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# *Primeras Convocatorias del Tema 4 (NMP) del VII PM*

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**Madrid, 12 de enero de 2007**



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# FP7 Decisions

- 30 NOV 06 - Second reading in the EP (FP)  
First reading of Rules. Opinions on SPs
- 18 DEC 06 - Adoption in Council of FP  
(EC and Euratom) and EC Rules
- 19 DEC 06 - Adoption in Council of SPs and  
Euratom Rules
- 21 DEC 06 - Work Programmes (5) adopted
- 22 DEC 06 - First calls (42) issued



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# FP7 (2007–2013)

***Cooperation* – Collaborative research**

***Ideas* – Frontier Research**

***People* – Human Potential**

***Capacities* – Research Capacity**



**JRC (non-nuclear)**

**JRC (nuclear)**

**Euratom**

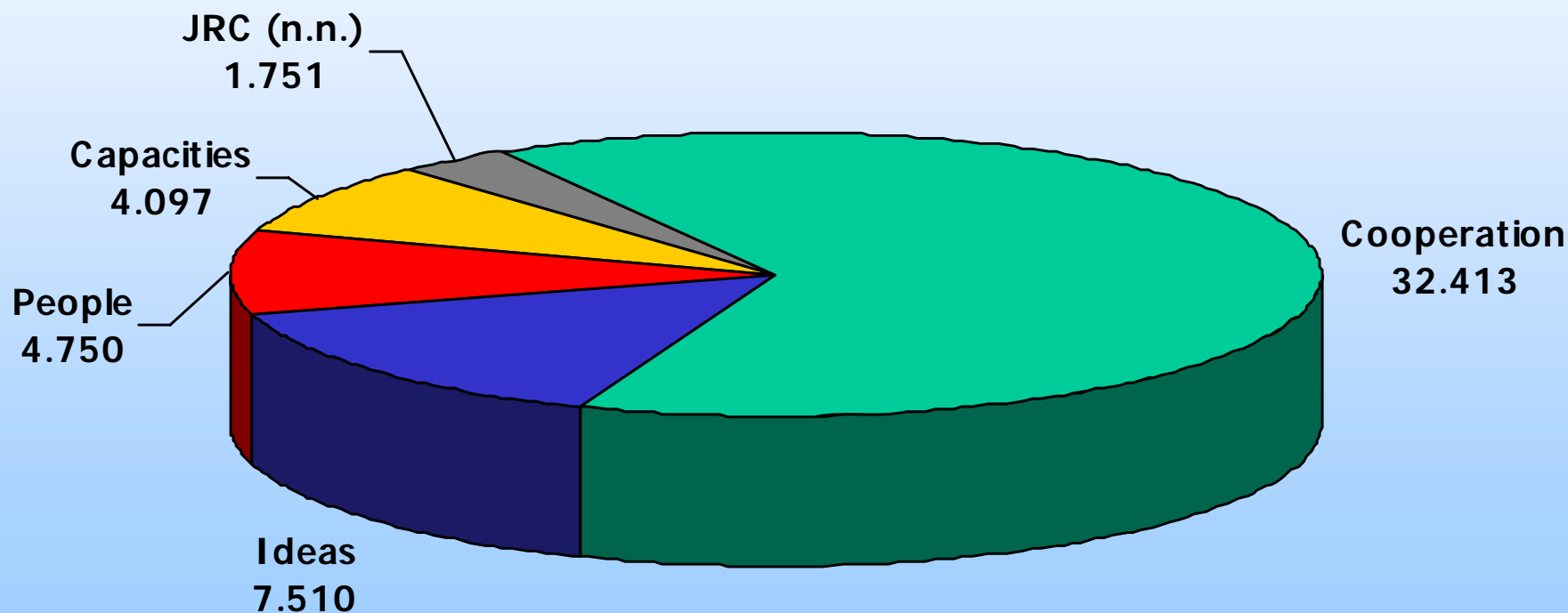


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# FP7 budget

(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



## ***Cooperation – Collaborative research***

- Flexibility for ***Emerging needs*** and ***Unforeseen policy needs***
- Support for Dissemination of knowledge and Transfer of results
- Support will be implemented across all themes through:

### **Collaborative research**

(Collaborative projects; Networks of Excellence; Coordination/support actions)

### **Joint Technology Initiatives**

### **Coordination of non-Community research programmes**

(ERA-NET; ERA-NET+; Article 169)

### **International Cooperation**



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# Simplification of procedures

- Light submission procedure (e.g. two-stage)
- Reducing a priori controls
- Increasing autonomy of consortia
- Streamlining the selection process (e.g. Time to contract, involvement of committees).
- Exploring new modes of funding
- Simplifying the cost-based funding system



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# New Terminology

- "Contract" becomes "Grant Agreement"
- "Contractor" becomes "Beneficiary"
- "Instruments" become "Funding Schemes"
- "Audit certificate" becomes "Certificate on Financial Statement"





# Funding Schemes

## 1. Collaborative projects

- consortia with participants from different countries
- new knowledge, technology, products or common resources for research
- size, scope and internal organisation of projects can vary

## 2. Networks of Excellence

- joint programmes by organisations integrating activities in a given field
- longer term co-operation
- formal commitment to integrate resources



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# Funding Schemes

## 3. Coordination and support actions

- networking, exchanges, trans-national access to research infrastructures, studies, conferences, etc.

## 4. Support to frontier research

## 5. Training and career development of researchers

## 6. Research for the benefit of specific groups (in particular SMEs)

Generally based on calls for proposals



# Maximum Funding Rates

1. Research and technological activities:  
up to 50% of eligible costs, except for:
  - **Public bodies: up to 75%**
  - **Secondary and higher education establishments: up to 75%**
  - **Research organisations (non-profit): up to 75%**
  - **SMEs: up to 75%**
- Demonstration activities: up to 50%
- Other activities: up to 100%, e.g. Management
- Coordination and support actions: up to 100%



# Indirect Costs

- For all:
  - either actual overhead or simplified method
  - flat rate of **20%** of direct costs minus subcontracting and 3rd parties not used on the premises of the beneficiary.
- For Non profit Public Bodies, Secondary and Higher Education establishments, Research Organisations and SMEs unable to identify real indirect costs, may apply for a flat rate of **60%** for **funding schemes with RTD**.
- For CSA limit of **7%** of direct costs



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# **No financial collective responsibility, unlike FP6**

- Instead: establishment of a participant guarantee fund to cover risks
- However, there is “technical responsibility” to carry out the project jointly and severally vis-à-vis the Commission



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# Redress

- An obligation on the Commission
  - Details of operation still to be determined
- Aim is to address complaints in a systematic manner
- Triggered by “initial information letter”
- All complaints considered by an internal review committee
- Looks at procedure and factual questions
  - Not an internal evaluation of the proposal
  - Not calling into question the scientific assessment of the experts
- Committee would recommend a course of action, possibly (but exceptionally) including a re-evaluation by experts



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# Similarities of GA with FP6 contract

- Structure:
  - Core part: GA parameters,
  - Annex I: DoW,
  - Annex II: General Conditions,
  - Annex III: Specific provisions for funding schemes
  - Annex IV, V & VI: Form A,B & C
  - **Annex VII: Form D** terms of reference for the certificate of costs and **Form E** certificate on the methodology (**NEW**)
- Consortium Agreement mandatory (except if excluded by Call)



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# Amendments

- Coordinator requests amendments on behalf of the consortium
- Coordinator can accept an amendment proposed by the Commission (NEW)
- For addition/withdrawal tacit approval after 45 days





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# Theme 4: NMP

*Overall objective : To improve the competitiveness of EU industry (including SMEs) and ensure its transformation through:*

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

*... strong continuity with FP 6*

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





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# WP – NMP

## main features

- NMP addresses all industrial sectors
- Stimulates strong participation of SMEs
- Promotes a multi-disciplinary approach
- Favours cooperation across the supply chain
- Two stage proposal submission (except CSA)
- Budget allocation by call (not by Activity/Area)
- Yearly updated workprogramme



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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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# WP - NMP

## Activity 4.1: Nano S&T

**4.1.1: Nanosciences and converging sciences**

**4.1.2: Nanotechnologies and converging technologies**

**4.1.3: Health, Safety and Environmental Impacts**



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# WP - NMP

## Activity 4.1: Nano S&T

### 4.1.1: Nanosciences and converging sciences

- Nano-scale mechanisms of bio/non-bio interactions - SSFRP
- Self-assembling and self organisation – SSFRP
- Support to ICPC researchers and creation of an electronic archive of publications - CSA
- Development of methodology, collection and elaboration of data and studies...and establishment of an observatory - CSA
- ERANET-PLUS in Nanosciences



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# WP – NMP

## Activity 4.1: Nano S&T

### 4.1.2: Nanotechnologies & converging technologies

- Pilot lines to study, develop and up-scale nanotech-based processes from laboratory - LSIP
- Equipment and methods for nanotechnology - LSIP
- Analysis of the ethical, regulatory, social and economic environment of nanomedicine - CSA
- Coordination in nanometrology - CSA
- Examining capacity building in nanobiotechnology - CSA



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# WP - NMP

## Activity 4.1: Nano S&T

### 4.1.3: Health, Safety and Environment Impacts

- Specific, easy-to-use portable devices for measurement and analysis - LSIP
- Risk assessment of engineered nano-particles on health and the environment – SSFRP
- Scientific review of...the potential impact of engineered nanoparticles – CSA
- Database on impact of nanoparticles – CSA
- Coordination in studying H,S&E impact - CSA



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# WP - NMP

## Activity 4.2: Materials

- 4.2.1: Mastering nano-scale complexity in materials**
- 4.2.2: Knowledge-based smart materials with tailored properties**
- 4.2.3: Novel biomaterials and bioinspired materials**
- 4.2.4: Advances in chemical technologies and materials processing**
- 4.2.5: Using engineering to develop high performance materials**





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# WP - NMP

## Activity 4.2: Materials

### 4.2.1: Mastering nano-scale complexity in materials

- Nanostructured polymer-matrix composites - LSIP
- Nanostructured coatings and thin films - SSFRP
- Characterisation of nanostructured materials - CSA



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# WP - NMP

## Activity 4.2: Materials

### 4.2.2: Knowledge-based smart materials with tailored properties

- Organic materials for electronics and photonics - LSIP
- Nanostructured materials with tailored magnetic properties - SSFRP
- Advanced material architectures for energy conversion - SSFRP



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## Activity 4.2: Materials

### 4.2.3: Novel biomaterials and bioinspired materials

- Highly porous bioactive scaffolds controlling angiogenesis for tissue engineering - LSIP



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## Activity 4.2: Materials

### 4.2.4 Advances in chemical technologies and materials processing

- Flexible efficient processing for polymers-SME-TP
- Nanostructured catalysts with tailor-made functional surfaces - SSFRP
- Renewable materials for functional packaging applications - SSFRP



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## Activity 4.2: Materials

### 4.2.5 Using engineering to develop high performance knowledge-based materials

- Novel materials tailored for extreme environments - LSIP
- Modelling of microstructural evolution under work conditions and in materials processing - SSFRP



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## Activity 4.3: New Production

- 4.3.1: Development and validation of new industrial models and strategies**
- 4.3.2: Adaptive production systems**
- 4.3.3: Networked production**
- 4.3.4: Rapid transfer and integration of new technologies into the design and operation of manufacturing processes**
- 4.3.5: Exploitation of the convergence of technologies**



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## Activity 4.3: New Production

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

- Beyond Lean Manufacturing – New industrial models for products and process life cycle - LSIP
- New added-value user-centered products and product services – SME-TP
- Integrated risk management in industrial systems - LSIP



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## Activity 4.3: New Production

### 4.3.2 Adaptive production systems

- Rapidly configurable machines and production systems - SSFRP
- Process intensification in chemicals production - SSFRP





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## Activity 4.3: New Production

### 4.3.3 Networked production

- Innovative custom-driven product-service design in a global environment - SSFRP



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## Activity 4.3: New Production

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

- Rapid manufacturing concepts for small series industrial production – SMEs-TP
- Innovative pathways in Synthesis – improving efficiency by smart synthesis, design and reduction of the number of reaction steps - SSFRP



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## Activity 4.3: New Production

### 4.3.5: Exploitation of the convergence of technologies

- Processes and equipment for high quality industrial production of 3D nano-surfaces – LSIP
- Production technologies and equipment for micro-manufacturing - LSIP



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## Activity 4.4: Integration

- Advanced wood-based composites and their production - LSIP
- Application of new materials including bio-based fibres in high-added value textile products – SME-TP
- Multifunctional materials for the future vehicles – LSIP
- Development of nanotechnology-based systems for in-vivo diagnosis and therapy – LSIP
- Resource efficient and clean buildings – LSIP
- Innovative added-value construction product-services – SME-TP
- ERA-NET on Construction



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## 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 the first calls)**

### **Coordination and Support actions**



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## Deadlines of the Calls

### **Collaborative projects**

- Closure date of First Stage: 4 MAY 07  
10 page proposal: S&T content + expected impact  
2 pages: consortium+estimated financial resources
- Indicative closure for Second Stage  
SSFRP on 13 SEP 07  
LSIP, SME-TP on 4 OCT 07

### **Coordination and Support actions**

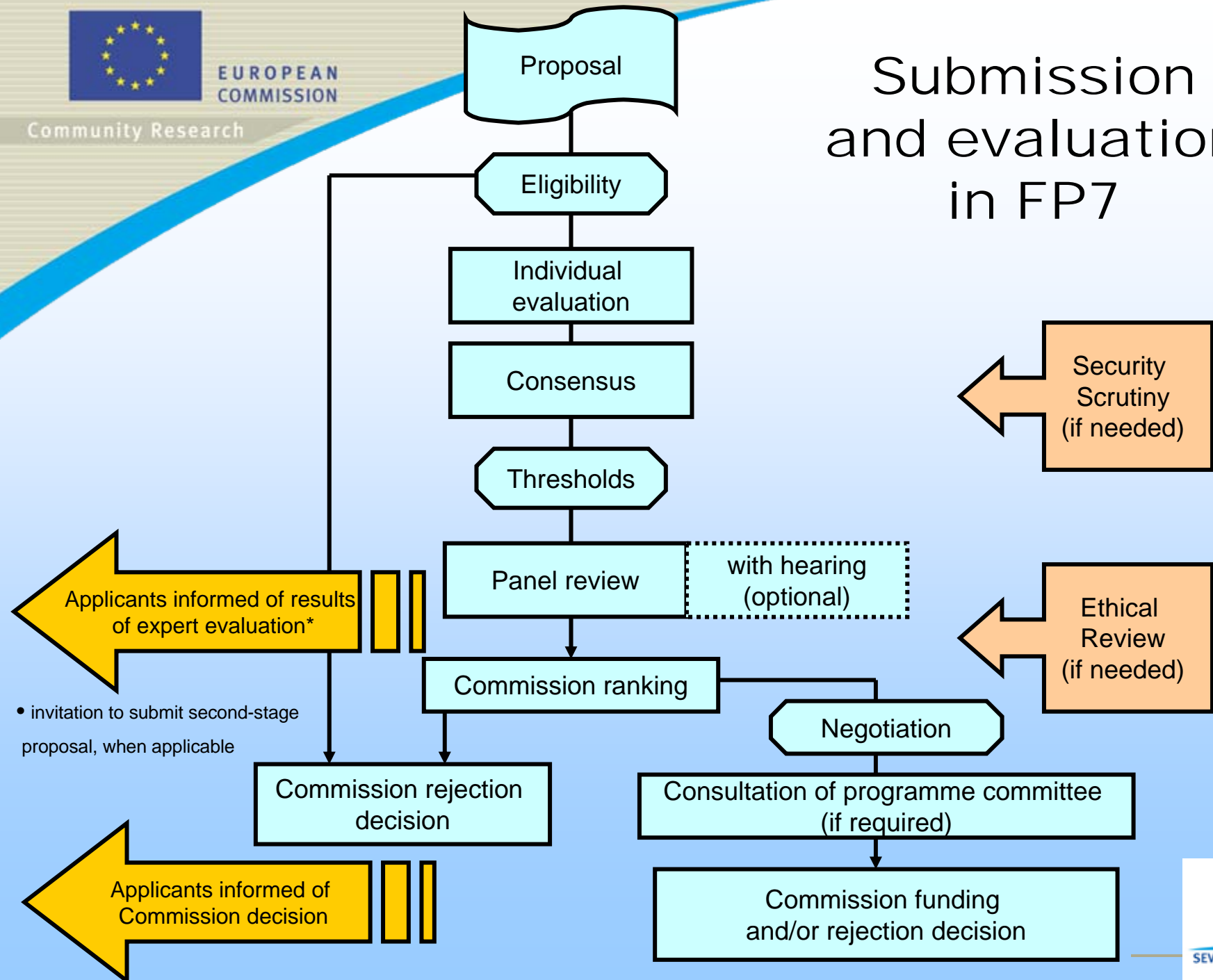
- Closure date: 5 JUN 07 – Single stage



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# Submission and evaluation in FP7





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## Proposal submission

- **Using the Electronic Proposal Submission Service (EPSS)**
- **Proposals arriving by any other means are regarded as 'not submitted'**
- **Advice: Submit first a draft version one week before the deadline**





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## Evaluation criteria and thresholds

<b>S&amp;T quality</b>	<b>4/5</b>
<b>Implementation</b>	<b>3/5</b>
<b>Impact</b>	<b>3/5</b>
<b>Overall</b>	<b>12/15</b>

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



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# FP7 Information

- **EU research:**

<http://europa.eu.int/comm/research>

- **Research programmes and projects:**

<http://cordis.europa.eu/en/home.htm>