EUROPEAN COMMISSION / Research & Innovation / 7th Framework Programme

EU: Identifying Technical Platforms for Collaboration

European Commission
Directorate-General for Research and Innovation
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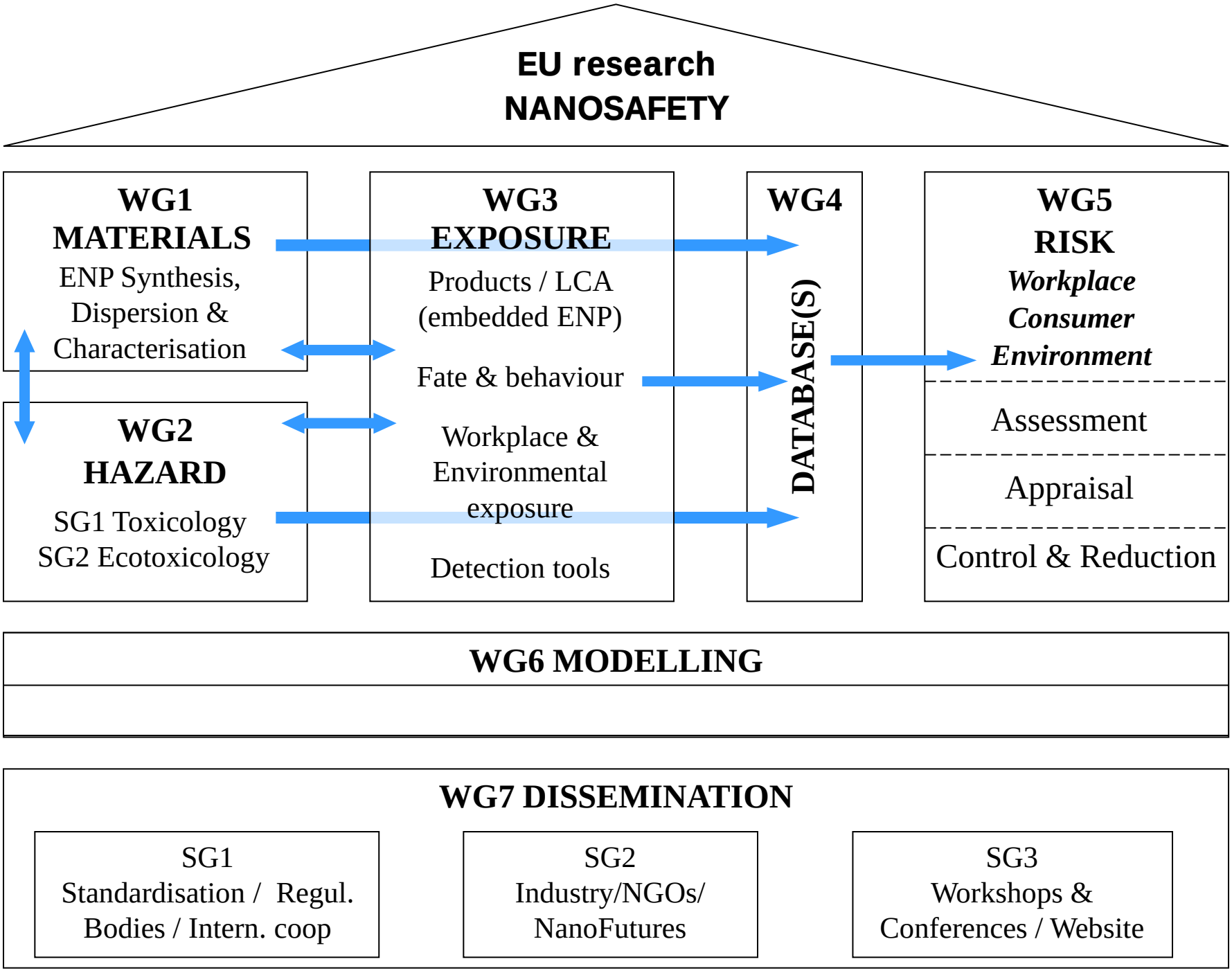
COOPERATION

The NMP Nanosafety Cluster

- **An initiative to maximise the synergies between projects addressing all aspects of nanosafety including toxicology, ecotoxicology, exposure assessment, mechanisms of interaction, risk assessment, LCA and standardisation.**
- **A projects and scientists forum**
- **About 30 EU and national projects**
- **Open to voluntary participation**
- **A projects compendium published; 2011 version available**
- **Integrating in the** Technology Platform NanoFutures


EU research
NANOSAFETY
WG1
MATERIALS
ENP Synthesis,
Dispersion &
Characterisation
WG2
HAZARD
SG1 Toxicology
SG2 Ecotoxicology
WG3
EXPOSURE
Products / LCA
(embedded ENP)
Fate & behaviour
Workplace &
Environmental
exposure
Detection tools
WG4
DATABASE(S)
WG5
RISK
Workplace
Consumer
Environment
Assessment
Appraisal
Control & Reduction
WG6 MODELLING
WG7 DISSEMINATION
SG1
Standardisation / Regul.
Bodies / Intern. coop
SG2
Industry/NGOs/
NanoFutures
SG3
Workshops &
Conferences / Website

Technology platforms - the concept

- **Scope**:
  - •Areas where RTD plays a vital role in **addressing major economic, technological and societal challenges**
  - •Potential for **sustainable competitiveness** of the EU
  - •Increased and **more effective investment in RTD**
  - •**Accelerate innovation** and
  - •**Eliminate barriers** to the deployment and growth of new technologies

- **Partnership:**
  - •**bring together all stakeholders** (research, industry, regulators, policy makers)

- **Objectives:**
  - •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**

COOPERATION

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NANO*futures* as "Nano-Hub"

MEMBERS

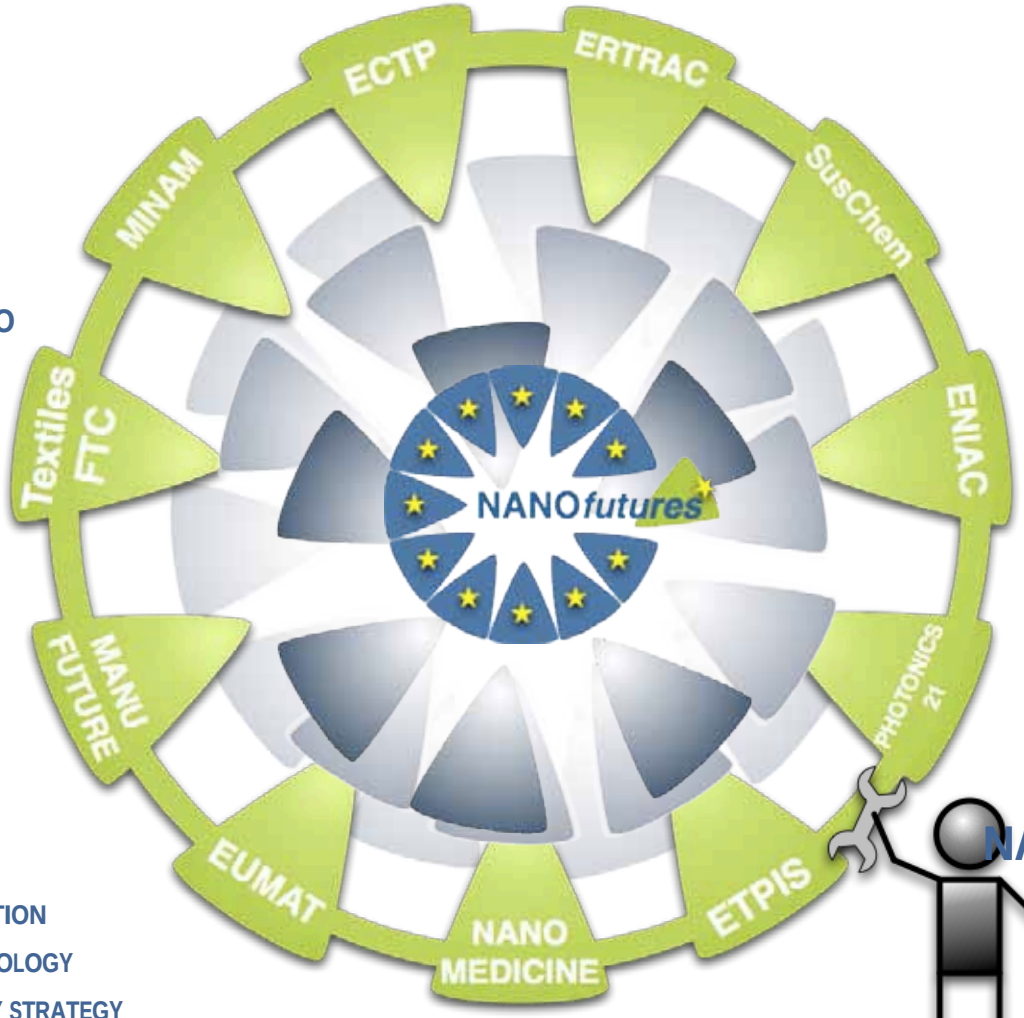
- q Associations
- q SMEs
- q Industries
- q Universities
- q Scientists
- q ...

CSA

- q ObservatoryNANO
- q ProNano
- q NanoCom
- q Nano2Market
- q MINAM 2.0
- q Nano-TV

Working Group

- q REGULATION
- q NETWORKING
- q COMMUNICATION
- q STANDARDIZATION
- q SAFETY RESEARCH
- q SKILLS AND EDUCATION
- q RESEARCH / TECHNOLOGY
- q INDUSTRIAL SAFETY STRATEGY
- q INDUSTRIALIZATION/ nano-MANUFACTURING
- q TECH TRANSFER and INNOVATION FINANCING

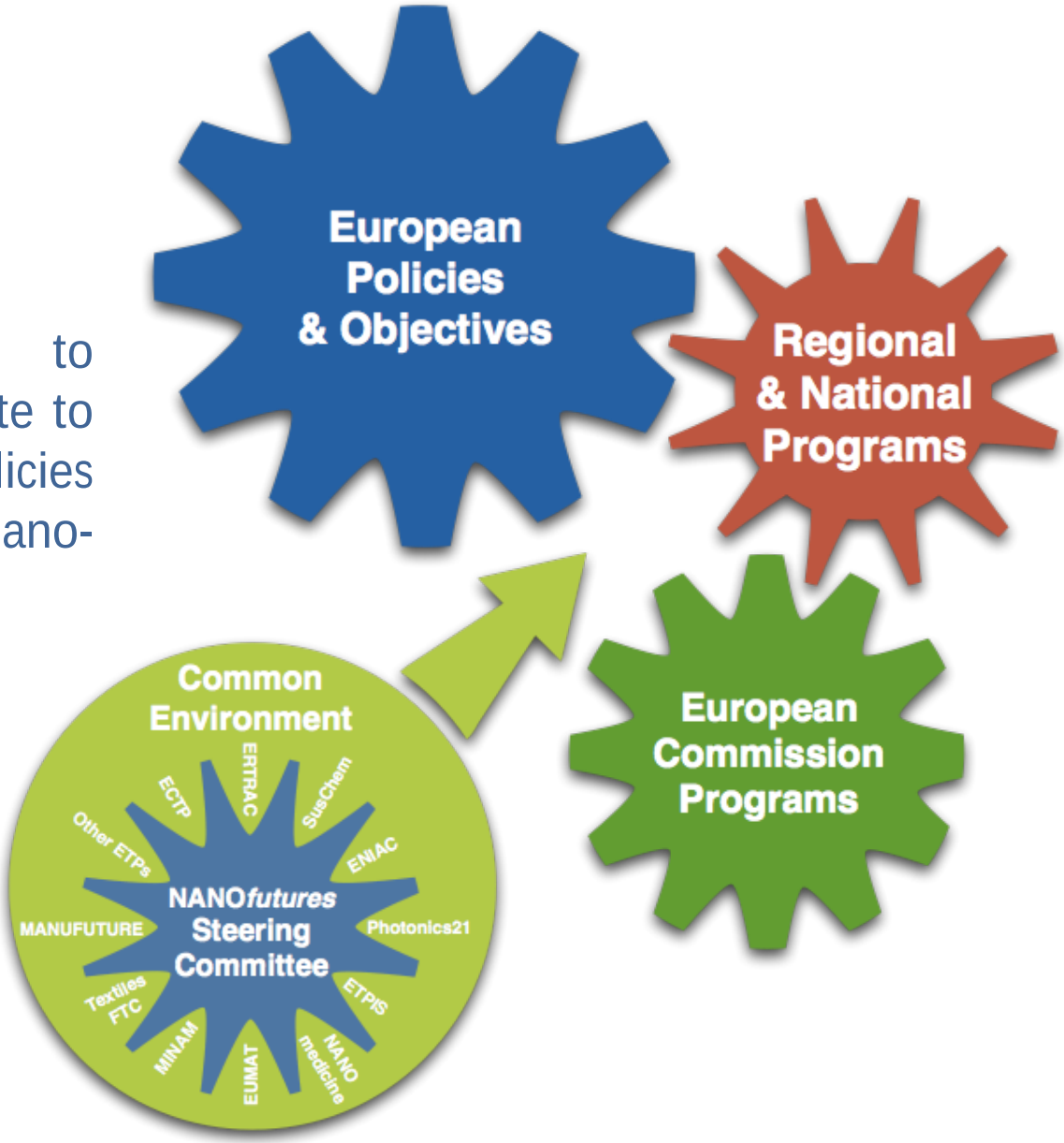


ETP

NANO*futures* CSA

COOPERATION

q **NANO*futures*** aim to address and contribute to **EU** and **national** policies in the area of nano-technologies



Nano-Risk Management System elements

Materials and hazards

- Develop material characterisation methods
- Develop and validate methods to evaluate toxicity / ecotoxicity

Exposure and Monitoring

- Instruments for assessing exposure to nanomaterials in air and water (number, surface area, mass)
- Monitoring accidental hazards

Risk understanding / risk evaluation

- Acceptable / unacceptable risks, Costs / Benefits Analysis
- Exposure limits, control measures
- Impact evaluation over entire Life Cycle

Risk Communication

- Dialog and transparency
- Risk perception

Risk mitigation

- Proactive risk management
- Safe processes and safe handling

- Develop strategic programmes that enable risk-focussed research
- Safety management infrastructure and capacities
- Material data, Toxicity testing methods and data, Exposure mesurements methods and data

COOPERATION

Mechanisms of cooperation

SCOPE

- **Information: Two networks, communicating**
  - Materials
  - Hazard/exposure
  - Risk management
- **Exchange of researchers / visits**
- **Scientific strategy & planning**
- **Cooperation extension towards:**
  - Data management
  - Standardisation
  - Testing
  - Exposure

STAKEHOLDERS

-EU and USA provide the platform based on their Scinece and Technology cooperation agreement

-Projects on voluntary basis

MEANS

- Meetings: One per year?

- Organisation of working groups on specific issues?

- Facilitation of joint actions? Databases?

COOPERATION

Information on Nanotechnology in EC

Commission Nanotechnologies homepage

http://cordis.europa.eu/nanotechnology/

http://ec.europa.eu/nanotechnology/index_en.html