



ETPIS contribution to EU2020 Strategy

Industrial Safety constitutes a transversal field of knowledge which provides an important added value in all European industry sectors.

ETPIS is ready to support the implementation of the EU2020 Strategy applying the following principles:

- 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.
- 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 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.
- 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, common projects with the USA, Japan, China, India, Latin America... are strategic.

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.



Examples of concrete contributions from ETPIS

It is crucial to rapidly transform wishes and good intentions in concrete activities, initiatives, projects and solutions to make progress. Therefore, referring to the societal Grand Challenges ETPIS has defined a list of concrete contributions to projects and flagship initiatives.

Societal Challenges	Examples of contributions from ETPIS
Climate change	<ul style="list-style-type: none"> • Share best practices on risk assessment and management of natural hazards which frequency is increasing due to climate change. • Improve risk management of natural hazards triggering accidents on technological infrastructures. The particular questions addressed by ETPIS members are: <ul style="list-style-type: none"> - Multi-hazard and vulnerability assessment - Optimisation of land-use planning strategies based on cost-benefits analysis
Clean energy	<ul style="list-style-type: none"> • Accompany the safe development of clean energy. Several problems have to be solved regarding safety issues, e.g.: <ul style="list-style-type: none"> - Safe capture, transport and storage of CO₂ - Safe development of Hydrogen as an energy carrier - Control the runaway reaction in Li-Ion batteries and super-capacitors - 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	<ul style="list-style-type: none"> • 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 addressed are: <ul style="list-style-type: none"> - Adaptation of the underground parking slot in a city centre for vehicles using hydrogen or compressed natural gas - 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	<ul style="list-style-type: none"> • Improve the performance of personal protective equipment (PPE). • Develop specific solutions for new products or new processes such as engineered nanomaterials. The solutions are in terms of: <ul style="list-style-type: none"> - Specific measurement techniques to assess the exposure of the worker and of the consumers, and the impact on the environment. - Risk reduction technologies (PPE, cleaning of contaminated areas) - Elaboration of reference documents and methods to deal with emerging risks - Development of simulation tools (VR) to train employees in safety critical situations • 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.
Aging population	<ul style="list-style-type: none"> • Improve the management of safety competencies and skills in industry and public authorities, <ul style="list-style-type: none"> - where the experienced employees are going to retire - where aged personal have to perform safety critical tasks in the industry