Building a Europe of Knowledge Towards the Seventh Framework Programme 2007-2013

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2. Tips for FP7 (Give them what they want)
3. Introduction to CORDIS (on line)

1

The 7th framework programme

Architecture, specific programmes & budget

SEVENTH FRAMEWORK PROGRAMME

Building a Europe of Knowledge Towards the Seventh Framework Programme 2007-2013

Content :

1. Rationale
2. FP7
   - Overview
   - Architecture
   - Specific programmes
   - Budget
   - Funding schemes
   - Proposal evaluation
3. Keep watching

FP7 Legislative Process

Framework Programme

Specific Programmes

Work-programmes

Rules for participation

Model contracts

Overview of FP7

Action plan « Knowledge society »

Structural Funds
Including regional competitiveness

FP7
2007-2013

CIP
Competitivity and innovation

Education
Programme

Cooperation
1. Health
2. Food, agriculture and biotechnology
3. Information and communication technologies
4. Nanosciences, nanotechnologies, materials and new production technologies
5. Energy
6. Environment (including climate change)
7. Transport (including aeronautics)
8. Socio-economic sciences and the humanities
9. Security
10. Space

Ideas
Frontier research

ERC (Agency)

People
Marie Curie Actions

Executive Agency

Capacities
Research infrastructures

Research potential

Regions of Knowledge

SME

Science in Society

INCO

Coordination (policies)

From FP5 to FP7

4 years
13 700 M€

- Mobility & infrastructures
- Project Consortium
- Accompagnying measures Innovation, INCO

~+ 9,8% per year

4 years
17 500 M€

- **Integrating**
  Network of excellence
  Integrated project
  ERA-NET
- **Structuring**
  Infrastructures, Mobilité
  Innovation, INCO
- Strenghthening ERA

~+ 40 % per year

7 years
50 182 M€

- **COOPERATION**
  Recherche collaborative
  Project: consortium
  Network of excellence
  Joint technologies initiatives
  ERA-NET Plus
- **IDEAS**
  European Research Council
- **PEOPLE**
  Marie Curie Actions
- **CAPACITI8ES**
  Infrastructures, SMEs
  International Cooperation

NB : **without EURATOM**

What's new?

Main new elements compared to FP6:

- New structure: **Cooperation, Ideas, People, Capacities**
- Duration increased from five to **seven years**
- Annual budget increased (~€5 billion ⇒ ~€7 billion)
- Basic research (~ €1 billion per year?)
- Flexible funding schemes
- From Technology Platforms to Joint Technology Initiatives
- Simpler procedures
- Logistical and administrative tasks ⇒ external structures

Cooperation **– Collaborative research**

10 thematic priorities

1. Health
2. Food, agriculture and Biotechnology
3. Information and Communication Technologies
4. Nanosciences, Nanotechnologies, Materials and new Production Technologies
5. Energy
6. Environment (including climate change)
7. Transport (including aeronautics)
8. Socio-Economic Sciences and the Humanities
9. Security
10. Space

1. Health

Objective:

*Improving the health of European citizens and increasing the **competitiveness of European health-related industries and businesses**, while addressing global health issues including emerging epidemics. Emphasis will be put on **translational research** (translation of basic discoveries in clinical applications), the development and validation of new therapies, methods for health promotion and prevention, diagnostic tools and technologies, as well as sustainable and efficient healthcare systems.*

2. Food, Agriculture and Biotechnology

Objective:

*Building a European Knowledge Based Bio-Economy by **bringing together science, industry and other stakeholders**, to exploit new and emerging research opportunities that **address social and economic challenges**: the growing demand for safer, healthier and higher quality food and for sustainable use and production of renewable bioresources; the increasing risk of epizootic and zoonotic diseases and food related disorders; threats to the sustainability and security of agricultural and fisheries production resulting in particular from climate change; and the increasing demand for **high quality food**, taking into account animal welfare and rural contexts.*

3. Information and Communication Technologies

Objective:

To enable Europe to master and shape the future developments of Information and Communication Technologies (ICT) so that the demands of its society and economy are met. Activities will strengthen ***Europe's scientific and technology base in ICT****, help drive and stimulate innovation through ICT use and ensure that ICT progress is rapidly transformed into* ***benefits for Europe's citizens, businesses, industry and governments****.*

4. Nanosciences, Nanotechnologies, Materials and new Production Technologies

Objective:

*Improve the **competitiveness of European industry** and ensure its transformation **from a resource-intensive to a knowledge-intensive industry**, by generating breakthrough knowledge for new applications at the crossroads between different technologies and disciplines.*

5. Energy

Objective:

Transforming the current fossil-fuel based energy system into a more sustainable one based on a diverse portfolio of energy sources and carriers combined with enhanced energy efficiency, to address the pressing challenges of security of supply and climate change, whilst ***increasing the competitiveness of Europe's energy industries****.*

6. Environment and climate change

Objective:

Sustainable management of the environment and its resources through advancing our knowledge on the interactions between the biosphere, ecosystems and human activities, and developing new technologies, tools and services, in order to address in an integrated way global environmental issues . Emphasis will be put on ***prediction of climate, ecological, earth and ocean systems changes****; on* ***tools and technologies for monitoring, prevention and mitigation of environmental pressures and risks*** *including on health, as well as for the conservation of the natural and man-made environment.*

7. Transport

Objective:

Based on technological advances, develop integrated, ***"greener" and "smarter"*** *pan-European transport systems for* ***the benefit of the citizen and society, respecting the environment and natural resources****; and securing and further developing* ***the leading role attained by the European industries in the global market.***

8. Socio-Economic Sciences and the Humanities

Objective:

Generating an in-depth, shared understanding of complex and interrelated socioeconomic challenges ***Europe is confronted with, such as growth, employment and competitiveness, social cohesion and sustainability, quality of life and global interdependence****, in particular with the view of providing an improved knowledge base for policies in the fields concerned.*

9. Space and Security research

Objective:

To develop the technologies and knowledge for building capabilities needed ***to ensure the security of citizens from threats such as terrorism, and crime, while respecting fundamental human rights****; to ensure optimal and concerted use of available technologies to the benefit of European security, and to stimulate the co-operation of providers and users for security solutions.* ***Supporting a European Space Programme*** *focusing on applications such as GMES with benefits for citizens and for* ***the competitiveness of the European space industry****. This will contribute to the development of a European Space Policy, complementing efforts by Member States and by other key players, including the European Space Agency.*

Ideas **– Frontier Research**

Objective:

*This programme will enhance the dynamism, creativity and excellence of European research at the frontier of knowledge. This will be done by supporting "**investigator driven**" research projects carried out across all fields by **individual teams in competition** at the European level. Projects will be funded on the basis of proposals presented by researchers on subjects of their choice and evaluated on the **sole criterion of excellence** as judged by **peer review**.*

People **– Human Potential**

Initial training of researchers
Marie Curie Networks

Life-long training and career development
Individual Fellowships
Co-financing of regional/national/international programmes

Industry-academia pathways and partnerships
Industry-Academia Scheme

International dimension
Outgoing International Fellowships; Incoming International Fellowships
International Cooperation Scheme; Reintegration grants

Specific actions
Excellence awards

Capacities – Research Capacity

1. Research Infrastructures
2. Research for the benefit of SMEs
3. Regions of Knowledge
4. Research Potential
5. Science in Society
6. Specific activities of International Cooperation

5. Science in Society

Objective:

*With a view to **building an effective and democratic European Knowledge society**, the aim is to stimulate the harmonious integration of scientific and technological endeavour, and associated research policies in the European social web, by encouraging at European scale reflection and debate on science and technology, and their relation with society and culture.*

5. Science in Society

- Strengthening and improvement of the European science system
- Broader engagement politicial and societal issues (inc. ethical issues)
- Science and technology and their place in society
- Gender research and the role of women in research
- Science education – curiosity and the participation of young people
- Policy for the role and engagement of universities
- Improved communication

6. Specific activities of International Cooperation

"Horizontal" supporting measures and actions not carried out in the *Cooperation* programme

Two interdependent objectives

Support competitiveness through strategic partnerships with 3rd countries in selected fields and by engaging the best 3rd country scientists to work in and with Europe

Address specific problems that 3rd countries face or that have a global character, on the basis of mutual interest and mutual benefit

Capacities – Coherent development of policies

In addition, support to the coherent development of policies will complement the coordination activities under the Cooperation programme

Strengthening and improving the European science system

Monitoring and analysis the public policies / Industrial strategies

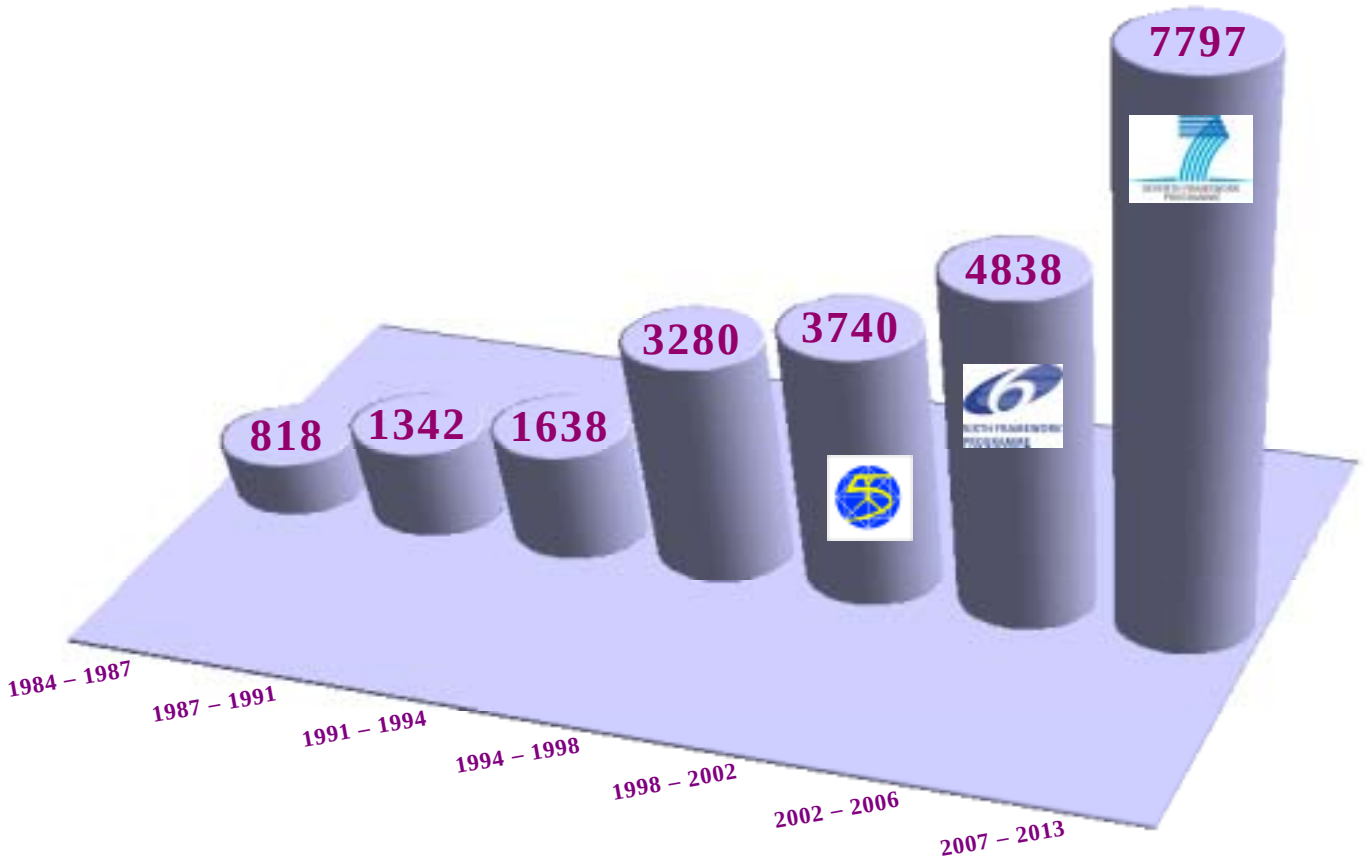
Coordination of research policies

FP7 Roadmap

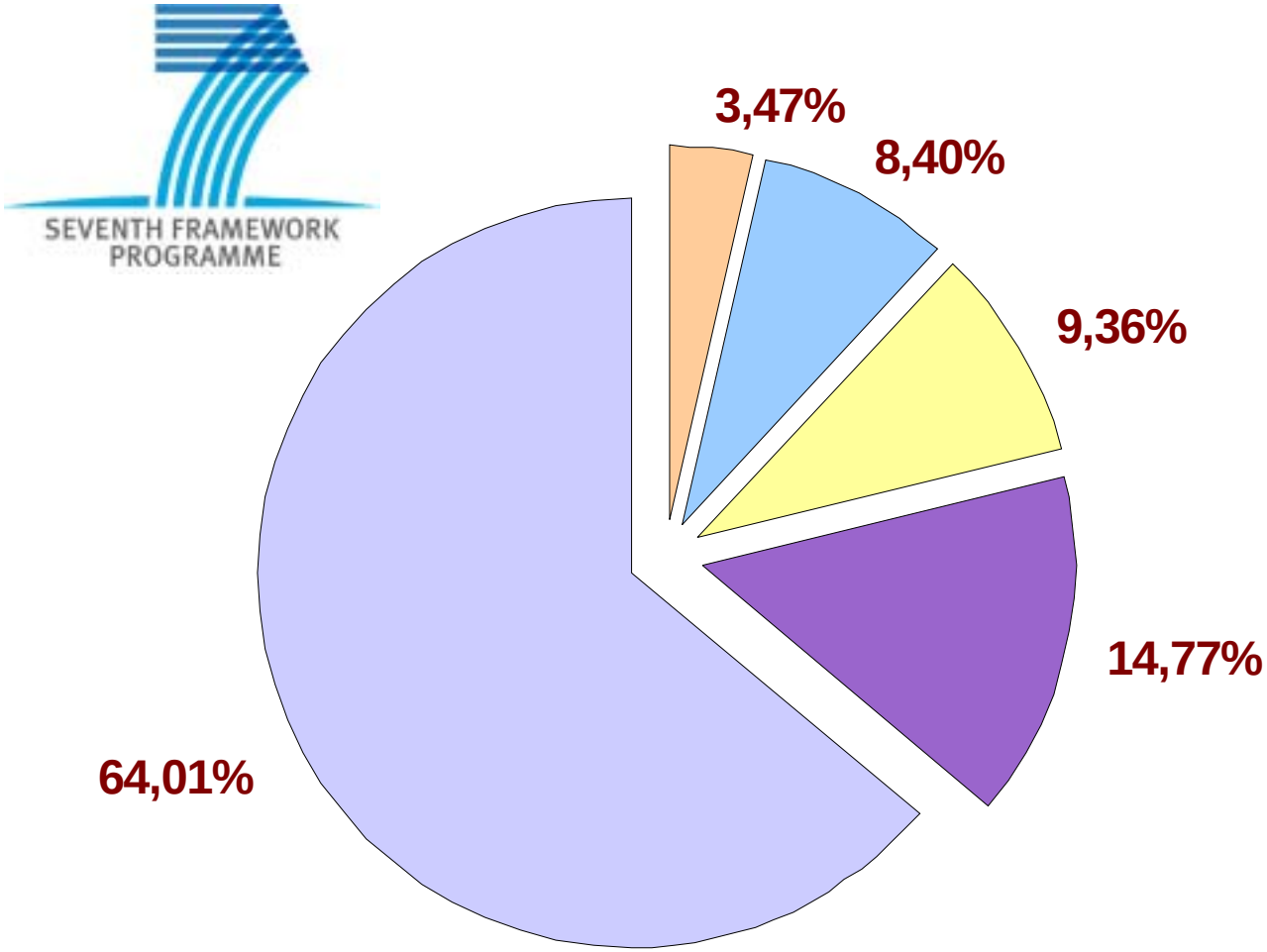
6 April 2005	FP7 Decision's proposal
21 September 2005	Specific programmes' proposal
22 December 2005	Rules for participation' proposal
May 2006	Common position at Council
June 2006?	First reading at EP
June 2006?	Adoption after first reading at EP
End 2006?	**First calls for proposals**

What about the budget?

Budget of the Framework Programmes (M€/year)



FP7 - Budget breakdown - Austrian Presidency - 27-04-2006



Cooperation	32342
Ideas	7460
People	4728
Capacities	4243
JRC – non nuclear	1751

Proposal submission & evaluation

Under discussion:

- **Proposal submission** (**100% electronic**, pre-filling of forms, one-stage/two-stage) ;
- **Expert evaluators** (required expertise, more remote evaluation, …) ;
- **Evaluation criteria** (presentation, relevance, management, …)
- **The evaluation process** (remote evaluation, briefing, hearings, feedback to proposers) ;
- **The selection process** (final ranking, budgetary and strategic considerations).

An important document …

Brussels, 6.4.2005 - SEC(2005) 430

COMMISSION STAFF WORKING PAPER

Annex to the

Proposal for the Council and European Parliament decisions
on the 7th Framework Programme (EC and Euratom)

Main Report: Overall summary
IMPACT ASSESSMENT AND EX ANTE EVALUATION
{COM(2005) 119 final}

Evaluation & selection …

Specific programme COOPERATION

EVALUATION & SELECTION	INSTRUMENTS – IPR - CONTRACT
Collaborative Research: Greater use of **two-stage evaluation** greater use of **remote evaluation** (to the extent possible). It should be better ensured that **evaluators with diversified profiles** (including regarding IPR and innovation issues) are systematically included in evaluation panels.	**Collaborative Research:** '**Networks of excellence**' and '**integrated projects**'; '**STREPs**', **coordination actions**, and **specific support actions**. Funding of networks of excellence to be reviewed. European loan guarantee scheme for large projects.
Technology Initiatives: For Article 171 initiatives the process with Parliament/Council has to be initiated and followed-through, for IPs "standard" procedures (unless particular aspects to be included in Guidelines or Rules). It should be ensured that **evaluators with diversified profiles** (including regarding IPR and innovation issues) are included in evaluation panels.	**Technology Platforms:** '**Integrated projects**'; **Article 171** (requiring a specific management structure), European loan guarantee scheme.
Coordination of national/regional programmes: Special provisions for Article 169 actions (ie Council and Parliament); for others, greater emphasis on **remote evaluation**, **no need for anonymity**, criteria for evaluation to concentrate on **impact of coordination**.	**Coordination of national/regional programmes:** Extending **ERA-NET activities** and their financial support to research activities; **Article 169**. for use in areas where Member States have firmly displayed willingness to make financial commitments, or to support 'variable-geometry' cooperation between a limited group of Member States, or by means of 'packages' of actions to be agreed upon simultaneously by Council and Parliament, or a 'framework regulation'. Direct support to European intergovernmental research organisations when Europe would benefit from their being conducted at Union level.

Evaluation & selection …

Specific programme IDEAS

EVALUATION & SELECTION	INSTRUMENTS – IPR - CONTRACT
Since these often involve teams from a single legal entity, **evaluation can be simplified** – **greater emphasis on scientific criteria**, **less on management, horizontal aspects**, **greater emphasis on dissemination potential**.	**Instruments with single partners or fewer partners**, no requirement for trans-national collaboration, simplified funding and reporting provisions.

The Scientific Council of the ERC is preparing its own rules

Evaluation & selection …

Specific programme PEOPLE

EVALUATION & SELECTION	INSTRUMENTS – IPR - CONTRACT
Greater use of **two-stage evaluation**, use of two-step in one stage for fellowships **entirely remote evaluation** – possibly including **remote panels**.	**Strengthen "Marie Curie" actions** by placing emphasis on: - **attracting young people** through support for the structuring of training, in particular **inter-disciplinary training**; the **role and place of women in science and research**; - **transfer of knowledge**, in particular for technologically least advanced regions and SMEs; - **increased training and mobility exchanges** with other parts of the world; - **life-long learning and career development**.

Evaluation & selection …

Specific programme CAPACITIES

EVALUATION & SELECTION	INSTRUMENTS – IPR - CONTRACT
Inclusion of regional/Structural funds component in evaluation criteria for construction of new infrastructure. **Co-funding aspects** will be important criterion for construction of new infrastructure.	- **Trans-national access** to infrastructures; - **research projects**; - **support for construction and operation of new infrastructures** of European interest using a mechanism like trans-European networks

About Simplification of procedures

- **Flexibility**
  - Continuity of FP6 “instruments” – Funding scheme
  - Flexibility of each programme and participants to specify instruments and activities
- **Rationalisation**
  - Consistent, high quality information
  - Less info required from participants – no CPF, legal info only first time, flexibility over reporting , electronic tools, lump-sum financing, flat-rate financing
- **Coherence in clarification of rights and obligations**
  - Good communication, uniform messages, taking into account user’s practices/autonomy

Keep watching

CECO 中欧科技促进网 www.ceco.org.cn

CORDIS Towards FP7
Your gateway to the preparation of the Seventh Framework Programme

EUROSFAIRE
Service Français d'Accès à l'Information sur la Recherche en Europe

Europa Gateway to the European Union

The Scientific Council of the European Research Council

EUROPARL

EUROPEAN RESEARCH AREA

IPR Helpdesk

4

"GIVE THEM WHAT THEY WANT!"

Know the evaluation process and criteria to prepare a winning research proposal

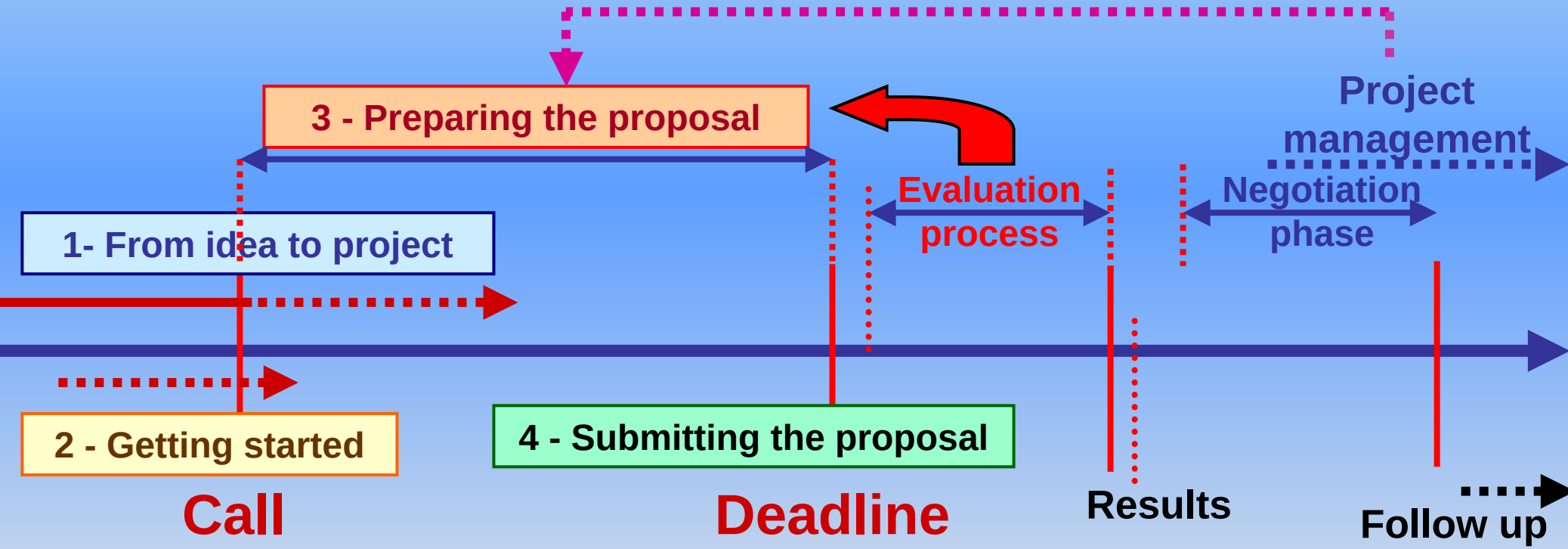
From SIXTH FRAMEWORK PROGRAMME **to** SEVENTH FRAMEWORK PROGRAMME

PROCESS DIAGRAM

The main training offers …

OBJECTIVES

PROCESS DIAGRAM



1- From idea to project

Many ideas, problems, research questions, opportunities,

IDEAS

Pre-proposal or outline proposal

Filter

Relevant, valuable, calculated risks, milestones, deliverables,

PROJECT

2 - Getting started (1)

Advance preparation

Know:

- **The funding body** (Europe): read Green papers, White papers, Action plans, all relevant policy papers on European strategies;
- **The Framework programme** and the specific programmes **:** be aware of the priorities, of the participation rules, …
- **Your subject:** relevant documents, i.e. text of the call, work programme, instruments,
- **Yourself:** what do you want to do? what are your strengths and your weaknesses. Play to your strengths!
- **The evaluation process :**

Know how your proposal will be evaluated before you write it

You must convince expert-evaluators

REMEMBER …

Your main objective is to prepare and to write a proposal to get it through the evaluation process successfully

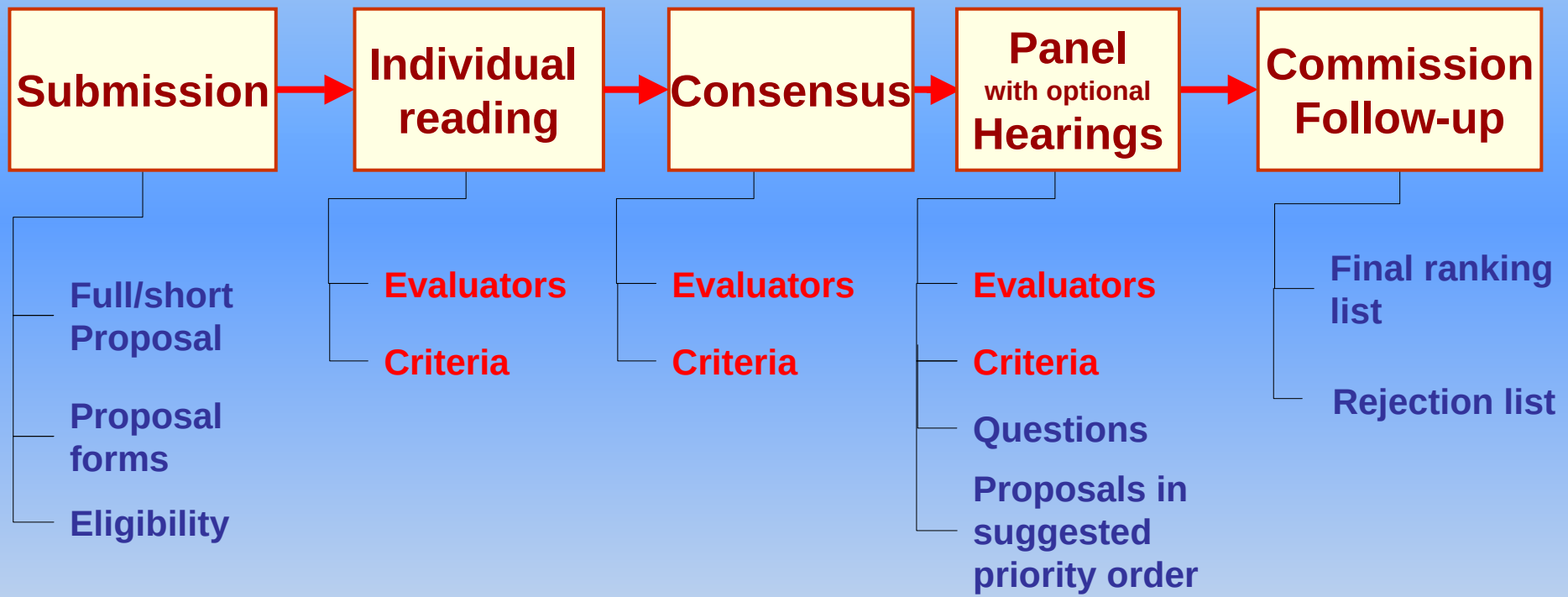
Work step by step to a winning proposal through collaboration and teamwork

2 - Getting started (2)

Know the Sixth Framework Programme from which you seek support: avoid to waste your time writing a proposal that has no chance of success.

- **Read carefully all the documents**: text of the call, work programme, participation rules, evaluation manual and **pay attention to specific goals and specific requirements!**
- **Contact NCPs,**
- **Contact a Scientific Officer,**
- **Discuss your proposal with colleagues.**

THE EVALUATION PROCESS



EVALUATION CRITERIA

- **Relevance to Call**
- **Potential Impact**
- **S&T Excellence**

All **(key for stage 1)**

- Quality of the Consortium
- Quality of the Management
- Mobilization of Resources

IP **(Integrated project)**

- The JPA & Degree of integration
- Excellence of the participants
- Organisation and management

NoE

(Network of Excellence)

The S&T quality criterion

Two aspects:

- Quality of the ideas and objectives (advance over the state of the art, objectives clearly defined)
- Methodology (the S&T approach)

The impact criterion

Two aspects:

- Potential impact (achieving the expected impacts listed in work programme, likely wider impacts)
- Dissemination, exploitation and use of results (IPR, etc, wider dissemination)

The implementation criterion

Three aspects:

- Quality of management structure and planning/decision-making procedures
- Quality of consortium (balanced, complementary skills and expertise)
- Resources devoted to project (human, financial, equipment..)

3 - Preparing the proposal

Six key points:

- Formulate (an) appropriate research objective(s);
- State your (research) objective(s) clearly in your proposal;
- Develop a realistic research plan;
- Frame your project around the work of others;
- Format, brevity, grammar and spelling are important;
- More common reasons for failure of proposals.

Formulate (an) appropriate research objective(s)

S M A R T Objectives

S Specific

M Measurable

A Achievable

R Result-oriented

T Time-related

Good objectives are:

- ✓ "**S M A R T**"
- ✓ Developed co-operatively by partners,
- ✓ Under the control of the co-ordinator, the "core team", WP leader,
- ✓ Expressed clearly in writing,
- ✓ Not too complicated …

State your (research) objective(s) clearly in your proposal

SIXTH FRAMEWORK PROGRAMME

FP6 proposal

Strategic objectives

Overall and specific objectives

Achievements

- **European policies**
- **Framework programme**
- **Call & work programme**
- **Proposal itself**
- **What will be achieved …**

⌦ **The research objective(s) of this proposal is (are) ….**

Develop a realistic research plan

A realistic research plan is a plan to accomplish your (research) objectives;

it will determine the success of the project:

- **Clear vision** of the project structure, work packages, tasks, …
- **Innovativeness** and **creativity** brought in by participants;
- **Work carried out** by each participants (no overlapping);
- **Management** approach (how the project is organised, how responsibilities are assigned, etc.);
- Template for scheduling, budgeting, **risk management**, etc.

⌦ Don't hide potential difficulties, suggest alternative approaches to achieve objectives

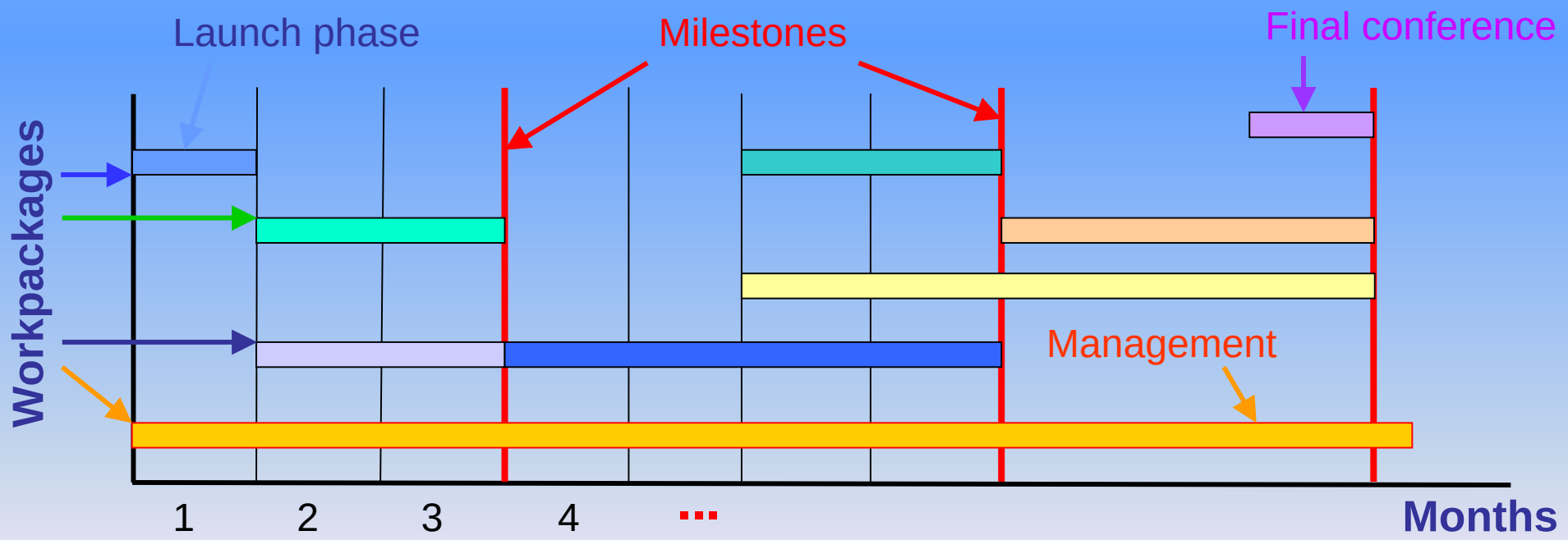
Frame your project around the work of others

- **Frame the project appropriately** (exact boundaries of the project);
- Make clear your contribution and your partners' contribution;
- Frame your project in terms of broader impact to the field and …
- **Describe the benefits for:**
  - Europe,
  - Regions,
  - Industries (a more competitive Europe),
  - Citizens.

⌦ **If successful, the benefits of this proposal will be …**

Producing a Gantt Chart

A Gantt Chart helps organize **a plan** to implement a (research) project. It documents **what** is to be accomplished, **who** will be involved and **when** workpackages and tasks will take place and how they will interrelate. It shows at a quick glance **the course of the project**. Additionally it provides guidance for managing the project. A simple example looks like:



Format, brevity, grammar and spelling are important

A proposal is not rated based on its weight

- **Write, edit and proof read like a pro:**

  Make your proposal a pleasant reading experience, providing relevant concepts and making them clear

- **Take pity on the experts-evaluators: they are human!**

  Your are writing to the experts-evaluators, not to yourself

- **Educate the experts-evaluators: use figures appropriately to make and clarify points, but not as filler,**

- **Don't be verbose, don't cover every conceivable detail, don't use the smallest acceptable fonts, etc.**

From the NIAID-NIH web site:

http://www.niaid.nih.gov/ncn/grants/write/write_e3.htm

Many writing labs are available on the web

- **Write a topic sentence for each main topic:** then write a topic sentence for each sub topic in the outline;
- **Make one point in each paragraph:** this is key to creating text that's easy to read;
- **Divide the document into sections and subsections.** This organizes your text and, together with paragraph headers, creates white space;
- **Include bullets and lists:** they draw attention to key facts and create a visual break;
- **Use short sentences with a basic structure:** subject, verb, object;
- **Include transitions:** at the beginning of a new paragraph or concept;
- **Keep related ideas and information together:** *e.g.* put clauses and phrases as close as possible;
- **Use strong, active verbs:** write "We will develop a cell line," not "A cell line will be developed";
- **Use verb forms instead of abstract nouns:** say 'creating the assay leads to...' rather than 'the creation of the assay leads to...

If writing is not your forte, get help

More common reasons for failure of proposals

- Missed deadline,
- Incomplete proposal (parts are missing),
- Does not fit objectives in call & work programme (**relevance**),
- Scientific content is not convincing: research is not innovative, not up-to-date with developments (**scientific excellence**),
- Alternative hypotheses are not considered,
- Too ambitious, problem more complex than proposers appear to realise,
- Proposal hastily put together and lacking coherence (**project management**),
- Likelihood of achieving success and value for money are not convincing.

4 - Submitting the proposal

- **Proof read your proposal before it is sent:**

Too many proposals are submitted with stupid mistakes, omissions and errors of all sorts

Don't spend months writing a proposal just to kill it with stupid mistakes that are easily prevented

- **Submit your proposal in time:**

A co-ordinator is responsible to submit the proposal in due time

Plan your work to submit one or two days before the deadline

The Commission strongly encourages the use of the on-line

Electronic Proposal Submission System (EPSS)

Conclusions (1)

It is not easy to write a good proposal:

it takes **time** and **efforts**; it can take several months …

Keep in mind what evaluators are looking for in proposals:

- **relevance**
- **scientific and technical excellence**
- **quality of project management**
- technical credibility of the proposal
- added value of carrying out the research at a European level
- strategy for exploitation and dissemination of results
- costs and budget breakdown
- competence and effectiveness of the consortium

Conclusions (2)

What makes a good proposal?

- **clear objectives** / fits programme
- **scientific excellence** / innovation
- **European dimension** / collaboration
- **high quality project management**
- balanced distribution of workload
- clear timescale and workplans
- understandable, non-technical, scientific jargon-free language
- industrial relevance
- a well defined marketable project result / product (what are benefits to EU?)

⌦ **A good proposal is convincing from the outset.** The essential facts must be readily extractable. A well written summary can often help hard-pressed evaluators to grasp the main points. Presentation is extremely important.

Conclusions (3)

For the Commission, quality of management is essential

The proposal must clearly state:

- What each member of the consortium will do;
- How they will work together effectively;
- How the various work packages relate to each other;
- That each activity has been properly resourced;
- Expected **deliverables** and **milestones** : they must be clearly identified and charts must be drawn up.

⌦ **Keep the core team small and well balanced**

Conclusions (4)

Right on target

- Convince expert-evaluators that you:
  - Understand the problem
  - Can solve the problem
  - Can do the job
  - Provide value

Conclusions (5)

This presentation was nothing more than common sense!

Why not get a thorough understanding of the process and

volunteer to be an expert-evaluator yourself !

It's easy: **http://www.cordis.lu/experts/fp6_candidature.htm**

GOOD LUCK & thanks for your attention.

Thank you for your attention

谢谢你的注意

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