



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

iNTeg-Risk Kick-Off INERIS profile and contributions

Bruno Debray, INERIS

Short presentation of INERIS

- INERIS = national institute for industrial environment and risks
 - Public institute with an industrial and commercial activity
 - Technical support to the ministry in charge of the environment
 - Support to the industry, consulting and laboratory activities
 - Research

- Areas of activity :
 - Chronic risks and pollutions,
 - Technological accident risks
 - Risks due to underground cavities (ancient mines...)

- Founding member of Eu-Vri

Main participants to the project

- **Bruno Debray**, scientific manager, accident risk division
- **Frédéric Merlier**, head of unit integrated risk management
- **Bastien Affeltranger**, responsible for development
- **Christophe Proust**, senior expert explosion and hazardous phenomena
- **Myriam Merad**, head of unit governance and acceptability
- **Sylvie Tissot**, toxicology expert
- **Alain Thoraval**, expert CO2 geological storage
- ...

Main contribution to the project

➤ SP1 Co-leader with GDF Suez

➤ SP1 Contributor to various ERRAs

- A1: CO2 capture and sequestration, both technical risks and governance risk
- A3: Control of risk related to gas and oil high pressure transmission pipeline safety by unmanned flying drone
- A5: Safety and security of underground hubs
- C1: Challenges to safety posed by outsourcing of critical tasks
- C4: Atypical, one-of-the-kind major hazards/scenarios
- D1: Definition of KPIs emerging risks for selected industry case studies
- D3: Emerging risks related to interaction between natural hazards (coordination)
- D4: Emerging risks related to hazardous substances, impact on public health

Main contribution to the project

➤ SP2 Methodological framework

- Task leader
 - Collaborative framework
 - Common vocabulary
 - Natech guidelines

- Contributor
 - Definition of the paradigm and Framework
 - Gap Analysis
 - Guideline et tools for operators
 - Communication and decision support
 - Human and organisational factors
 - KPIs

Main contribution to the project

➤ **SP3 ENISFER**

- ERRA C1: Challenges to safety posed by outsourcing of critical tasks
- ERRA validation of explosion models for refineries
- Contribution to setting the ENISFER network

➤ **SP4 Communication and safetypedia**

- Contribution to the specification of system
- Initiation of a CEN Workshop Agreement
- Design of a training module