Workshop 2: Benchmarking in OSH
Future challenges to address with benchmark and exchanges of good practices

Olivier SALVI, Secretary General of the European Technology Platform on Industrial Safety (ETPIS)
Presentation outline

- ETPIS, an instrument to strengthen the European Community working on industrial safety
- Findings from the Benchmark Workshop about Future Challenges in Horizon 2020
- Opportunities to tackle the Future Challenges
What is ETPIS? It is...

- An instrument to pilot and defragment EU research investment in industrial safety (OHS, Process safety and environmental safety)
- **Vision & Strategic Research Agenda**
- **10 National TPIS**

- An open forum with 800+ experts to share ideas, prepare future work & disseminate results
  - **Focus groups, Technical Workshops & Conferences Education and Training**

- A platform driven by industry
  - **High Level Group with representatives from Chemical, Oil, Car, Energy, Transport, Food, Re-insurance, Construction, Manufacturing and EU-OSHA**

Buncefield, 11 De. 2005 (UK)
ETPIS as Cross-ETP initiative on Industrial Safety

- Evaluation by the European Commission last spring 2013
- ETPIS has become a Cross-ETP Initiative
- Cross-cutting / transversal topic
- Potential interactions with all other ETPs
- Safety as an overarching issue

Cross-ETP initiative on Industrial Safety
Vision and missions as cross-ETP

• SafeFuture vision: “Safety for sustainable and competitive future”

• Focus on Societal Challenges

• Develop the solutions technological and non technological – regulatory, standards, public acceptance, cultural ... that the industry needs to operate a sustainable business based on innovation (new products, new technologies with adequate management of residual risks).
Safe Infrastructure:
J.J. LARRAÑETA (Tecnalia)
- Life extension of process plants, transport infrastructures, power plants…
- Intensification of NatCat (NaTech)
- Design and monitoring for long term operation
- Adaptation of infrastructures to new energy systems

Safe Energy:
O. SALVI (INERIS DEV)
- New energy carriers for ground vehicles (FEV, fuel cells, CNG, H2…)
- Deployment of sustainable fuels
- Energy storage in stationary applications

Safe Products/Production:
J. MEULENBRUGGE (TNO) and R. NOMEN (IQS)
- Green jobs
- Value chain and interdependencies
- Nanosafety
- PPEs in a Smart Working Environment

Safety Cross-cutting issues:
A. JOVANOVIC (Steinbeis R-Tech) & V. COZZANI (CONPRICI, UniBo)
- Multi-Risk / Risk-Risk tradeoffs – safety for sustainable integration, interaction and risk governance
- “Agreed Approach to Risk-Risk Tradeoff management” (the Multi-Risk initiative); difficulties in putting together different risk mitigation policies and ensuring their compatibility
### Strategy
From the Strategic Research Agenda the **SafeFuture** Initiative has been developed to address Societal Challenges. In relation with the **ERA-NET SAF€RA** it provides the structure for research and implementation planning.

### Mobilization
The **open forum** offered by ETPIS enables the members and stakeholders to meet and develop solutions to current and future safety challenges using various funding schemes, mainly at EU level with e.g. the European Framework Programme.

### Dissemination
**Newsletters, technical workshops, and other events** organized on a regular basis contribute to keep the community up-to-date with legal requirements and the new knowledge gained though research and innovation.
Safety in Horizon 2020

**Conventional risks**
improving the safety performance in all industry sectors and reducing the impact of accidents taking into account technical, human, organisational and cultural aspects, and the current ‘state-of-the-art methods’ for safety management.

**Innovative industry**
accompanying the innovative industry to reduce the time to the EU market and reach public acceptance of new technologies and products by implementing e.g. the CEN Workshop Agreement CWA 16649:2013 ‘Managing emerging technology-related risks’ adopted on June 26, 2013

**Safety technologies, products & services**
guaranteeing the leadership of the EU safety industry on personal protective equipment, safety systems, inspection and control...
Evolution of safety performance and risk aversion

- **Technology improvement**
- **Safety Management Systems**
- **Safety Culture**
- **Safety Behaviour**

**Risk aversion**

Enhanced risk management

- Decrease of the number of accidents => decrease of their tolerance
Enhanced Risk Management

- **7 principles**
  - **Expertise** based risk assessment (not only knowledge and experience based), working under high uncertainties and ambiguities
  - **Collaborative** and **integrative** risk assessment based on a distributed multidiscipline expertise, using RiskEars, ENISFER and RiskForum
  - **Dynamic** risk assessment and management, using KPIs
  - **Adaptive** risk management, to the context and the desired safety performance
  - **Aligned** with ISO 31000, ISO 26000, ISO 27000, ISO 55000, IRGC framework, iNTeg-Risk CWA 67...
  - Use of **advanced technology** for solutions
  - **Participative** through education and life-long learning
ETPIS Proposal: Risk Management in all innovative technology project in Horizon 2020

FP4  FP5  FP6  FP7  Horizon 2020

R & D  R & D  R & D  R & D  R & D
PM  QMS  PM  QMS  PM

Risk Mngt  Dissemi.  Dissemi.  QMS  PM

www.healthy-workplaces.eu
Technological and scientifical challenges

We observe or anticipate:

- More ICT in the daily business
- New products and technologies...
  - ... with new energy
  - ... with nano inside
  - ... with more biotechnologies

Solutions should focus on:

- Management of change
- Communication on safety inside the companies and with all stakeholders
- Improvement of use of ICT for safety
Structural challenges

We observe or anticipate:

- Immigrant workforce
- More access to information and more participative decision process
- Ageing of the installations and of the workforce

Solutions should focus on:

- Life-long training
- Organised dialogue for safety
- Building resilient organizations
Policy challenges

We observe or anticipate:

- Changes in the values of the society
- Integration of OSH, Process Safety, Security, Environment because of with ISO 31000, ISO 26000, ISO 27000, ISO 55000, IRGC framework, iNTeg-Risk CWA 67...

Solutions should focus on:

- Integration of the regulatory frameworks for more cost-effectiveness
- From prescriptive to more goal-oriented with robust standards
Opportunities to tackle the challenges
ETPIS proposal

- **Further thematic benchmark exercise/workshop for example on:**
  - Safety culture
  - Positive wording for safety
  - Integration of safety and security issues
  - Practical organisational learning and management of change
  - ...

- **ETPIS can offer:**
  - Working groups
  - Seminars in person or virtual (webminar/teleworkshops)
  - Collect structured topics for research to promote research in Horizon 2020 programme and in SAF€RA (ERANET on Industrial safety)
Perspectives

- ETPIS provides an effective forum to exchange ideas on safety, security and sustainability towards an integrated and global approach.

- SafeFuture is the vehicle to promote industrial safety in the new political and industrial context provided that safety management are key for sustainable and competitive business.

- Future initiatives and projects have to be prepared in partnership with sectoral platforms, and both industry and public authorities to reach an effective implementation.
Safety and health at work is everyone’s concern. It’s good for you. It’s good for business.