnected transportation services and shopping centers

VSH, INERIS, SP, STUVA (i.e. L-surF)



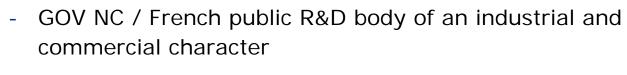




- VSH Hagerbach Test Gallery Ltd.
 - PRIV C / Underground RI operator



INFRIS French National Institute for Industrial Environment and Risks





- SP Technical Research Institute of Sweden
 - GOV C / National Fire Research and Testing Laboratory



STUVA Research Association for Underground Transportation **Facilities**

- PRIV NC / Non-Profit Research Association







Objectives

- To improve safety and security of underground hubs by improving risk assessment and risk management
- To provide input for the Emerging Risk Management Framework
- To harmonize the design phase for hubs and deep tunnels







Description of work

- The most critical issue in the operation of deep tunnels and hubs is the evacuation of persons in case of an incident.
- Involvement of stakeholders and operators of infrastructure (Metro Barcelona, Metro Madrid) is absolutely necessary
- Work to be done:
 - Description of Scenarios
 - Analysis and Assessment of risks
 - Integration of stakeholders via interviews / meetings
 - Evacuation exercise from rolling stock
 - Deliverable: Reference solution (A5) containing documents, methods and tools for safety and security of underground hubs with interconnected transportation services and shopping centers.



