iNTeg-Risk Info Sheet (June 2010) (ver.16.0)

iNTeg-Risk

Early Recognition, Monitoring and Integrated Management of Emerging, New Technology Related Risks

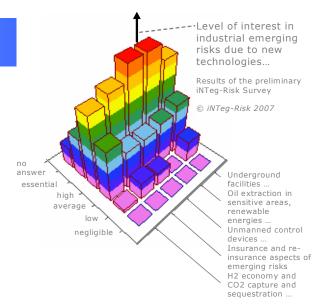
FP7/NMP - Nanosciences, Nanotechnologies, Materials and new Production Technologies: Grant no. CP-IP 213345-2

Coordination: EU-VRi European Virtual Institute for Integrated Risk

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Start/End: Dec. 1, 2008 to May 31, 2013 Budget: ~ 19.3 million €



Partners

Main Beneficiaries" (62, fivini) indicates an EU-VRi member):

- EU-VRi European Virtual Institute for Integrated Risk Management, Germany
- EDF Electricité de France, France
- 3 **GDF SUEZ** France
- 4 **Definiens AG** Germany
- MERL Materials Engineering Research Lab. Ltd, UK 6
- TÜV SÜD Industrie Service GmbH, Germany
- R-Tech Steinbeis Advanced Risk Technologies GmbH, 9
- Iberdrola S.A., Spain 10
- Atos Origin Sociedad Anónima Española, Spain 11
- Eni Norge Eni Group, Norway 12
- D'Appolonia S.p.A., Italy 13
- MIT Management Intelligenter Technologien GmbH, 14
- 15 **DNV** Det Norske Veritas AS, Norway
- 16 COWI A/S, Denmark
- Pöyry Forest Industry Oy, Finland 17
- MOL Plc. MOL Hungarian Oil and Gas Public Ltd Company, Hungary 18
- 19 VSH Hagerbach Test Gallery Ltd, Switzerland
- 20 Swiss Re Swiss Reinsurance Company, Switzerland
- 21 NIS Petroleum Industry of Serbia, Serbia
- 22 Saipem Energy Services S.p.A., Italy
- Technologica Group European Joint Venture cv, Belgium 23
- Eurogas-GERG The European Association of the Natural gas Industry, Belgium
- 26 Enagás S.A., Spain
- INCOPM Alexandru Darabont, National Research and Development Institute on Occupational Safety, Romania
- SWISSI Swiss Institute for the Promotion of Safety and Switzerland
- 29 KMM-VIN European Virtual Institute on Knowledge-based Multifunctional Materials AISBL, Belgium
- INERIS Institut National de l'Environnement Industriel et des Risques, France
- 31 CEA Commissariat à l'Energie Atomique, France
- 32 BAM Ba. für Materialforschung und -prüfung, Germany
- 33 USTUTT Universität Stuttgart (ZIRN), Germany
- 34 LEIA Fundación Centro de Desarrollo Tecnologico, Spain
- 37 TU Crete Technical University of Crete, Greece
- 39 **EU-YRI** SINTEF Stiftelsen, Norway
- **DTU** Technical University of Denmark, Denmark 40
- VTT Technical Research Centre of Finland, Finland
- BZF Bay Zoltan Foundation for Applied Research, Institute 42 for Logistics and Production Systems, Hungary
- 43 Demokritos National Center for Scientific Research, Greece
- IVF Swerea IVF AB, Sweden 44
- 45 **VSB-TUO** Sc. Technicka Univerzita Ostrava , Czech Republic
- JSI Jozef Stefan Institute, Slovenia

Basic idea and objectives

iNTeg-Risk is a large-scale integrating project aimed at improving the management of emerging risks, related to "new technologies" in European industry. This will be achieved by building new management paradigm for emerging risks as a set of principles supported by a common language, agreed tools & methods, and Key Performance Indicators, all integrated into a single framework. The project aim is to reduce time-to-market for the lead market EU technologies and promote safety, security, environmental friendliness and social responsibility as a trademark of the EU technologies. The project will improve early recognition and monitoring of emerging risks, seek to reduce accidents caused by them (estimated 75 B€/year EU27) and decrease reaction times if major accidents involving emerging risks happen.

Project structure and main planned achievements

The "EU response" proposed by the project will be based on 17 individual applications of new technologies like nano, H2 technologies, underground storage of CO₂, new materials (ERRAs - Emerging Risk Representative Applications in EU Industry). The solutions will be generalized and the used for the framework, which will be validated in a second application cycle. Overall solution will be made available to the users in the form of the iNTeg-Risk "one-stop shop" for EU solutions addressing emerging risks. The solution will include issues of early recognition and monitoring of



emerging risks, communication, governance, pre-standardization, education & training, dissemination, as well as new tools such as Safetypedia, Atlas of Emerging Risks, Reference Library, etc. The project involves leading EU industries and renowned R&D institutions. It is coordinated by the European Virtual Institute for Integrated Risk Management, the dedicated EEIG guaranteeing the sustainability the results after the project

The project structure is a bottom-up one starting from the problems identified as representative (iNTeg-Risk ERRAs), over the development of the integrated/common approach and methods, towards the "onestop-shop" containing solutions for different groups of stakeholders: from interested citizen, over students and concerned SMEs, to the scientists at academia or researchers in industry (each of them finding the information matching their respective interests). The subprojects in iNTeg-Risk, listed below, reflect the approach described above:

- 47 HSE-HSL Health and Safety Executive, UK
- 48 JRC Commission of The European Communities Directorate General Joint Research Centre, Belgium
- 49 **CEN** European Committee for Standardization , Belgium
- 50 **RIVM** Rijksinstituut voor Volksgezondheid en Milieu, The
- 52 **EU-YRI vfdb** German Fire Protection Association, Germany
- 53 ARPC Agenzia Regionale Protenzione Civile Emilia Romagna, Italy
- 55 ARMINES Association pour la Recherche et le Développement des Méthodes et Processus Industriels, France
- 57 TUKE Technical University of Kosice , Slovakia
- 58 FTN University of Novi Sad, Serbia
- 59 **EKON** Modeling Software Systems Ltd., Israel
- 62 **SP** Technical Research Institute of Sweden , Sweden
- 63 STUVA Studiengesellschaft. für unterirdische Verkehrsanlagen e. V., Germany
- 64 UNIBO Alma Mater Studiorum Università di Bologna, Italy
- 65 **EU-YRI UNIPD** University of Padua, Italy
- 66 FU-YRI POLIMI Politecnico di Milano, CMIC Dpt, Italy
- 67 EVYNI UNIRM Dipartimento Ingegneria Chimica Materiali e Ambiente, Sapienza Università di Roma, Italy
- 68 CNR-IRC CNR Istituto di Ricerche sulla Combustione, Italy
- 69 **EU-YRI UNIPI** University of Pisa, Italy
- 70 IQS, Institut Químic de Sarrià, Spain

"Article 10 partners" (16):

2B, 2B Consulenza Ambientale, Italy; EUR, Erasmus University Rotterdam, Netherlands; OttoUNI, Otto-von-Guericke-Universität Magdeburg, Germany; BristolUNI, University of Bristol, UK; STC, Steinbeis Technologie-transfer GmbH & Co. KG, Germany; DIIN, German Institute for Standardization e. V., Germany; CrisisTox, CrisisTox Consult, Netherlands; BlueOcean Semantic Web Solutions GmbH, Switzerland; IPPT, Instytut Podstawowych Problemow Techniki Polskiej Akademii Nauk, Poland; IMR SAS, Institute of materials research, Slovak Academy of Sciences, Slovakia; MCL, Materials Centre Leoben Forschung GmbH, Austria; UK HPA, UK Health Protection Agency, UK; FOI, Swedish Defense Research Agency, Sweden; FIOH, Finnish Institute of Occupational Health, Finland; BfR, Bundesinstitut für Risikobewertung, Germany; ENSMP, Ecole Nationale Supérieure des Mines de Paris. France

Subproject 1: Technology CASES: Identifying specific emerging risks and developing solutions to enter into the unifying framework, concept of ERRAs - Emerging Risk Representative industrial Applications

> "Hot topic" **ERRAs:** Emerging Risks emerging risk Representative (industrial) Applications are significant Industry partner(s) partner(s) examples of applications related to industrial safety (emerging risks). Solutions for the these single, ERRAS: specific problems related to EMFRGING RISK emerging risks should allow to REPRESENTATIVE INDUSTRIAL capitalize upon and, by generalizing APPLICATIONS the solutions, build the common European approach to emerging risk. Each ERRA is a triplet containing: (a) one significant emerging risk related issue/topic, (b) one or more industrial partners concerned by the above emerging risk(s), and (c) one or more R&D partners having proven excellence in providing solutions for the above emerging risk(s). They also provide the test-bed for the developed integrated methods, tools and the whole system..

- Subproject 2: CREATING AN INTEGRATED SCIENTIFIC & TECHNOLOGY FRAMEWORK: Emerging Risk Management Framework. (ERMF): iNTeg-Risk New Paradigm, Methods & Tools for dealing with emerging Risks
- Subproject 3: APPLICATION, VERIFICATION & VALIDATION: European Network of Industrial Systems and Facilities for exploration of Emerging Risks (ENISFER); verifying the SP2 results and validating the whole method
- Subproject 4: DISSEMINATION ONE-STOP-SHOP: iNTeg-Risk integrated EU solution, the "iNTeg-Risk one-stop-shop" for solutions addressing emerging risks
- Subproject 5: MAKING IT HAPPEN & ASSURING SUSTAINABILITY; MANAGING A LARGE COLLABORATIVE PROJECT – PROJECT MANAGEMENT & MORE: Managing iNTeg-Risk and creating its IT and "post-project" infrastructure

