



# Funding for Safety Research within Industrial Technology in FP7

European Commission  
DG Research – Industrial Technology  
Søren Bøwadt

iNTeg-Risk Conference - Stuttgart, 2 June 2009

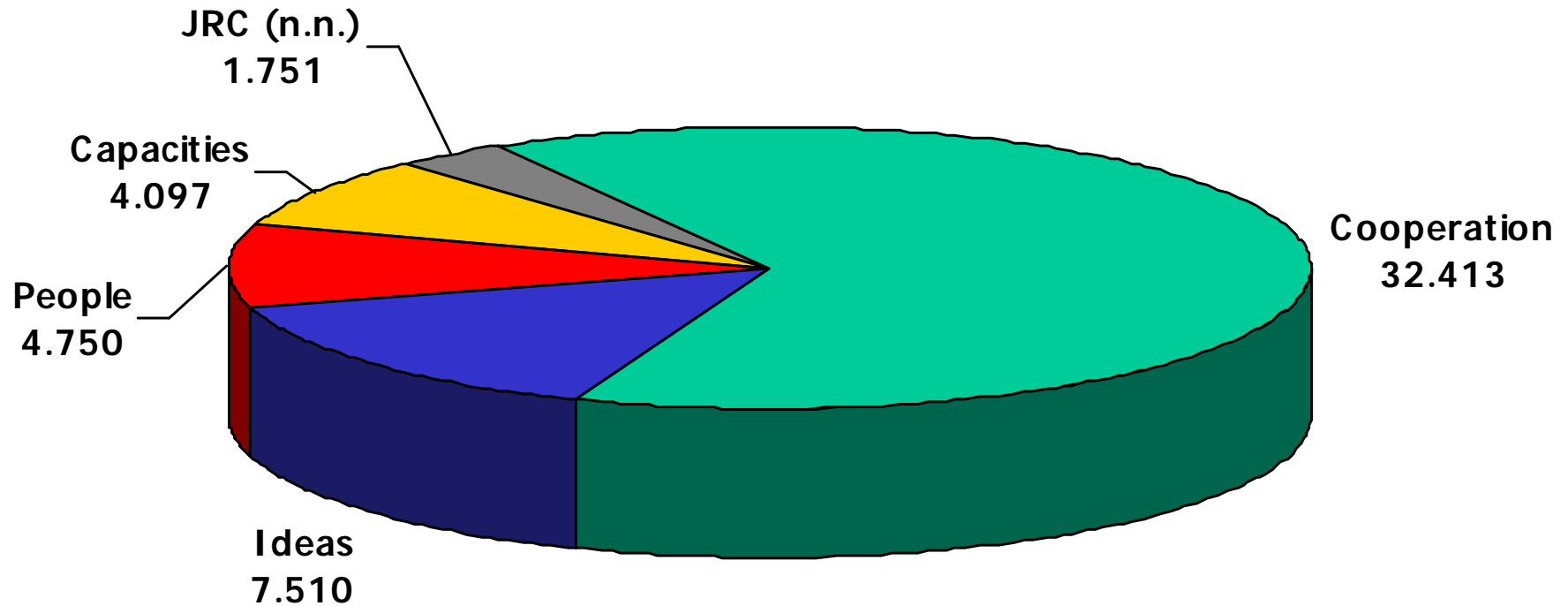




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# FP7 budget (in billion €, total 50.521)



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# FP7 – SP Cooperation

## 10 Themes

(€million)

1. Health	6 100
2. Food, agriculture and fisheries, and biotechnology	1 935
3. Information and communication technologies	9 050
4. Nanotechnologies, materials and production	3 475
5. Energy	2 350
6. Environment	1 890
7. Transport	4 160
8. Socioeconomic research	623
9. Space	1 430
10. Security	1 400
<b>Total</b>	<b>32 413</b>

\* Not including non-nuclear activities of the Joint Research Centre: €1 751 million

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# Safety & Policy

**The safety domain is outside competition concerns: strong research investments are needed, much larger than DG-RTD can provide → support flagship projects like iNTeg-Risk and bring together national and private efforts**

**Identification of new risks is a priority in a society more and more risk averse → occupational health and safety and environmental concerns gains increasing attention**

**SRA of TP for industrial safety is of key importance for future projects though the improvement of synergies between different Technology Platforms is encouraged → ensure continuity into the 7th FP**



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# Target of safety activities

**Transforming the whole industry into a "risk free" system for both workers and environment → possible interactivities with directorates such as Industry (DG ENTR), Environment (DG ENV), Health and Consumer Protection (DG SANCO) and the Health and Safety at Work (OSHA) agency**

**Risk assessment, management and reduction → risk governance through standards & regulation**

**Dissemination, knowledge transfer, education, training → increase safety culture and human reliability factors while highlighting beneficial impacts of cooperative R&D activities (success stories)**



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# Progress in Materials Sciences ...and more

- **Nano-enhanced products increasingly appear in our everyday life, even if we do not always realise it**

- 1 - Organic Light Emitting Diodes
- 2 - Photovoltaic film
- 3 - Scratch-proof self-cleaning glass
- 4 - Stain resistant fabrics
- 5 - Intelligent clothing
- 6 - Bucky-tubeframe
- 7 - Biocompatible hip-joint
- 8 - Nano-particle paint
- 9 - Thermo-chromic glass
- 10 - Magnetic data memory
- 11 - Carbon nanotube fuel cells
- 12 - Nano-engineered cochlear implant



Source: BBC



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# Theme 4: NMP

*Overall objective : To improve the competitiveness of EU industry and ensure its transformation via:*

- the effective transition from a resource-based to knowledge-based industry
- generation of new breakthrough knowledge
- strengthening EU leadership in nano, materials and production technologies
- emphasis on integrating different technologies and disciplines across many industrial sectors

*... strong continuity with FP6*

Importance of **Technology Platforms** to help establish common research priorities

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SEVENTH FRAMEWORK  
PROGRAMME



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# Theme 4: NMP

## Four activities:

1. Nanosciences and nanotechnologies
2. Materials
3. New production
4. Integration of technologies for industrial applications





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## Theme 4: NMP

**NMP Topics with possibilities for  
Safety funding in 2010 call**

**Publication date: 30 JULY**

**DRAFT!**



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# Safety in Nanotechnology

This activity will also investigate the impact of nanotechnology on society, human health and the environment, as well as look into the relevance of nanoscience and technology for the solution of societal problems as well as the societal acceptance of nanotechnology. This will include research on potential ethical, **public health, occupational safety and environmental protection implications as well as safety, monitoring and sensing, metrology, nomenclature and standards which are becoming increasingly important to pave the way for industrial applications.** Actions will be launched to implement the Commission's integrated and responsible approach as well as the measures outlined in the associated Action Plan 'Nanosciences and nanotechnologies.

Knowledge gaps in relation to the risk assessment of nanomaterials and nanotechnologies could currently constitute an impediment to the smooth implementation of regulatory requirements.

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# WP - NMP

## Activity 4.1: Nano S&T

### 4.1.2: Nanotechnologies and converging technologies

- 4.1.2-2 Substitution of materials or components utilising "green nanotechnology" - SM
- 4.1.2-3 Thermoelectric energy converters based on nanotechnology – SM

### 4.1.3: Health, Safety and Environmental Impacts

- 4.1.3-1 Reference methods for managing the risk of engineered nanoparticles - LA
- 4.1.3-2 Modelling toxicity behaviour of engineered nanoparticles – SM – (Coordinated call with the US)



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# WP - NMP

## Activity 4.2: Materials

### 4.2.3: Novel biomaterials and bioinspired materials

- 4.2.3-1 Development of standard scaffolds for the rational design of bioactive materials for tissue regeneration – LA

### 4.2.4: Advances in chemical technologies and materials processing

- 4.2.4-1 New materials and/or membranes for catalytic reactors - LA -



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# WP - NMP

## Activity 4.3: New Production

### 4.3.1: Development and validation of new industrial models and strategies

- 4.3.1-1: New industrial models for a sustainable and efficient production – SM

### 4.3.4: Rapid transfer and integration of new technologies into the design and operation of manufacturing processes

- 4.3.4-1 Manufacturing systems for 3D-shaped, multilayered products based on flexible materials - LA



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# WP - NMP

## Activity 4.4: Integration

- 4.0-1: Development of nanotechnology-based systems for detection, diagnosis and therapy for cancer – LA –**
- 4.0-2: Capacity building for the development of nanotech-based multi-parameter sensors – LA –**
- 4.0-3: High throughput technologies for the development of formulated products - LA**
- 4.0-4: A new generation of multi-functional fibre-based products produced by new and flexible manufacturing concepts – SME -**





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## Activity 4.4: Integration

- 4.0-5: Support to coordination activities of NMP related to European Technology Platforms – CSA - Coordination**
- 4.0-7: ERANET on nanotechnologies, including nanotoxicology**
- 4.0-8: ERANET on Manufacturing**
- 4.0-9: ERANET on Catalysis**



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# WP - NMP

## Public Private Partnerships

### Energy-efficient Buildings

**EeB.NMP.2010-1: New Nanotechnology based high performance insulation systems for energy efficiency.**

**EeB.NMP.2010-2: : New technologies for energy efficiency at district level**

### Factories of the Future

**FoF.NMP.2010-2 : Supply chain approaches for small series industrial production**



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# WP - NMP

## Deadlines of the Calls

### Collaborative projects

- Closure date of First Stage: 8 December 09  
10 page proposal: S&T content + expected impact  
2 pages: consortium+estimated financial resources

**PPP: FoF & EeB** 3 Nov-09 – one stage

**PPP: Green Cars** 14 Jan-10 – one stage

**CSA** 2 FEB-10 – one stage

**Coord. call with US/Mexico** 31 Dec – one stage



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# WP - NMP

## Funding Schemes - NMP

### Collaborative projects

- Small or medium scale focussed projects  
< € 4 million EC funding requested
- Large scale integrating projects  
> € 4 million EC funding requested
- SME-targeted projects: at least 35% to SMEs

### Networks of Excellence (not in this call)

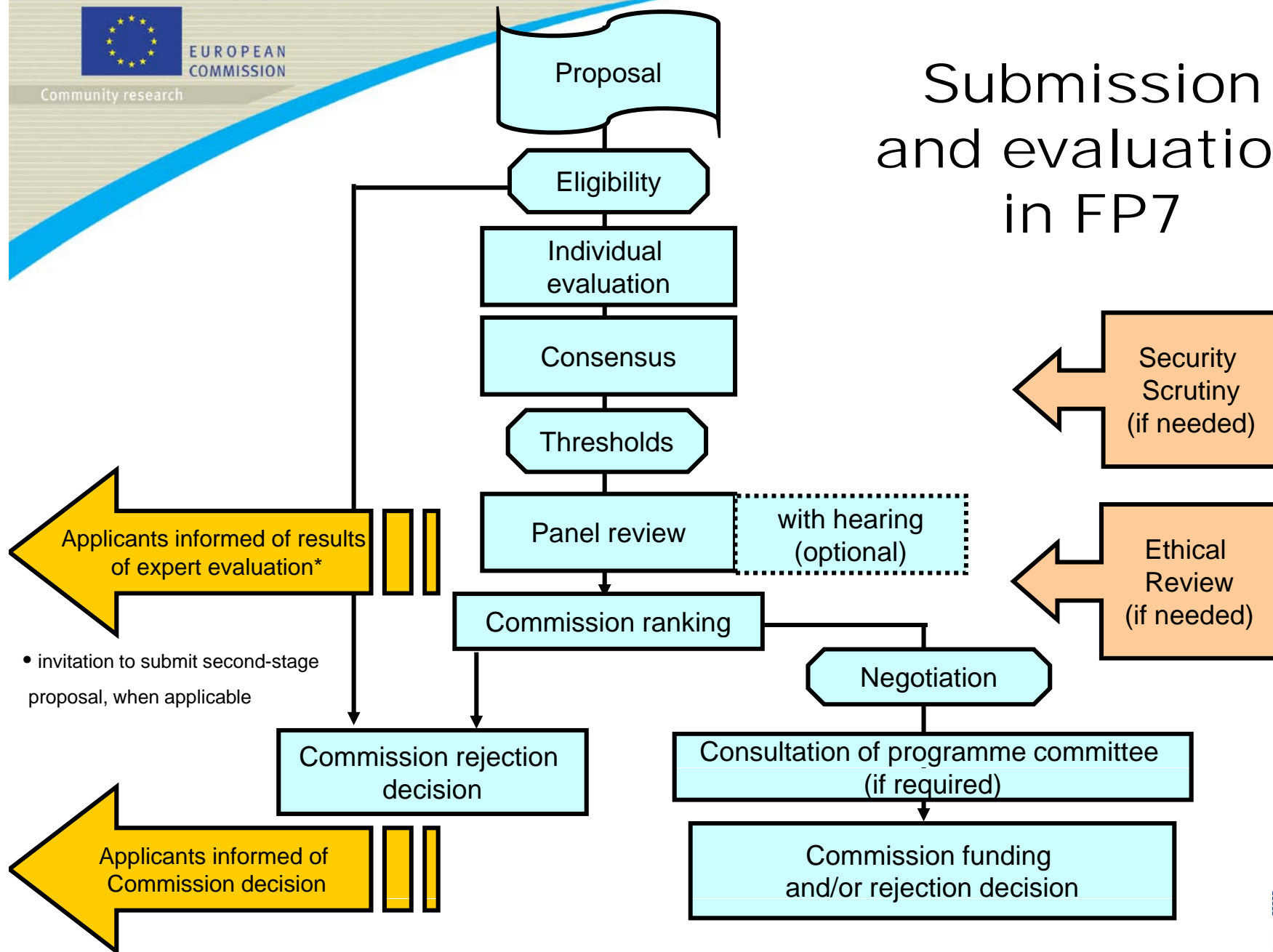
### Coordination and Support actions



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# Submission and evaluation in FP7



\* invitation to submit second-stage proposal, when applicable



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## Evaluation criteria and thresholds

<b>S&amp;T quality</b>	<b>4/5 (3/5, PPP)</b>
<b>Implementation</b>	<b>3/5</b>
<b>Impact</b>	<b>3/5</b>
<b>Overall</b>	<b>12/15 (10/15, PPP)</b>

- Implementation is not considered in stage 1 and the overall threshold is 8
- For LA, in stage 2 the threshold for Impact is 4





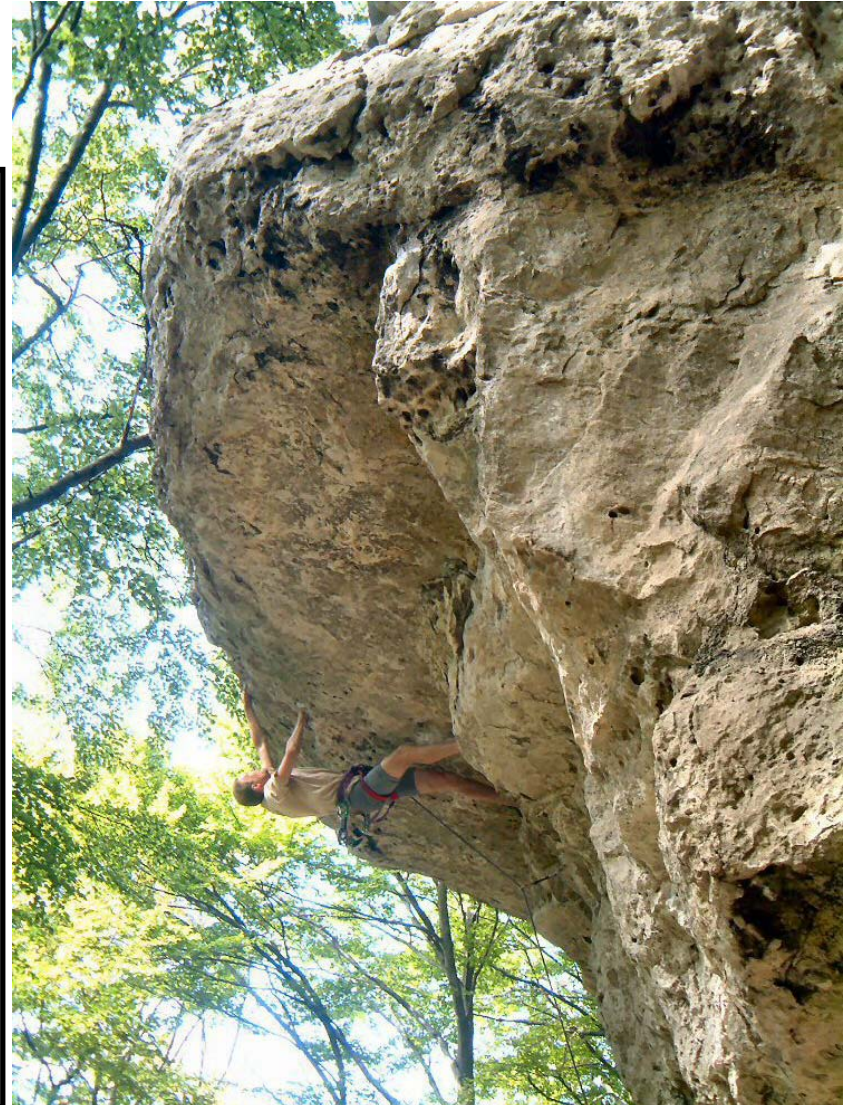
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## *More info:*

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**About the 7th Framework Programme see:**

**<http://cordis.europa.eu.int/fp7/>**

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