Preparation of an EU Technology Platform

Safety for Sustainable European Industry Growth

General Presentation

Why technology platforms?

Criteria for establishment are:

- **potential strategic importance of the sector** in terms of major economic, technological or societal challenges
- the **EU dimension**
- **importance of the role of RTD** in fully achieving the potential benefits

Main drivers could be the need:

- to **maintain (or regain) global leadership** through new RTD
- to develop and assimilate new scientific knowledge and technologies **to evolve towards paradigm shift**
- to renew, revive or restructure ailing industry sectors
- to **support development of new technology based public good services** with high entry barriers, uncertain profitability but high economic/social potential (poverty related diseases)

Technology platforms - the concept

Technology platforms could

- be important in all areas where RTD plays a vital role in **addressing major economic, technological and societal challenges**
- generate **sustainable competitiveness** of the EU, stimulate increased and **more effective investment in RTD**, **accelerate innovation** and **eliminate barriers** to the deployment and growth of new technologies.

Technology platforms should

- **bring together all stakeholders** (research, industry, regulators, policy makers) **to develop a long term vision** for the deployment and growth of new technologies, including the downstream regulatory environment in which technologies are developed and marketed
- **create a coherent strategy and action plan** to deliver agreed programs of activities and optimise the benefits of all
- elaborate and follow-up a **strategic research agenda**

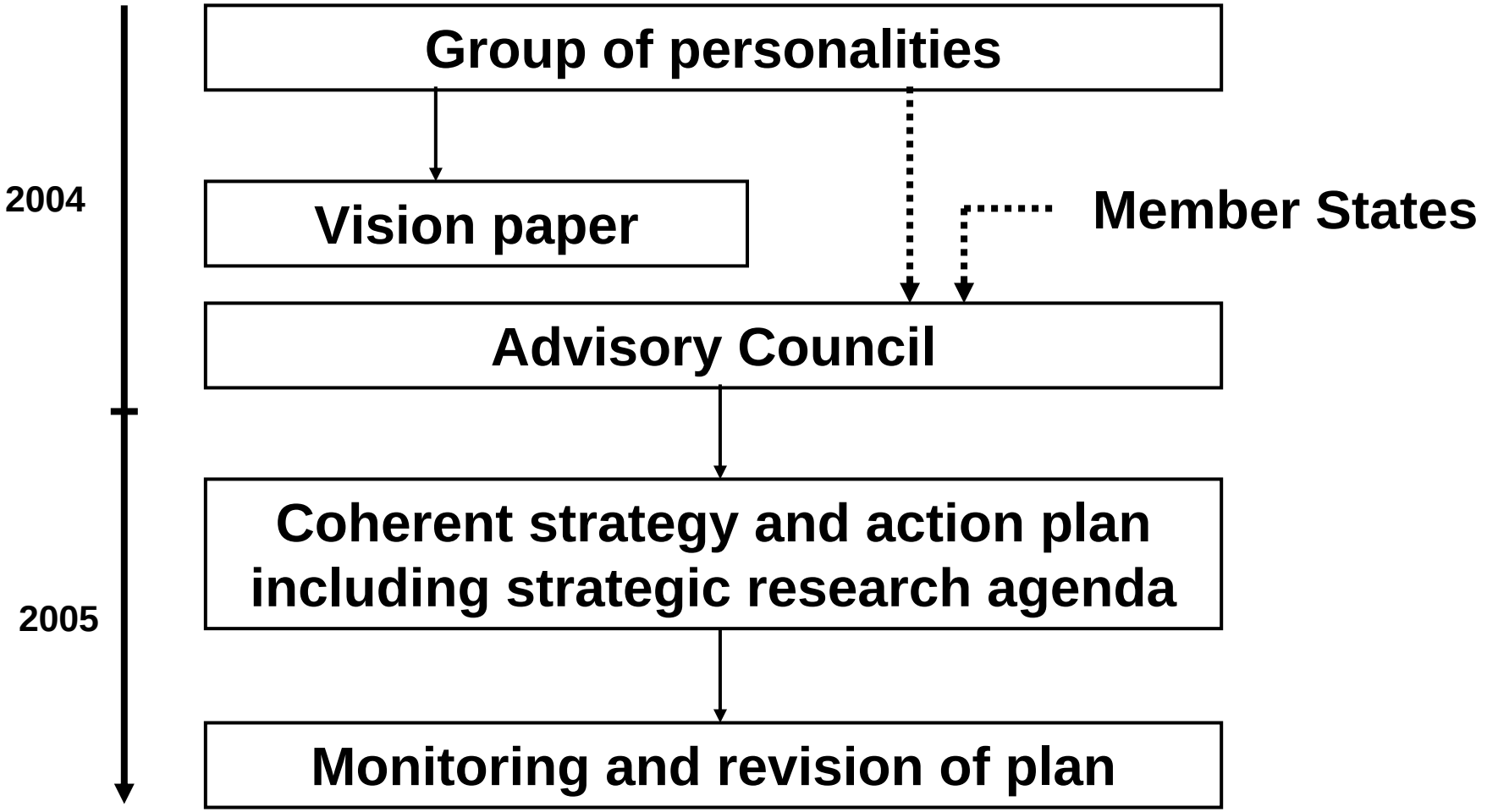
Technology platform - key elements

- Need to bring together disparate actors to achieve common objectives
- Inclusiveness: Research and industry is basis of TP, but synergies and interactions between them and public authorities, regulators, users and consumers necessary
- Independence and transparency: no lobbying group for particular actor; develop common approach above the (sometimes narrow) viewpoints and interests of specific groups
- develop comprehensive understanding of challenges and opportunities with a view of achieving widespread consensus on long-term vision and strategy
- TP can be seen as a new form of governance within knowledge based economy

Industrial Safety

- … is a key issue for a number of current and emerging industrial sectors in Europe
  - chemical, petrochemical, process industry
  - oil industry
  - paper industry
  - manufacturing
  - nanotechnologies
  - … etc.
- … will support the emergence and adoption of new technologies (e.g. hydrogen technologies and fuel cells, nanotechnology, multi-scale installations…), therefore the competitiveness of the European Industry,
- … can address a number of societal and economical challenges

Technology Platform Industrial Safety



Preparation of common vision and goals

- Scope of industrial safety
- Research
- Networking
- Integration
- Education
- Taking SMEs on board, transfer
- Standardisation and regulations
- Communication

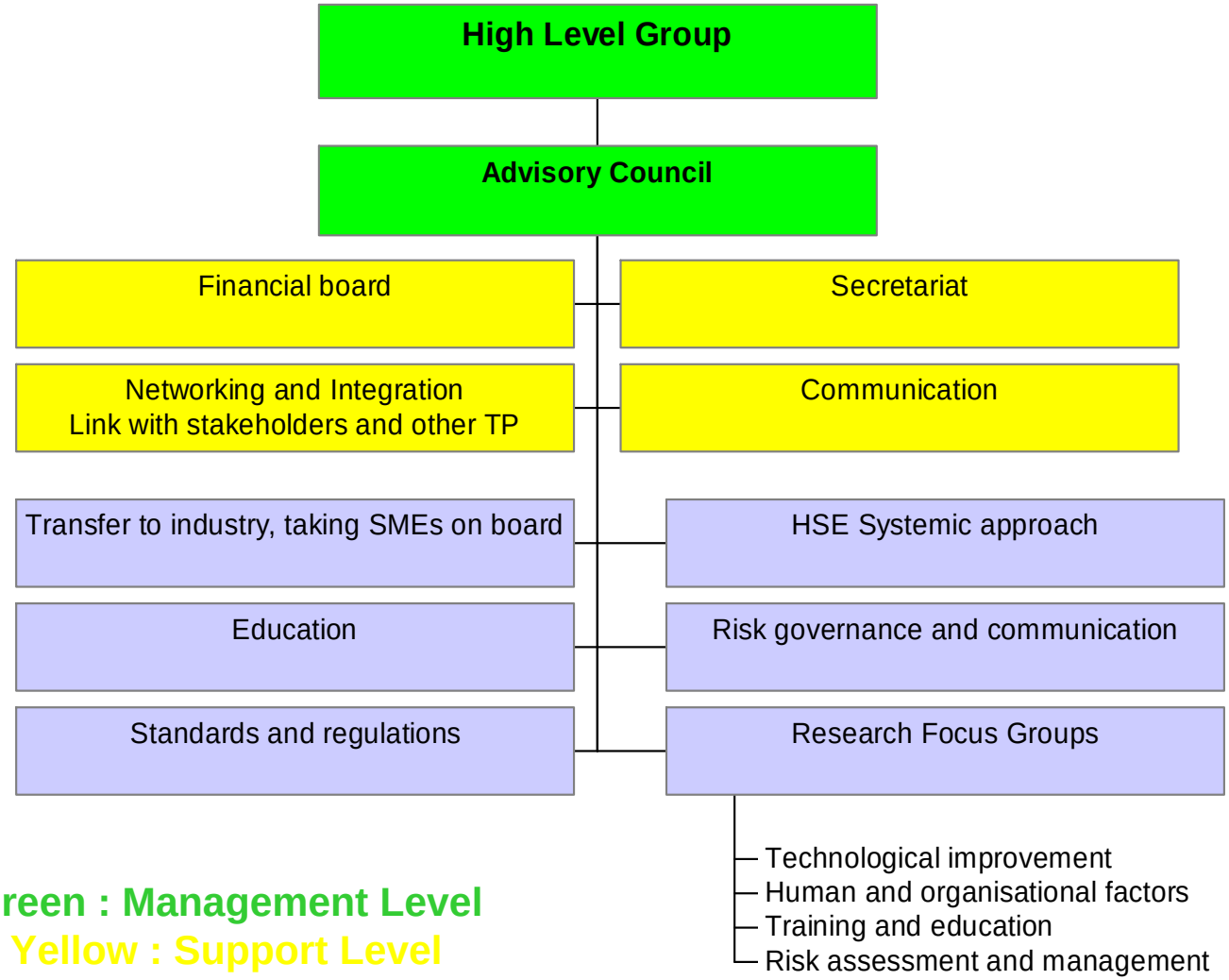
Industrial Safety

- Occupational health and safety of the workers in industry
- Environmental safety
  - prevention of major accidents with off-site consequences
  - protection of the environment

MISSION ORIENTED

Safety for Sustainable European Industry Growth

Structure of the TP
Safety for Sustainable European Industry Growth



Green : Management Level
Yellow : Support Level
Blue : Operational Level

Financial Board

- Establish a sustainable funding of the platform by working with
  - industry
  - banks
  - insurance
  - Member states
- Create a permanent team to operate the TP ?

Networking, link with other TP

- Establish links between relevant stakeholders : industry, R&D community, policy makers, competent authorities, public and communities
- Relations with other TP
- Gather a critical mass : public-private partnership

Communication

- Promote the TP with a adequate strategy
- Public Relation with high level personalities
- Make the initiative visible to politicians, public, authorities, industry…

Integration, HSE systemic approach

- Develop joint programme of activities
- Exchange personels
- Carry out Joint Technological Initiatives (article 171 of the Treaty)
- Build a common structure for funding

Education

- Improve education and training programmes to increase industrial safety, at various levels of education
- Introduce risk information and sensitisation in education system for young people

Taking SMEs on board and transfer

- Collect expectations and analyse barriers that hamper the improvement of safety among SMEs
- Transfer knowledge to SMEs
- Make them proactive

Standardisation and regulations

- Identify the needs in terms of standardisation and regulations
- Draft new relevant standards
- Move from prescriptive standards to goal-oriented ones

Risk governance and Communication

- Build a strategy to improve risk governance
- Make the initiative visible from outside : politicians, public, authorities, industry… (e.g. create safety indicators to communicate to the public and authorities)

Schedule

- July 04 :
  First meeting, drafting group
- September 04 :
  Draft document (vision paper)
- 20 October 04 :
  Workshop for orientation and creation of the Advisory Council and preparation of the strategy and action plan
- November / December 04 :
  Communication of the vision during the SRA Europe annual Meeting in Paris and during the Manufuture Conference in Entschede
- January 05 :
  Communication of a coherent strategy and action plan including strategic research agenda

Research objectives

Breakthrough for progress in Industrial EH&S risk via a co-ordinated, focused research and implementation process

Research objectives

- Develop integrated solutions with improvement of :
  - Relevance
  - Quality
  - Applicability
  - Use

Research objectives

- Improvement of Relevance
  - A support process which ensures that research addresses the 'real needs'
  - Definition of 'real needs' is not controlled by a 'vested interest' or vocal minority
  - Benefit (Societal, Environmental or Financial) / Cost

Research objectives

- Improvement of Quality:
  - Audit of Research proposals
  - Approval process
  - Ongoing review process
  - Use-ability concept
  - Live testing and feedback judgements from stakeholders

Research objectives

- Improvement of Applicability:
  - Should Proposals be authenticated by potential users (e.g. Competent Authorities and/or Operators) before funding approval?
  - Meeting the Relevance test

Research objectives

- Improvement of Use:
  - Did the project deliver its promises
  - Are people using it?
  - Publicise list of 'users'/beneficiaries
  - Simple benefit judgement
  - Reward success

Research content

For occupational health and safety of the workers and environmental safety (prevention of major accidents and protection of the environment) :

- technological improvement : inherently safer design, process intensification, flexible plants, chemical parks, nano-production…
- risk assessment and management : safety barriers approaches, quantitative risk assessment, performance of safety equipments, cost-benefice analysis…
- human factors : human-machine interaction, organisational safety, organisational learning…
- knowledge transfer and dissemination…