

The European Technology Platform Nanomedicine

Nanotechnologies for Breakthroughs in Healthcare

Introduction

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Vision

“Within 10 years nanomedicine-based products will lead to breakthroughs in the treatment of diseases such as cardio-vascular disease, cancer, CNS diseases and diabetes.”



What is Nanomedicine

Nanomedicine drives the convergence of Nanotechnology and Medicine

- **Nanotechnology** is a very diverse field involving many scientific disciplines and technology areas
 - Physics, chemistry, biology, engineering, etc.
- **Medicine** covers many application areas
 - Diagnostics, therapy, regenerative medicine, pharmaceuticals, etc.

Where is Nano **in** medicine

- Nanoparticles in diagnostics and therapy
- Surfaces on implants
- Materials in smart devices
- Scaffolds for cell and tissue engineering
- ...

Nano is only part of the story

The (Nano)medicine value chain

- Patient needs
- Basic Research
- Applied Research
- Industrial Implementation
(Qualified products & services)
- Clinical Translation
- Regulatory Issues
- Reimbursement



**Nanotechnology will enable
revolutions in healthcare**

**ETP Nanomedicine applies a holistic
approach to make this happen**

Mission

The ETP is operated to

- identify opportunities and set the priorities of Europe's Nanomedicine translational research program with the goal of moving concepts from the laboratory to *in vivo* validation
- guide the development of the social, regulatory and reimbursement environment
- facilitate communication between key stakeholders on the progress made
- use healthcare leadership to drive and encourage new product concepts from academia
- improve healthcare provision for patients within Europe
- improve the competitiveness of companies within Europe
- support members to get access to R&D funding

Shaping the business, societal, regulatory and reimbursement environment

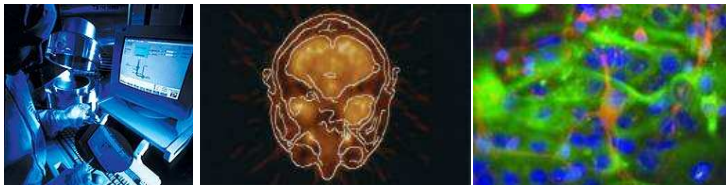
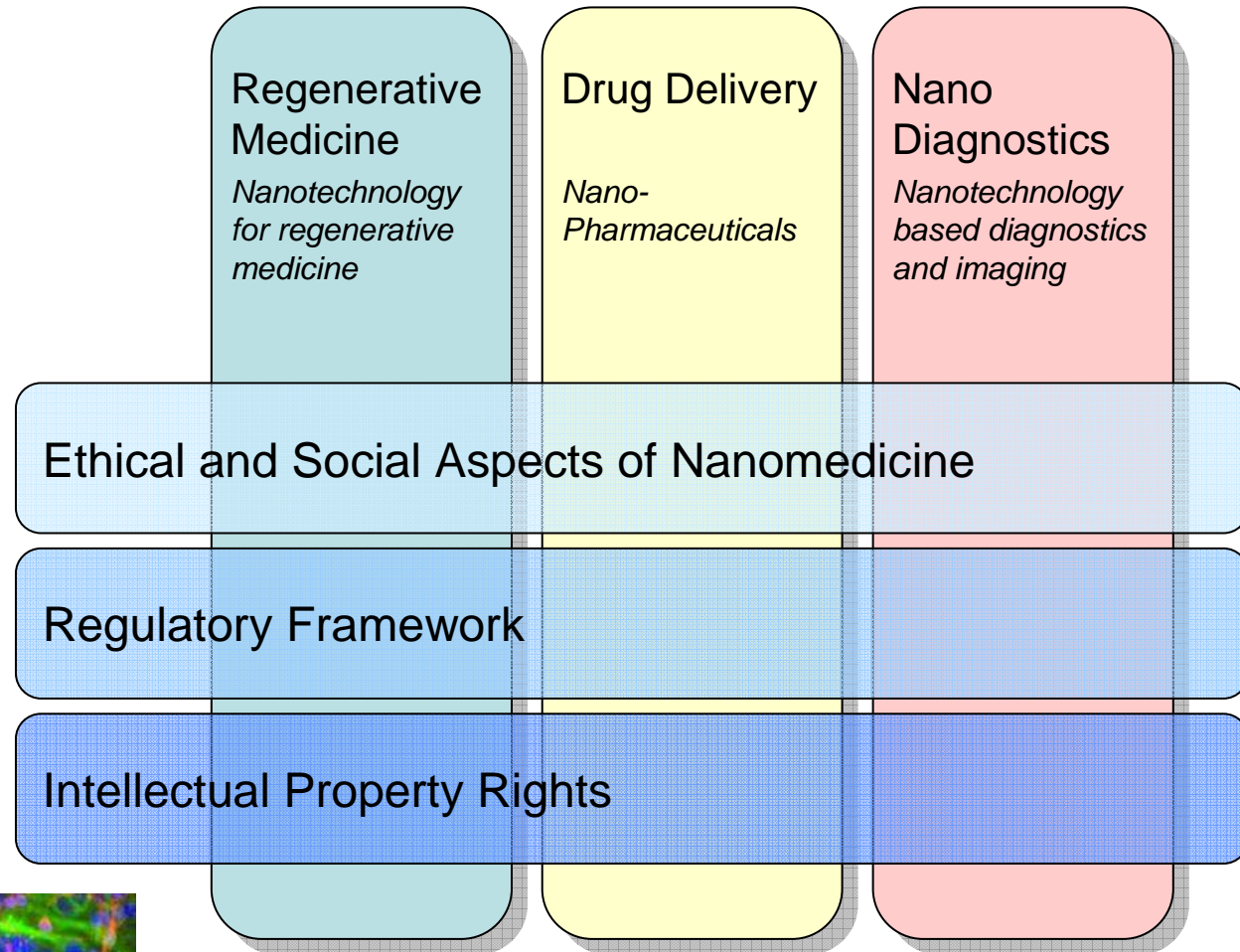
- Influencing the regulatory bodies dealing with nanomedicine
 - Identify issues needing an action from the ETP
 - Make proposal to change regulation
- Preparing guidelines, recommendations
 - IP related issues in joint projects
 - ELSA issues
 - Health economics specific to nanomedicine (Time to market)
- Transferring industrial know-how & perspective to academia
- Assuring access to new products across society

Education & training

- Identify **educational gaps** to respond to the needs of industry, healthcare providers and academia in nanomedicine
- Stimulate **universities and training organisations** in **implementing courses and training** for scientists, engineers, technicians and clinicians in nanomedicine related topics



Three technical / three horizontal working groups



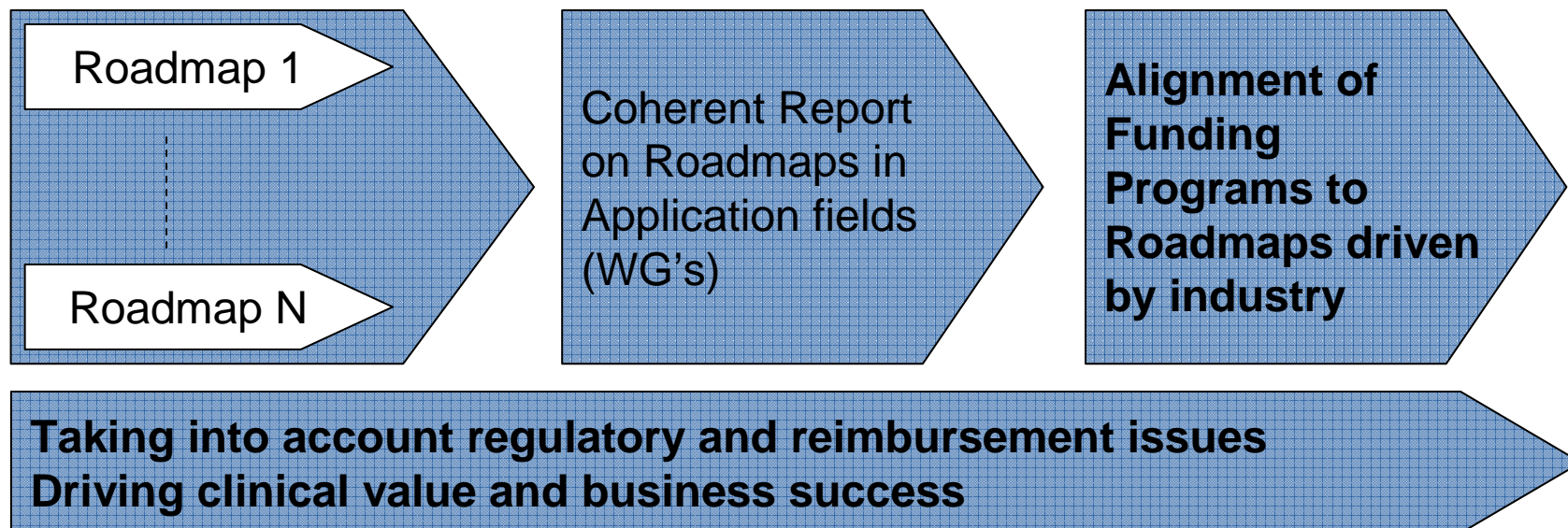
ETP membership:

- **Focus on companies**
 - Which are committed to achieve a leadership in Nanomedicine
 - Which are willing to bring nanotechnology to patients and market
- **Academia and healthcare providers are essential partners for the development of Nanomedicine**
 - Projects focused on translational research
 - Focusing on diseases with significant economic impact
- **The ETP is not another trade association,** but an organisation that highlights/ facilitates issues for existing organisations



Roadmapping of priorities, challenges and roadblocks

- Identifying Application- and Product-driven research roadmaps in Nanomedicine
- Integrating them into a coherent concept and long term strategy
- **Finally defining the upcoming FP7/8 work programmes** and call topics

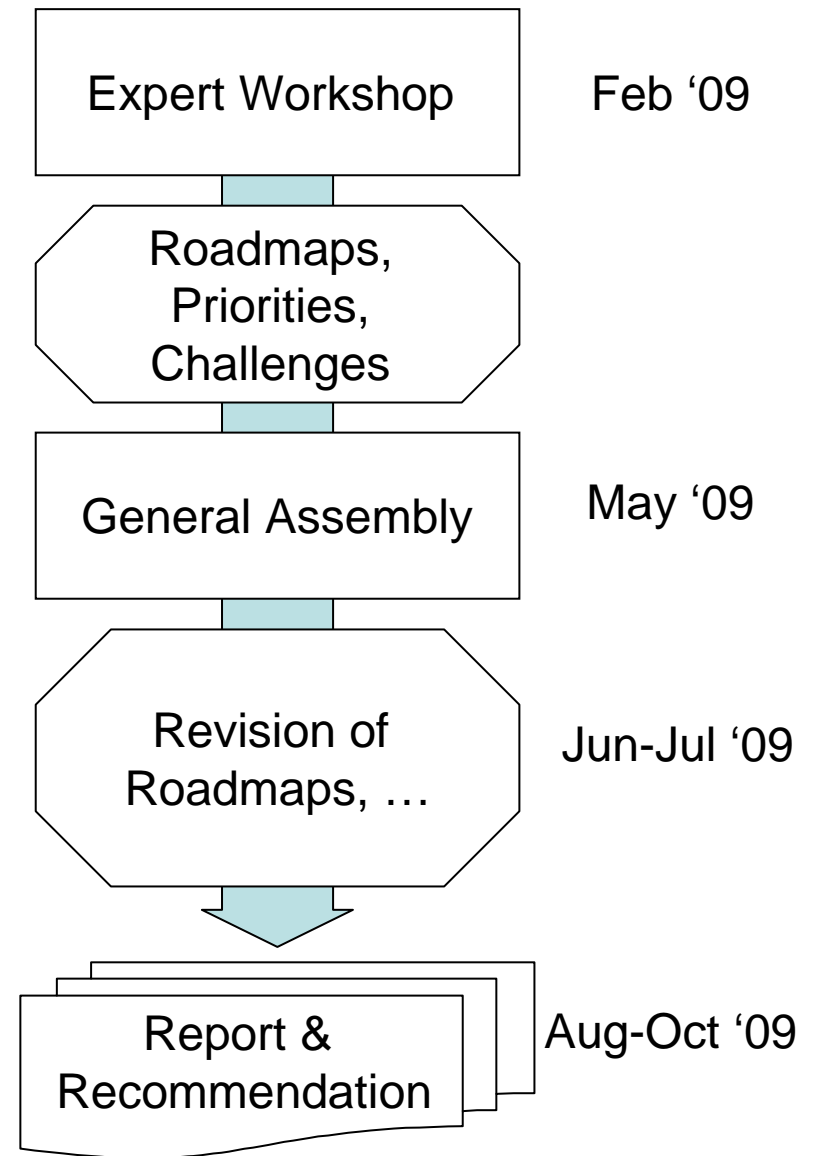


ETP Roadmapping Process

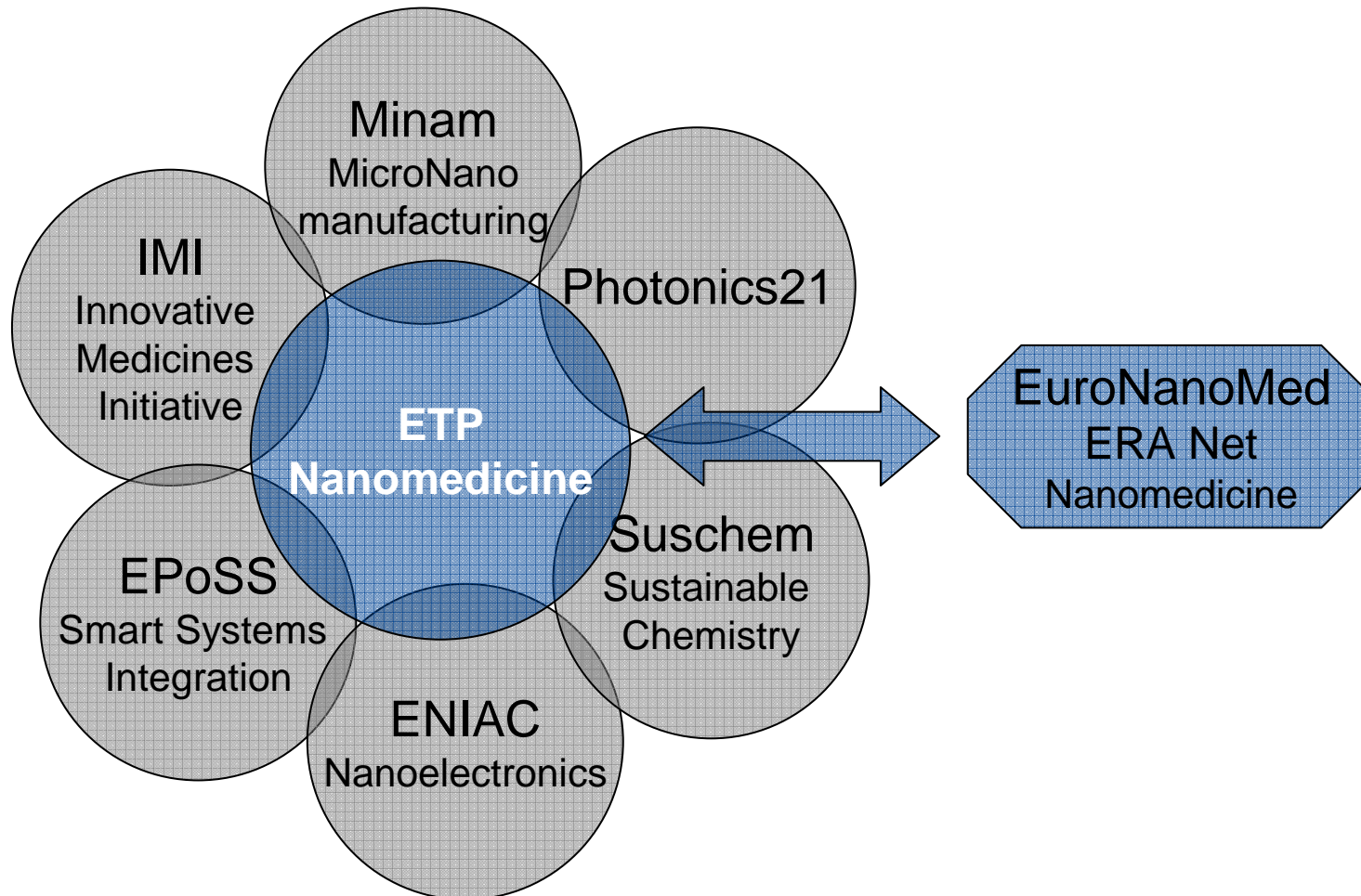
- **Expert Workshop (Feb. 2009)**
- **Roadmapping of priorities, challenges and roadblocks in the area of Nanomedicine (→ SRA)**
- **Defining long-term challenges for 2010-13 calls and FP8**
- **General Assembly (11-12 May 2009)**
- **Report on Priorities & Challenges in Nanomedicine (Oct '09)**

To become involved visit:

www.etp-nanomedicine.eu



Medicine/Health related landscape around the ETP Nanomedicine



Outreach of the ETP Nanomedicine

- Information and influence of selected **target groups**
 - NMP, HEALTH and ICT programme committees
 - Other European Technology Platforms (e.g. IMI)
 - National authorities, programme agencies...
 - Industries
- Raising **awareness of the general public**
- Increasing **membership of industry and healthcare providers**



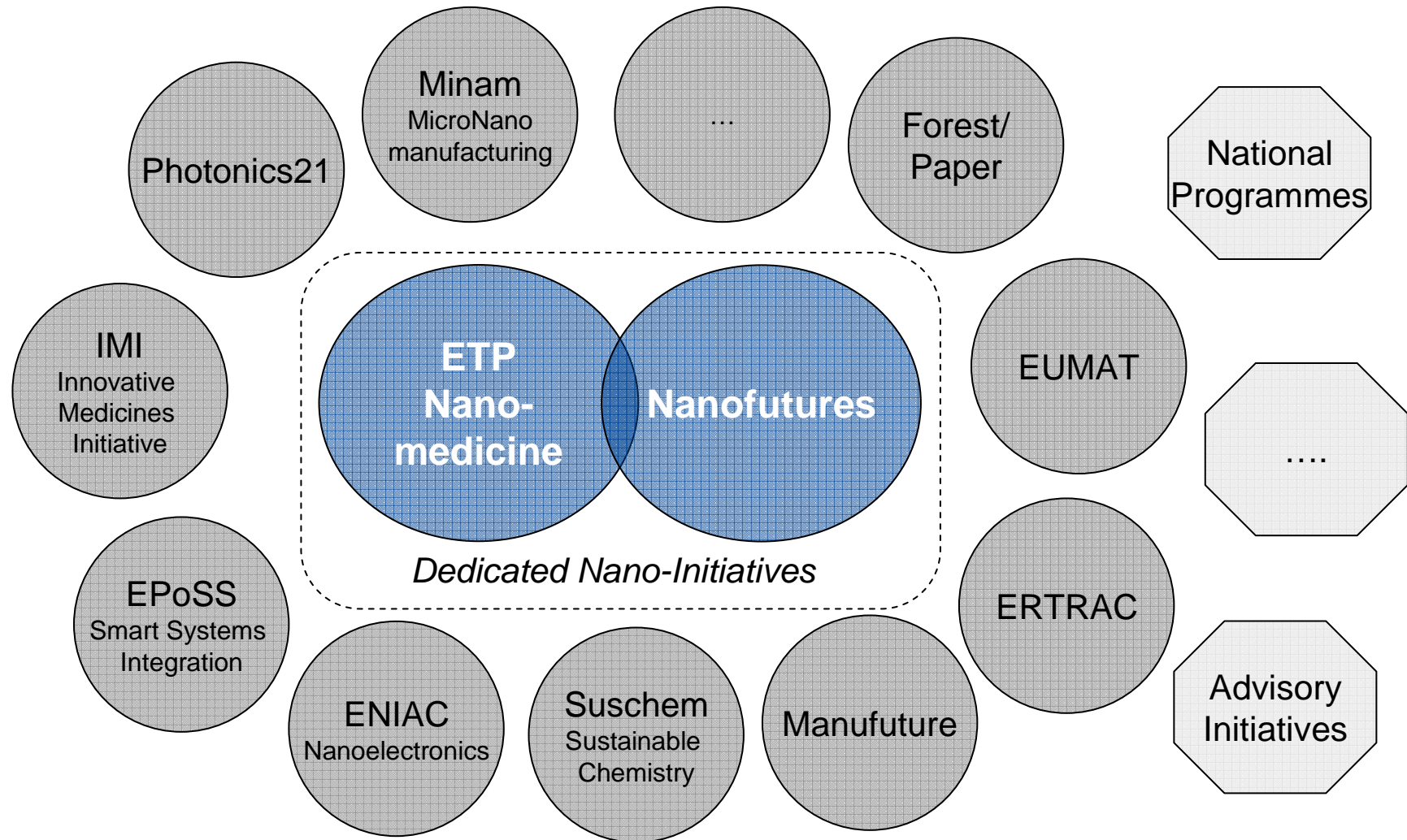
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Fits after Slide 14 to explain the interactions

nlv16627; 4.6.2009

Extended Nano-Landscape - ETPN perspective



Thank you very much!

For more information visit:
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