
***Technology Platform to gain Safety for Sustainable European Industry Growth***

Stuttgart, January 15th, 2010

Sent to: **EU2020@ec.europa.eu**

Subject: Consultation EU Strategy 2020

Dear Sirs,

The European Technology Platform for Industrial Safety (ETPIS) was founded in 2004 at the prompting of the Directorate DG Research of the European Commission. It currently has more than 430 members ranging through: industry from various sectors (manufacturing, chemical, energy, construction…), research institutes, academia, E.U. Member State regulatory authorities, consultants, NGOs, standardisation and accreditation bodies…

In 2009, the European Agency for Safety and Health at Work claims that every 3.5 minutes, somebody in the EU dies from work-related causes, which equates to more than 150 000 deaths a year. The Major Accident Hazard Bureau (Joint Research Centre, Ispra) records every year about 30 major accidents. The overall aim of ETPIS is to reduce the accidents at work and avoid major accidents resulting in extensive consequences to people, the environment and property by optimizing the research investment in industrial safety. At the same, activities of ETPIS increase to accompany innovation and the development of new products and processes in a safe manner.

As the other ETPs, ETPIS has developed a structure, a vision and the strategic research agenda and implementation plans. Some information is provided in annex regarding the composition of the High Level Group and the Executive Board. But in addition, it is important to mention that ETPIS activities are currently overseen by a 'Mirror Group' gathering 45 official representatives of the Member States and other interested parties, currently focusing on working the creation of an ERANET. The network of the 9 national platform TPIS is also a key instrument to have the whole community interested by industrial safety aligned with the activities performed at European level.

Following the invitation to participate in the consultation concerning the draft of the Commission's communication "EU Strategy 2020" (http://ec.europa.eu/eu2020/), I am pleased to send you the contribution from ETPIS. If you need any clarification, don't hesitate to contact me.

Yours sincerely,

Olivier Salvi
ETPIS Secretary General

Attachments:

- Attachment 1: Contribution to the EU2020 Strategy
- Attachment 2: List of High Level Group Members and Executive Board Members
- Attachment 3: List of Focus Groups


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# Attachment 1: Contribution to the EU2020 Strategy

## Context

The Commission Working Document COM(2009)647 final presents the **"societal challenges" for Europe and the key priorities selected by the European Commission to address these challenges.**

*(1)* ***Creating value by basing growth on knowledge.*** *Opportunity and social cohesion will be enhanced in a world where innovation makes the difference in both products and processes, harnessing the potential of education, research and of the digital economy;*

*(2)* ***Empowering people in inclusive societies.*** *The acquisition of new skills, fostering creativity and innovation, the development of entrepreneurship and a smooth transition between jobs will be crucial in a world which will offer more jobs in exchange for greater adaptability;*

*(3)* ***Creating a competitive, connected and greener economy.*** *The EU should compete more effectively and increase its productivity by a lower and more efficient consumption of non-renewable energy and resources in a world of high energy and resources prices, and greater competition for energy and resources. This will stimulate growth and help meet our environmental goals. It will benefit all sectors of the economy, from traditional manufacturing to new hi-tech start ups. Upgrading and inter-connecting infrastructure, reducing administrative burden and accelerating the market uptake of innovations will equally contribute to this goal.*

The European Technology Platform on Industrial Safety (ETPIS) agrees with these key priorities where investment in R&D and education will play a major role, while changing our society to meet the environmental and social constraints.

## Contribution from ETPIS

ETPIS would like to put emphasis on the following remarks as a contribution to the EU2020 Strategy.

- Several challenges are cross-cutting and it is necessary to **work at the interface between several industry sectors**. The innovation and improvement may come from the development of synergies between industry sectors, between Member States and between Communities. Industrial Safety constitutes a transversal field of knowledge involving equally all European industrial sectors; thus, it can provide an important added value to define a joint vision and strategic research agenda.

- In a lot of situations, quick progress can be achieved by implementing the best practices or solutions already existing. Therefore, sharing of best practices between

industry sectors, between Member States and between Communities **and focus on the implementation** of existing knowledge may bring great and quick benefits.

- The change in the values of the society towards more safety, environment friendliness and sustainability is **an opportunity** to develop new products, new services and new activities.

- **Pro-active attitudes** with the development of safer and cleaner products and processes right from the beginning directly contribute to sustainable development. This has to be accompanied in the regulatory framework which also has to be compatible with innovation in the industry. Europe cannot afford to have regulations lagging behind innovation.

- The European governance of emerging risks related to innovation (e.g. massive use of nano-particles in the industry, adoption of new energy carriers…) has to be updated to give more flexibility while ensuring a high level of protection of the citizens. This reduces also the time to market as demonstrated by the iNTeg-Risk project (http://www.integrisk.eu-vri.eu/). **Goal-based regulations** supported by effective standards should be therefore promoted.

**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.

- Changes in the society have to be carried out with the support of all stakeholders. The dialogue and **participation of the interested parties** should be maintained. Therefore, the links with the professional associations and federations, trade unions and with the scientific organizations are very important.

- The European solutions have to be developed and implemented in an international context because most of the societal challenges faced by Europe are not only European challenges but most of the time they are global. Then the solutions developed need to be elaborated in **partnership with other international teams**. In this context, partnership with the USA, Japan, China, India, Latin America… are very important.

It is crucial to rapidly transform wishes and good intentions in concrete activities, initiatives, projects and solutions to make progress. Therefore, in the next paragraph some concrete examples of possible contribution are provided.


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# Examples of concrete contributions from ETPIS

Referring to the societal challenges mentioned during a meeting with the European Commission and the leaders of the European Technology Platforms mid October 2009, ETPIS has established a list of concrete examples of possible contributions.
They are presented hereunder.

| **Societal Challenges** | **Example of contribution from ETPIS** |
|---|---|
| Climate change | Share best practices on risk assessment and management of natural hazards which frequency is increasing due to climate change.<br><br>Improve risk management of natural hazards triggering accidents on technological infrastructures. The particular questions addressed by ETPIS members are:<br><br>- Multi-hazard and vulnerability assessment<br><br>- Optimisation of land-use planning strategies based on cost-benefits analysis |
| Clean energy | Accompany the safe development of clean energy. Several problems have to be solved regarding safety issues, e.g.:<br><br>- Safe capture, transport and storage of CO2<br><br>- Safe development of Hydrogen as an energy carrier<br><br>- Control the runaway reaction in Li-Ion batteries and super-capacitors<br><br>- Deployment of the use of alternative fuels in the aircraft industry: compatibility of the materials, logistic constraints and compatibility of various types of alternative fuels… |
| Sustainable transport | Accompany the development of the greening of transport. ETPIS members are working for example on the compatibility of the existing underground infrastructures with the new energy vectors. The questions addresses are:<br><br>- Adaptation of the underground parking slot in a city centre for vehicles using hydrogen or compressed natural gas<br><br>- Upgrade of the design of underground stations and terminals to enable the safe use of a diversity of energy carriers for the vehicles (cars, buses, trams) |

| | |
|---|---|
| Sustainable industrial production | Improve the performance of personal protective equipment (PPE).<br><br>Develop specific solutions for new products or new processes such as engineered nanomaterials.<br><br>The solutions are in terms of:<br><br>- Specific measurement techniques to assess the exposure of the worker and of the consumers, and the impact on the environment.<br><br>- Risk reduction technologies (PPE, cleaning of contaminated areas)<br><br>- Elaboration of reference documents and methods to deal with emerging risks<br><br>- Development of simulation tools (using virtual reality) to train the employees in safety critical situations<br><br>Support the development of the European Factory of the Future, by managing emerging risks through new integrated solutions (safety systems, advanced PPEs, new organisational models, ergonomics, etc), enabling higher productivity under better workplaces. |
| An aging population | Improve the management of safety competencies and skills in the industry and the public authorities,<br><br>- where the experienced employees are going to retire<br><br>- where aged personal have to perform safety critical tasks in the industry |

NB: ETPIS can provide experts if needed to include the risk management dimension in the EU 2020 strategy.


*Technology Platform to gain Safety for Sustainable European Industry Growth*

# Attachment 2: List of High Level Group Members and Executive Board Members

| Name / Company / Function / Country |
|---|
| **Members of the HLG** |
| Wolfgang Gerhardt<br>BASF, Vice President, Director HSE – Germany |
| Philippe Klein<br>EDF, Head of Risk Management Department in EDF R&D – France |
| Antonio Moreno<br>IBERDROLA, Director HSE – Spain |
| Theo van der Smeede<br>EXXON Mobil, Safety and OIMS Advisor - The Netherlands |
| Terry Taylor<br>European Agency For Safety And Health At Work, Head of Working Environment Information Unit - European organization (located in Spain) |
| Reto Schneider<br>SWISS RE, Director and Head of Risk Engineering Services Casualty – Switzerland |
| Ramon Paredes Sanchez-Collado<br>SEAT SA, Human Resources Executive Vice President – Spain |
| Andreas Zink<br>LKW Walter International, Director and ECTA Vice President |
| **Members of the Executive Board** |
| Christian Jochum<br>European Process Safety Center - EPSC, Director – UK / ETPIS Chairman |
| Olivier Salvi<br>INERIS, Scientific Division – France / ETPIS Secretary General |
| Jan Meulenbrugge<br>TNO, Coordinator Industrial Safety - Netherlands |
| Rosa Nomen<br>University Ramon Llull – IQS, Professor – Spain |
| Aleksandar Jovanovic<br>Steinbeis R-Tech, Director – Germany |
| Eusebio Gainza<br>Praxis Pharma, Research Director – Spain |

# Attachment 3: List of Focus Groups and leaders

***Risk assessment and management***

- Fabio Bagnoli, D'Appolonia S.p.A., IT
- Valerio Cozzani, Univ. Bologna & CONPRICI, IT

***Advanced risk reduction technologies***

- Daniel Podgórski, Central Institute for Labour Protection - (CIOP-PIB), PL
- Jan Meulenbrugge, TNO Built Environment & Geosciences, NL

***Structural safety***

- Carlos Guedes Soares, Instituto Superior Tecnico (IST), PT
- Mustafa Koçak, GKSS Research Center, GE

***Human and organisational factors***

- Patrick Lainé, Electricité de France, FR
- Camilla Knudsen Tveiten, SINTEF, NO

***Emerging risks***

- Aleksandar Jovanovic, Univ. Stuttgart (ZIRN), GE
- Raija Koivisto, VTT, FI

***Hub education and training***

- Rosa Nomen, IQS, ES
- Dirk Oberhagemann, VFDB, GE

***Hub NanoSafe***

- Frédéric Schuster, CEA, FR
- Jacques Bouillard, INERIS, FR

***Hub Research Infrastructures for Safety and Security***

- Jürgen Lexow, BAM, DE
- Didier Gaston, INERIS, FR

***Hub Transport***

- Livia Pardi, Autostrade per l'Italia, IT
- Jesús López de Ipiña, LEIA, ES