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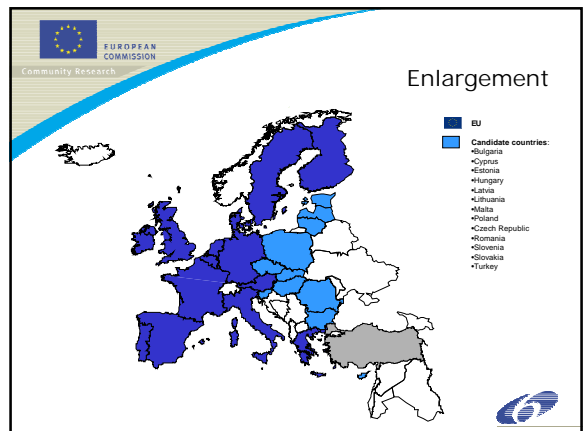
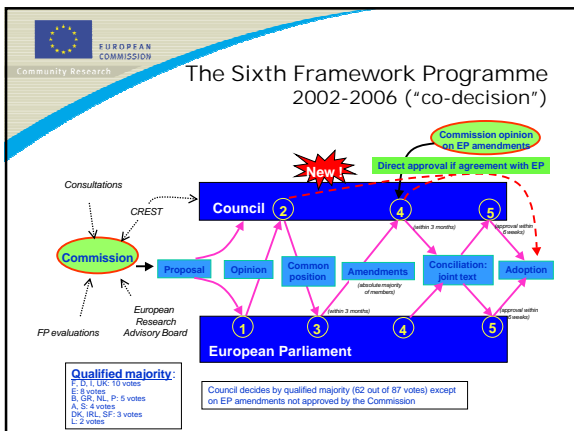
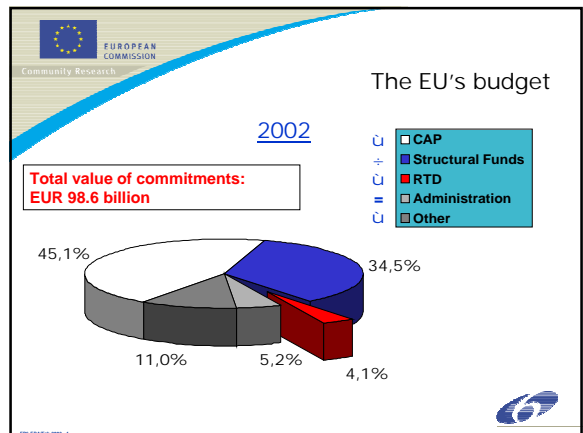
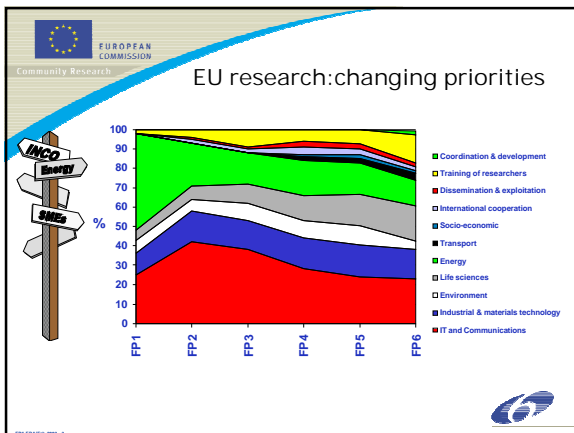
Towards the Sixth Framework Programme

European Commission
Research DG

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Community RTD the story so far

- | 1957: EURATOM treaty; Joint Research Centre set up
- | 1983: ESPRIT programme
- | 1984: First Framework Programme (1984-1987), followed by 4 successive Framework Programmes (up to 2002)
- | 1987: "European Single Act" - science becomes a Community responsibility; Second Framework Programme (1987-1991)
- | 1993: Treaty on European Union; role of RTD in the EU enlarged
- | 2001: Proposal for the Sixth Framework Programme (2002- 2006)



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The European Research Area

- A blueprint for the future of research in Europe
- Broad support at the highest political, scientific and industrial levels
- Being Implemented

European Research Area

National programmes
Framework programme
European organisations

Open Coordination → European research policy

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Sixth Framework Programme 2002-2006

- Commission proposal: 21 February 2001
- Instrumental for implementation of the European Research Area (ERA)

Some figures:

- Proposed budget: EUR 17.5 billion
- = 3.9% of the EU's budget (2001)
- = ~ 6% of the EU's public (civilian) research budget

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Sixth Framework Programme - Budget -

Rationale:

- Maintain economic weight of European investment in research / real growth of European economy
- Financial perspectives
- Increase: 17% (nominal) ; 8.8% (real)

Increase (%) compared with previous framework programme

Period	Inflation (%)	Real Increase (%)	Total Increase (%)
2002-2006	~8.8	~8.8	~17.6
1998-2002	~8.8	~0	~8.8

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Budgets of the EU Framework Programmes

Period	Budget (€ billion)
1984-1987	3.27
1987-1991	5.36
1990-1994	6.6
1994-1998	13.12
1998-2002	14.96
2002-2006	17.5

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Sixth Framework Programme - Main components -

FOCUSING and INTEGRATING
European research

STRUCTURING
the European Research Area

STRENGTHENING
the foundations of the European Research Area

BASIC PRINCIPLES

Concentration:
on selected priority research areas

Structuring effect: through a stronger link with national, regional and other European initiatives

Coordination - Simplification

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Sixth Framework Programme

Activities	Budget (€million)
1. European Community	16 270
2. Euratom	1 230
Total	17 500

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Sixth Framework Programme (EC)

Group of actions	Budget (€million)
1. Focusing and integrating Community research	13 345
2. Structuring the European Research Area	2 605
3. Strengthening the foundations of the European Research Area	320
Total	16 270





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Sixth Framework Programme


I. Focusing and integrating research	Budget (€million)
1. Life sciences, genomics and biotechnology for health	2 255
• Advanced genomics and its applications for health	1 100
• Combating major diseases	1 155
2. Information Society technologies	3 625
3. Nanotechnologies and nano-sciences, knowledge-based multifunctional materials and new production processes and devices	1 300
4. Aeronautics and space	1 075
5. Food quality and safety	685
6. Sustainable development, global change and ecosystems	2 120
• Sustainable energy systems	810
• Sustainable surface transport	610
• Global change and ecosystems	700
7. Citizens and governance in a knowledge-based society	225
8. Specific activities covering a wider field of research	1 300
Total	13 345*


*Including non-nuclear activities of the Joint Research Centre: €769 million



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- ## The 7 thematic priorities
- I **Genomics and biotechnology for health**
 - : **Advanced genomics and its application for health**
 - **Fundamental knowledge and basic tools for functional genomics in all organisms:** gene expression and proteomics, structural genomics, bioinformatics, etc.
 - **Application of knowledge and technologies in genomics and biotechnology for health:** technological platforms, prevention and therapeutic tools, etc.
 - : **Combating major diseases**
 - **Application-oriented genomics approaches to medical knowledge and technologies:** diabetes, cardiovascular diseases, resistance to antibiotics, brain and ageing, etc.
 - **Cancer**
 - **Major poverty-linked infectious diseases:** aids, malaria and tuberculosis
- 

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- ## The 7 thematic priorities
- I **Genomics and biotechnology for health**
 - I **Information Society technologies**
 - : **Applied IST research addressing major societal and economic challenges:** security, societal challenges, 'ambient intelligence', electronic commerce, etc
 - : **Communication, computing and software technologies**
 - : **Components and microsystems**
 - : **Knowledge and interface technologies**
- 

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- ## The 7 thematic priorities
- I **Genomics and biotechnology for health**
 - I **Information Society technologies**
 - I **Nanotechnologies and nanosciences, knowledge-based multifunctional materials, and new production processes and devices**
 - : **Nanotechnologies and nanosciences:** long-term research, supramolecular architectures and macromolecules, nano-biotechnologies, applications in health, chemistry etc
 - : **Knowledge-based multifunctional materials:** fundamental knowledge; production, transformation and processing technologies, etc
 - : **New production processes and devices:** flexible and intelligent manufacturing systems, systems research and hazard control, clean and safe production, optimisation of life cycles, etc
- 


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- ## The 7 thematic priorities
- I **Genomics and biotechnology for health**
 - I **Information Society technologies**
 - I **Nanotechnologies and nanosciences, knowledge-based multifunctional materials, and new production processes and devices**
 - I **Aeronautics and space**
 - : **Aeronautics:** competitiveness of the industry (new aircraft, engines etc); improving environmental impact (emissions and noise); safety; increasing the capacity of the air transport system ('Single European Sky')
 - : **Space:** research relevant to Galileo (satellite navigation) and GMES (monitoring for environment and security); satellite telecommunications (integrating terrestrial networks and space systems)
- 

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The 7 thematic priorities

- | Genomics and biotechnology for health
- | Information Society technologies
- | Nanotechnologies and nanosciences, knowledge-based multifunctional materials, and new production processes and devices
- | Aeronautics and space
- | Food quality and safety
 - : Epidemiology of food-related diseases and allergies
 - : Impact of food on health
 - : 'Traceability' processes all along the production chain
 - : Methods of analysis, detection and control
 - : Safer and environmentally friendly production methods and healthier foodstuffs
 - : Impact of animal feed on human health
 - : Environmental health risks




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The 7 thematic priorities

- | Genomics and biotechnology for health
- | Information Society technologies
- | Nanotechnologies and nanosciences, knowledge-based multifunctional materials, and new production processes and devices
- | Aeronautics and space
- | Food safety and health risks
- | Sustainable development and global change
 - : Sustainable energy systems: clean energy, energy savings, alternative motor fuels, fuel cells, energy carriers/transport/storage, etc
 - : Sustainable surface transport: environmentally friendly transport, interoperability, safety, etc
 - : Global change and ecosystems: greenhouse gas emissions, water cycle, biodiversity, natural disasters, land management, climate modelling, etc




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The 7 thematic priorities

- | Genomics and biotechnology for health
- | Information Society technologies
- | Nanotechnologies and nanosciences, knowledge-based multifunctional materials, and new production processes and devices
- | Aeronautics and space
- | Food safety and health risks
- | Sustainable development and global change
- | Citizens and governance in the European knowledge-based society
 - : Knowledge-based society and social cohesion: generation/distribution/use of knowledge; development of a knowledge-based society; variety of paths towards a knowledge-based society; etc
 - : Citizenship, democracy and new forms of governance: consequences of EU integration, enlargement; new forms of governance; resolution of conflicts; citizenship and cultural identities



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Integrating research: Specific activities covering a wider field of research

- | 7 thematic priorities
- | Specific activities covering a wider field of research :
 - : Supporting policies and anticipating scientific and technological needs: activities in support of EU policies and research responding to new and emerging needs (annual programming)
 - : Horizontal research activities involving SMEs: to boost technological capacities of SMEs in traditional or new areas and develop their ability to operate internationally (co-operative and collective research)
 - : Specific measures in support of international co-operation: developing countries, Mediterranean countries including the Western Balkans; Russia and the CIS



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International co-operation activities

- | Participation of third countries in the thematic priorities

+

- | Specific activities (in support of the EU's foreign policy and development aid policy)

Third countries : countries which are not members of the EU and not associated with the Framework Programme.



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SMEs


- | General activities
 - o At least 15% of the total budget allocated to SMEs
 - o Taking into consideration specific regional economic and social situations
 - o Support for technological needs of SMEs
- | Specific activities
 - o 'Co-operative research': carried out by research centres for SMEs or by high-tech SMEs in collaboration with research centres and universities
 - o 'Collective research': carried out by research centres for industrial associations or industry groupings in entire sectors of industry dominated by SMEs



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Sixth Framework Programme

II. Structuring the ERA	Budget (€million)
1. Research and innovation	290
2. Human resources	1 580
3. Research infrastructures	655
4. Science and society	80
Total	2 605



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Structuring the ERA: four categories of activity


- Research and innovation**
 - Networking the players and users
 - Encouraging trans-regional co-operation
 - New tools and approaches concerning technological innovation
 - Putting services in place and consolidating them (CORDIS)
 - Economic and technological intelligence
 - Analysing innovation in EU-funded research projects



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Structuring the ERA: four categories of activity


- Research and innovation**
- Human resources and mobility**
 - Host-driven actions:** MC (*Marie Curie*) research training networks, MC host fellowships for early stage research training, MC host fellowships for the transfer of knowledge, MC conferences and training courses
 - Individual-driven actions:** MC intra-European fellowships, MC outgoing/incoming international fellowships,
 - Excellence promotion and recognition:** MC excellence grants, MC excellence awards, MC chairs
 - Return and reintegration mechanisms**



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Structuring the ERA: four categories of activity


- Research and innovation**
- Human resources and mobility**
- Research infrastructures**
 - Transnational access to research infrastructures
 - Integrating activities
 - Communication network development
 - Design studies
 - Development of new infrastructures



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Structuring the ERA: four categories of activity


- Research and innovation**
- Human resources and mobility**
- Research infrastructures**
- Science/society**
 - Bringing research closer to society:** science and governance, scientific advice and reference systems
 - Responsible research and application of science and technology:** ethics, uncertainty, risk, precautionary principle
 - Stepping up the science/society dialogue and women in science:** public understanding, young people's interest in scientific careers, women and science




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Sixth Framework Programme

III. Strengthening the foundations of the ERA	Budget (€million)
1. Support for the coordination of activities	270
2. Coherent development of research and innovation policies	50
Total	320





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Three new instruments


- | **Networks of excellence**
- | **Integrated projects:**
 - : To boost competitiveness or to address major societal needs
 - : To provide results applicable to products, processes or services
 - : Research activities may be complemented by demonstration, innovation activities
 - : High level of management autonomy
 - : Implemented through overall financing plans
 - : Selected on the basis of calls for proposals
- | **Programmes implemented jointly**




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Three new instruments

- | **Networks of excellence**
- | **Integrated projects**
- | **Programmes implemented jointly**
 - : Joint implementation of national/regional programmes (article 169 of the Treaty) e.g. through harmonised work programmes and common, joint or co-ordinated calls for proposals
 - : Specific implementation structure
 - : May be used in all FP activities





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Other instruments


- | **Specific targeted research or innovation projects:**
 - : Specific targeted **research** projects: to improve competitiveness; need to be sharply focussed; either a RTD project (to gain knowledge) or a demonstration project (to prove the viability of new technologies which cannot be commercialised directly)
 - : Specific targeted **innovation** projects: to test, validate and disseminate new innovation concepts and methods
- | **Specific research projects for SMEs**
- | **Actions to promote and develop human resources and mobility**
- | **Co-ordination actions**
- | **Specific support actions**
- | **Integrated infrastructure initiatives**




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Other instruments (continued)

- | **Specific targeted research or innovation projects**
- | **Specific research projects for SMEs**
 - : **Co-operative** research projects undertaken for the benefit of a number of SMEs on themes of common interest
 - : **Collective** research projects carried out for industrial associations or industry groupings in sectors where SMEs are prominent
- | **Actions to promote and develop human resources and mobility**
- | **Coordination actions**
- | **Specific support actions**
- | **Integrated infrastructure initiatives**





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Other instruments (continued)


- | **Specific targeted research or innovation projects**
- | **Specific research projects for SMEs**
- | **Actions to promote and develop human resources and mobility**
 - : To promote training, development of expertise or transfer of knowledge
 - : To support actions undertaken by individuals, host structures (including training networks) and European research teams
- | **Coordination actions**
- | **Specific support actions**
- | **Integrated infrastructure initiatives**




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Other instruments (continued)

- | **Specific targeted research or innovation projects**
- | **Specific research projects for SMEs**
- | **Actions to promote and develop human resources and mobility**
- | **Coordination actions**
 - : To support co-ordinated initiatives undertaken by a range of stakeholders involved in research and innovation (with the aim of improving integration)
 - : Actions: conferences, meetings, studies, exchange of personnel, exchange of good practices, information systems, expert groups etc
- | **Specific support actions**
- | **Integrated infrastructure initiatives**



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Other instruments (continued)

- | Specific targeted research or innovation projects
- | Specific research projects for SMEs
- | Actions to promote and develop human resources and mobility
- | Coordination actions
- | **Specific support actions**
 - : To complement FP6 implementation
 - : To prepare future RTD activities (monitoring, assessment, etc)
 - : Actions: conferences, meetings, studies, awards, information and communication activities, support of research infrastructures (e.g. feasibility studies) etc
- | **Integrated infrastructure initiatives**



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Other instruments (continued)

- | Specific targeted research or innovation projects
- | Specific research projects for SMEs
- | Actions to promote and develop human resources and mobility
- | Coordination actions
- | **Specific support actions**
- | **Integrated infrastructure initiatives**
 - : To reinforce and develop research infrastructures in order to provide services at European level
 - : Must combine networking activities with support (e.g. transnational access) or research (e.g. to improve performance)
 - : Financing for new infrastructures is excluded (see 'Specific support actions')




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Sixth Framework Programme (Euratom)

Framework programme Euratom	Budget (€million)
1. Management of radioactive waste	90
2. Controlled thermonuclear fusion	750*
3. Radiation protection	50
4. Other activities	50
4. Activities of the Joint Research Centre	290
Total	1 230

* including EUR 200 million for participation in ITER




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EURATOM activities

- | **Waste treatment and storage:**
 - Long-term storage etc.
 - Reducing the impact of waste and the hazards associated with waste etc.
- | **Controlled thermonuclear fusion:**
 - Fusion physics and technology
 - Activities related to 'Next Step'/ITER
- | **Other activities:**
 - Radiation protection
 - Safer processes for the exploitation of nuclear energy
- | **Joint Research Centre:**
 - Nuclear safety and security
 - Measurements and reference materials




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Timetable

21 February 2001	Commission's proposal
30 May 2001	Specific programmes
14 November 2001	First reading at EP
10 December 2001	Political agreement at Council
28 January 2002	Common position at Council
15 May 2002	Second reading and approval at EP
3 June 2002	Adoption
11-12-13 November 2002	Launch conference (Brussels)
17 December 2002	49 calls for proposals



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First calls for proposals 17 December 2002

Areas	Budget (€billion)
Life sciences (genomics, major diseases)	0.513
Information society	1.190
Nanotechnologies, multi-functional materials and new production processes	0.440
Aeronautics and space	0.326
Food quality and safety	0.187
Sustainable development, global change and ecosystems	0.664
Citizens and governance	0.101
Support to policies and anticipation of s&t needs	0.177
SMEs	0.215
International cooperation	0.102
Coordination of research activities	0.024
Human resources and mobility	0.745
Research infrastructures	0.240
Science and society	0.008
Nuclear activities	0.069
Total	5.001

www.cordis.lu/fp6/




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Rules of participation - General Issues -

Commission proposal:

- | Reflects main orientations of FP proposal

with the aim of:

- | Simplification
- | Flexibility
- | Autonomy for participants

http://europa.eu.int/comm/research/fp6/documents_en.html#rules




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Rules for participation

- | Funding mechanisms: 'grant for integration' (for networks of excellence) and 'grant to the overall budget' (integrated projects), **i.e. the financing principle will no longer be the 'eligible costs'**
- | Mainly on-going and ex-post control (rather than ex-ante);
- | Changes in partnerships (addition or withdrawal) may be decided by partners, with tacit agreement by the Commission
- | Candidate countries associated to the FP will participate under same conditions as EU Member States;
- | European research organisations (e.g. CERN, ESA, EMBO, etc.) will be treated as any entity from member states;
- | Intellectual Property Rights (IPR) rules simplified; relevant agreements to be established by consortium partners.





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Participation

Who can participate?

- | Every legal entity
- | **New:** Associated candidate countries = Member States (MS)
- | **New:** International European interest organisations = MS






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Participation

Minimum number

- | Three for IP and NoE with two from MS or Associated Candidate Countries
- | In other instruments two with one from MS or Associated Candidate Country
- | Single participation possible for fellowships and specific support actions
- | Minimum number can be increased by work-programmes





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Participation

Third country participation

- | Participation in 'Integration' part for all countries
- | Financing for INCO countries in 'Integration' part
- | Participation for countries with co-operation agreement under applicable conditions in activities outside the 'Integration' part
- | Participation for other countries in all activities outside 'Integration' part if necessary





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Evaluation

Same principles as in FP 5:

- | Transparency
- | Equal treatment
- | Impartiality




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Evaluation

Core criteria & criteria for new instruments:

- | to be specified and complemented in work programmes according to instrument and activity

Exclusion criteria:

- | Violation of fundamental ethical principles
- | Financial irregularities





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Implementation

Objectives:

- | Define basic rights and obligations
- | Provide autonomy to consortia
- | Precise legal rules for evolution of consortia






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Financing (I)

Three different systems:


- | Grant to the budget
- | Grant for integration
- | Flat-rate





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Financing (II)

Instrument	EU contribution
Networks of excellence	Grant for integration: max 25% of the value of the capacity and resources proposed for integration as a fixed amount to support the joint programme of activities
Integrated projects	Grant to the budget: max 50% for research, 35% for demonstration, 100% for activities such as training
Specific targeted research or innovation projects	Grant to the budget: max 50% of the budget
Participation in programmes undertaken by several MS	To be defined in decisions taken on the basis of Art. 169
Specific research projects for SMEs	Grant to the budget: max 50% of the budget
Actions to promote and develop human resources and mobility	Grant to the budget: max 100% of the budget, if necessary as a lump sum
Coordination actions	Grant to the budget: max 100% of the budget
Specific support actions	Grant to the budget: max 100% of the budget, if necessary as a lump sum
Integrated infrastructure initiatives	Grant to the budget: max 100% of the budget, if necessary as a lump sum





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Financing (III)

Modalities:

- | Periodical (yearly) advances
- | Participants' own accounting rules
- | Audit certificate by external auditor
- | Marginal cost
- | Possibility of average rates by type of expenditure




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Control and Sanctions

Objective:

- | Reinforcing ex-post controls
 - o To simplify and streamline ex-ante controls
 - o As a counterbalance to increased autonomy for participants

Sanctions:

- | Exclusion criterion: financial irregularity
- | Recovery decisions (art. 256 EC Treaty)
- | Other sanctions in contracts




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Intellectual Property Rights (IPR)

Complete and comprehensive in one document

Based on:

- | Experience with FP 5 rules
- | Consultation with academia and industry






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Intellectual Property Rights (IPR)

As in FP 5:



- | Participants own results they have generated
- | Emphasis on use of results, dissemination if appropriate or if results are not used
- | SMEs own results generated in SME-activities




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Information

- | General information on research:
<http://europa.eu.int/comm/research>
- | General information on the Sixth Framework Programme:
<http://europa.eu.int/comm/research/fp6/>
- | Information on research programmes and projects:
<http://www.cordis.lu>
- | Information requests:
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The End

Thank you for your attention!



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