



EUROPEAN
COMMISSION

Community Research

THE SIXTH FRAMEWORK PROGRAMME

The Sixth Framework Programme covers Community activities in the field of research, technological development and demonstration (RTD) for the period 2002 to 2006



The Sixth Framework Programme in brief

The brochure is focused on the European Community Framework Programme. A similar brochure is available for the Euratom Framework Programme on nuclear research

December 2002 Edition

Preface

The purpose of this brochure is to give a brief overview of the basic features of the 6th EU Framework Programme for Research and Technological Development (FP6). It should serve as a guide for navigating through the various activities, funding schemes, thematic areas, types of projects etc. allowing potential participants to better find their way through to the activity suiting best their ideas and plans.

To elaborate and submit a proposal, the information provided in this brochure will not be sufficient. For more detailed information on a specific subject, the brochure indicates links to the respective documents and web sites.

For the preparation of a proposal, a dedicated information package for the particular call for proposals and for the respective instrument is necessary. Details on how to access information and where to get assistance are given below.

For readers who are for the first time in contact with EU research activities, the brochure starts with a compressed two-page overview "FP6 at a glance" summarising the main features and the differences to other public research funding programmes.

TABLE OF CONTENTS

THE SIXTH FRAMEWORK PROGRAMME (FP6) AT A GLANCE.....	1
INTRODUCTION	3
WHY EUROPEAN RESEARCH?	3
BASIC FEATURES OF FP6	3
1 THE SPECIFIC PROGRAMMES.....	4
1.1 THE BULK OF RESEARCH ACTIONS - THE SPECIFIC PROGRAMME "INTEGRATING AND STRENGTHENING THE ERA"	4
1.1.1 <i>The seven thematic priorities</i>	5
1.1.2 <i>RTD supporting European policies</i>	8
1.1.3 <i>New and emerging science and technologies (NEST)</i>	8
1.1.4 <i>Specific research activities for SMEs</i>	8
1.1.5 <i>Specific measures in support of international cooperation</i>	9
1.2 ATTACKING STRUCTURAL WEAKNESSES - THE SPECIFIC PROGRAMME "STRUCTURING THE ERA"	9
1.2.1 <i>Research and innovation</i>	9
1.2.2 <i>Human resources and mobility</i>	9
1.2.3 <i>Research infrastructures</i>	9
1.2.4 <i>Science and Society</i>	9
1.2.5 <i>Strengthening the foundations of the ERA</i>	11
2 WHICH TYPE OF PROJECT TO CHOOSE -	
AVAILABLE INSTRUMENTS AND SCHEMES.....	12
2.1 NETWORK OF EXCELLENCE (NOE)	12
2.2 INTEGRATED PROJECT (IP)	13
2.3 PROGRAMMES IMPLEMENTED JOINTLY BY SEVERAL MEMBER STATES ("ARTICLE 169").....	14
2.4 SPECIFIC TARGETED RESEARCH PROJECTS (STREP) AND SPECIFIC TARGETED INNOVATION PROJECTS (STIP)	14
2.5 COORDINATION ACTION (CA)	14
2.6 SPECIFIC SUPPORT ACTION (SSA)	15
2.7 SPECIFIC RESEARCH PROJECTS FOR SMES	15
2.7.1 <i>Co-operative research projects (CRAFT)</i>	15
2.7.2 <i>Collective research projects</i>	15
2.8 SPECIFIC ACTIONS TO PROMOTE RESEARCH INFRASTRUCTURES	16
2.8.1 <i>Integrating Activities</i>	16
2.8.2 <i>Communication Network Development</i>	16
2.8.3 <i>Transnational Access</i>	16
2.8.4 <i>Design studies</i>	17
2.8.5 <i>Construction of new infrastructures</i>	17
2.9 MARIE CURIE ACTIONS ON MOBILITY, TRAINING, KNOWLEDGE TRANSFER AND EXCELLENCE RECOGNITION	17
2.9.1 <i>Host-driven actions</i>	17
2.9.1.1 <i>Marie Curie Research Training Networks (RTN)</i>	18
2.9.1.2 <i>Marie Curie Host Fellowships for Early Stage Research Training (EST)</i>	18
2.9.1.3 <i>Marie Curie Host Fellowships for the Transfer of Knowledge (ToK)</i>	18
2.9.1.4 <i>Marie Curie Conferences and Training Courses (SCF, LCF)</i>	18
2.9.2 <i>Individual-driven actions</i>	18
2.9.2.1 <i>Marie Curie Intra-European Fellowships (EIF)</i>	18
2.9.2.2 <i>Marie Curie Outgoing International Fellowships (OIF)</i>	19
2.9.2.3 <i>Marie Curie Incoming International Fellowships (IIF)</i>	19
2.9.3 <i>Promoting and recognising excellence</i>	19
2.9.3.1 <i>Marie Curie Excellence Grants (EXT)</i>	19
2.9.3.2 <i>Marie Curie Excellence Awards (EXA)</i>	19
2.9.3.3 <i>Marie Curie Chairs (EXC)</i>	19
2.9.4 <i>Return and Reintegration Mechanisms</i>	19
2.9.4.1 <i>Marie Curie European Reintegration Grants (ERG)</i>	19
2.9.4.2 <i>Marie Curie International Reintegration Grants (IRG)</i>	20

3	THE SIXTH FRAMEWORK PROGRAMME - SCHEMATIC OVERVIEW OF SPECIFIC PROGRAMMES, THEMATIC AND HORIZONTAL PRIORITIES AND INSTRUMENTS	21
4	INDICATIVE BUDGET BREAKDOWN OF FP6.....	22
5	WHO CAN PARTICIPATE?	23
6	FLOWCHART: FROM PROPOSAL TO CONTRACT	24
7	CONTRACTUAL RELATIONS.....	25
8	INTELLECTUAL PROPERTY RIGHTS	26
9	RULES ON ETHICS TO BE APPLIED IN FP6	26
10	EUROPEAN INVESTMENT BANK & EUROPEAN INVESTMENT FUND - FINANCING POSSIBILITIES	27
11	ACCESS TO INFORMATION AND ASSISTANCE	28
12	REFERENCE DOCUMENTS:	31

The Sixth Framework Programme (FP6) at a glance

Fact Sheet for Potential Participants

What is FP6
FP6 is the European Community Framework Programme for Research, Technological Development and Demonstration. It is a collection of the actions at EU level to fund and promote research.
Basic features distinguishing FP6 from other national or international research funding programmes
<p>The European and international dimension</p> <p>Following the principle of subsidiarity, projects have to be transnational. In other words: only consortia of partners from different member and associated countries can apply; for mobility and training actions the fellows typically have to go to a country different from their country of origin or residence. Activities that can better be carried out at national or regional level, i.e. without co-operation across borders will not be eligible under the Framework Programme.</p> <p>FP6 provides also possibilities and funding for organisations from third countries (“international co-operation”). See pp. 3, Table 9</p>
<p>The strategic objectives</p> <p>Based on the Treaty establishing the European Union, the Framework Programme has to serve two main strategic objectives: Strengthening the scientific and technological bases of industry and encourage its international competitiveness while promoting research activities in support of other EU policies. These two objectives are setting the general scene for choosing priorities and instruments. See p. 3</p>
<p>Focus and concentration – the thematic priorities</p> <p>FP6 does not cover all areas of science and technology (the specific research activities for SMEs, Marie-Curie actions, infrastructure actions, policy coordination and the science and society programme are exceptions from this rule). Based on the above strategic objectives, a limited number of thematic priorities (and selected topics within the overall priorities) have been identified. Detailed descriptions of these areas and specific topics will be given in the calls for proposals. Potential participants have to check carefully if their ideas for projects fit within the scope of these priorities and topics. Multidisciplinary proposals addressing several topics may be submitted. Any proposal submitted in response to a call should however have a centre of gravity on one topic open in this call. PROPOSALS CANNOT BE ACCEPTED IF THEY ARE NOT FOCUSED ON THE PRIORITIES OF THE FRAMEWORK PROGRAMME; THE MULTIDISCIPLINARY NATURE OF A PROPOSAL DOES NOT REMOVE THIS REQUIREMENT. See Table 2, Table 3</p>
<p>Sharing of costs and ownership of results</p> <p>In general, the EU contributes only a certain percentage of the total costs of a project. Participants have to mobilise own resources accordingly. The percentage of the EU’s financial contribution depends on the type of activity. See p. 25</p>
<p>The submission and selection process</p> <p>Submission of proposals is only possible in response to calls for proposals, which are published in the Official Journal of the European Communities and on the Internet (CORDIS: http://www.cordis.lu/fp6/calls.htm). Special information packages are issued for each call comprising documents, explanations and forms which are needed for the preparation of a proposal. An electronic proposal submission system (EPSS) is offered and proposers are strongly encouraged to use electronic submission. Calls have strict deadlines which are enforced to the minute. Proposals are evaluated and selected for funding by the European Commission with the help of independent external experts (peer review). Evaluation criteria and a detailed description of the process of evaluation, including the ethical review, are published in advance. For successful proposals, the European Commission enters into (financial and scientific-technical) contract negotiations. Successful negotiation will lead to a contract between the European Commission and participants.</p> <p>FP6 on CORDIS: http://www.cordis.lu/fp6/, ethics rules: http://www.cordis.lu/rtd2002/science-society/home.html</p>
<p>Project management</p> <p>For the management of their project, consortia will have great autonomy. One of the project participants has to act as co-ordinator. The European Commission will transfer the EC financial contribution to the co-ordinator for further distribution to the other participants. The co-ordinator will also be responsible for delivering reports. To define details of relations between participants the conclusion of a consortium agreement is highly recommended. For most of the instruments it is even mandatory. The European Commission will provide a checklist for consortium agreements. p. 25, Consortium agreement: (http://www.cordis.lu/fp6/)</p>

FP6 – Who should consider participation?¹	
A research group at a university or at a research institute	Research institutions are one of the main target groups of FP6. They find possibilities in virtually all actions of FP6, from participation in research projects to becoming hosts for mobility and training actions.
A company intending to innovate	Companies are one of the main target groups of FP6, in particular SMEs, for which 15% of the budget of the thematic priorities is reserved. Companies can take part in all research activities. They can also become hosts for mobility and training actions.
A small or medium-sized enterprise (SME)	The main route for SMEs to participate in the Sixth Framework Programme in the activities implemented under the Priority Thematic Areas (p. 5) will be through Integrated Projects (p.13), Specific Targeted Research Projects (p.14) and possibly also through Networks of Excellence (p.ii). In addition, FP6 contains specific schemes for SMEs in the form of Horizontal Research Activities: Co-operative Research and Collective Research. Co-operative research (p.15) refers to SMEs that need to assign research activities to RTD Performers and own the results of these activities.
An SME Association or Grouping	An alternative route for SMEs to participate in the Priority Thematic Areas (p.5) is through SME Associations or Groupings that become participants on behalf of their SME members. In addition, Collective Research (p.15) refers to Associations and Groupings in sectors where SMEs are prominent.
Public administrations	If the organisation is dealing with research policy or management of public research programmes, the ERA-NET scheme might be of interest. The scheme gives support to transnational coordination and co-operation of research activities carried out at national or regional level. Otherwise, public administrations can be valuable partners of consortia in areas where they play a role in the use of research results (e.g. in health, environment, transport, legislation etc.), ERA-NET: http://europa.eu.int/comm/research/fp6/era-net.html
Undergraduate students	In general, activities funded under FP6 do not seek to target undergraduates directly, with the exception of some actions to promote science among young people (see Science and Society, p. 9). Mobility actions for undergraduates are supported in the EU educational programmes (SOCRATES-ERASMUS and others) See http://europa.eu.int/comm/education/erasmus.html
Early stage researchers (post-graduate)	Special mobility and training schemes are foreseen in FP6 for early-stage researchers, enabling them to further their research career by working in an institution in a country different from their country of origin or residence. Furthermore, these researchers can get support for participation in international conferences and training courses. See pp. 9, 18
Experienced researchers	Special mobility actions are foreseen in FP6 for experienced researchers (having a PhD or 4 years research experience). Their aim is to provide advanced training or to support the transfer of knowledge to institutions intending to develop new areas of activities or to institutions in less favoured regions. See pp. 9, 18
Acknowledged world-class researchers	There are Excellence Grants to enable a promising researcher to create a team engaged in leading edge or multi-disciplinary research, and Chairs for making top-level teaching appointments, in particular to attract world-class researchers and encourage them to resume their careers in Europe
Institutions running a research facility of transnational interest	The infrastructure actions are of interest to institutions hosting an important research facility. They offer support for transnational access for guest researchers from Europe or other countries. Moreover, support will also be given for design studies and development of new infrastructures and for communication networks pp. 9, 16
Organisations and persons from third countries	International co-operation (=co-operation with third countries not being a member state or an associated state) is an integral part of FP6, with the following three complementary routes for participating and funding: 1. The opening of the first block of activities (see page 3) to third country organizations (with substantial funding) 2. Specific measures in support of international co-operation 3. International mobility of researchers (fellowships to and from third countries)

¹ The list of potential participants is just exemplary, not exhaustive. Other entities like European Economic Interest Groups (EEIGs), European interest organisations, international organisations, non-governmental organisations, end-users, specialist service providers (management, dissemination etc) and many others may also participate.

Introduction

Why European Research?

Research and Technological Development (RTD) is an essential element in the functioning of industrialised countries, such as the EU Member States and the countries having applied for EU membership. The competitiveness of companies and the employment they can provide depend to a great extent on RTD; and RTD is also essential for the support of other policies such as consumer protection or the protection of the environment. In short: the individual and collective wellbeing of citizens depends on the quality and relevance of RTD.

Conducting a European research policy and implementing European research programmes is a legal and political obligation resulting from the Treaty. The Treaty does in fact include a whole chapter on RTD.

Europe must also play an active role in RTD because of a number of developments inherent to the RTD sector itself:

- high level research is increasingly complex and interdisciplinary;
- high level research is increasingly costly;
- high level research requires a constantly increasing "critical mass".

There are very few individual research teams or laboratories or companies that can reasonably claim to be able to respond to these challenges. Even entire countries find it increasingly difficult to be active and play a leading role in the many important areas of scientific and technological progress. Organising co-operation at different levels both within Europe and internationally, co-ordinating national or European policies, networking teams and increasing the mobility of individuals and ideas is therefore a requirement resulting from the development of modern research in a global environment. Without determined action at European level the present fragmentation of Europe's efforts cannot be overcome. Taking up this challenge the European Commission, Member States and the European Parliament, the scientific community and industry are committed to work jointly towards the creation of a "European Research Area" (ERA) and its international dimension. The sixth framework programme for Research and Technological Development (FP6) will be the main financial and legal instrument of the European Commission to implement the ERA, alongside national efforts and other European co-operative research activities. The framework programme will support collaboration in research, promote mobility and co-ordination and invest in mobilising research in support of other EU policies.

Basic features of FP6

As the name indicates FP6 is the frame for the EU activities in the field of science, research and innovation. With a budget of 17.5 billion euros for the years 2002 - 2006 it represents about 4 to 5 percent of the overall expenditure on RTD in EU Member States. The main objective of FP6 is to contribute to the creation of the European Research Area (ERA) by improving integration and co-ordination of research in Europe which is so far largely fragmented. At the same time research will be targeted at strengthening the competitiveness of the European economy, solving major societal questions and supporting the formulation and implementation of other EU policies. Activities under FP6 have to be conducted in compliance with ethical principles, including those reflected in the Charter of Fundamental Rights of the European Union. Furthermore they should strive both to increase the role of women in research and to improve information for, and dialogue with, society.

FP6 is made up of three main blocks of activities grouped in two specific programmes plus a third specific programme on nuclear research:

FP6 (EC PART): THREE MAIN BLOCKS OF ACTIVITIES									
BLOCK 1: FOCUSING AND INTEGRATING EUROPEAN RESEARCH									
7 PRIORITY THEMATIC AREAS							SPECIFIC ACTIVITIES COVERING A WIDER FIELD OF RESEARCH		
Life sciences, genomics and biotechnology for health	Information society technologies	Nanotechnologies and nano-sciences, knowledge-based functional materials, new production processes and devices	Aeronautics and Space	Food quality and safety	Sustainable development, global change and ecosystems	Citizens and governance in a knowledge-based society	Research for policy support	New and emerging science and technologies (NEST)	
							Specific research activities for SMEs		
							Specific international co-operation activities		
BLOCK 2: STRUCTURING THE ERA							BLOCK 3: STRENGTHENING THE FOUNDATIONS OF ERA		
Research and Innovation	Human resources & mobility	Research infrastructures	Science and society				Co-ordination of research activities	Development of research/innovation policies	

Table 1: Schematic overview of the structure of FP6 (— ■ — Specific Programme "Integrating and Strengthening the European Research Area", Specific Programme "Structuring the European Research Area")

Research in the first and third specific programme will be concentrated on a number of selected priority areas. Projects will be selected in a competitive way based on **Calls for Proposals** (in some cases calls for tenders) and peer review, i.e. evaluation with the help of external, independent experts.

To implement the various activities, different instruments, project types and funding schemes will be applied.

In addition to the activities shown in the above overview, there is a specific programme covering the activities of the Joint Research Centre of the European Community (the so-called direct actions). These actions are not dealt with in this document.

1 The specific programmes

1.1 *The bulk of research actions - the specific programme "Integrating and Strengthening the ERA"*

This specific programme implements the first and the third main blocks of activities of FP6 (see Table 1). It will strive towards greater integration by promoting research:

- in 7 key priority areas of exceptional interest and added value for Europe
- responding to the special needs of small and medium-sized enterprises (SME)
- in international co-operation with partners from specific groups of third countries

- to support other Community policies
- to explore new and emerging scientific and technological areas and to anticipate future science and technology needs

Furthermore, this specific programme will promote networking and joint actions of national and European initiatives in research and innovation.

The first block of activities

Which topics are covered - The seven thematic priorities and specific activities covering a wider field of research

1.1.1 The seven thematic priorities

The first block of activities “focusing and integrating” European research defines seven thematic priority areas of research. They cover those areas where the EU in the medium term intends to become the most competitive and dynamic, knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion. As one of the measures to implement the international dimension of FP6, this block is open to participation by organisations from third countries with substantial funding included in the budget.

Focusing and integrating European research – The seven thematic priorities

		1. Life sciences, Genomics and Biotechnology for Health	2. Information Society Technologies	3. Nano-technologies and nano-sciences, knowledge-based multifunctional materials, new production processes and devices	4. Aeronautics and Space	5. Food Quality and Safety	6. Sustainable Development, Global Change and Ecosystems	7. Citizens and Governance in a knowledge-based society
Main objectives		Integrating post-genomic research into the more established biomedical and biotechnological approaches. Involvement of key stakeholders e.g. industry, healthcare providers and physicians, policy makers, regulatory authorities, patient associations and experts on ethical matters	Direct contribution to European policies for the knowledge society and the e-Europe Action Plan; medium and long term RTD on the future generation of technologies integrating computers and networks into the everyday environment; placing the individual at the centre	Contribution to the creation of the scientific base for the transition of European production industry from resource-based towards knowledge-based, more environment-friendly approaches	Striving towards higher levels of technological excellence by consolidating and concentrating RTD efforts in the context of the Advisory Council for Aeronautics Research in Europe and the European Strategy for Space	Improve health and well-being of European consumers through a higher quality of food, improved control of food production and of related environmental factors. Re-address the classical “farm-to-fork” approach by giving priority to consumers’ demands and rights for high-quality and safe food. “Fork-to-farm” approach as primary driver for developing new and safer food production chains and foods.	Strengthening the S&T capacities needed for Europe to be able to implement a sustainable development model in the short and in the long term, integrating its social, economic and environmental dimensions; contributing to international efforts mitigating adverse trends in global change	Mobilisation of European research in economic, political, social sciences and humanities that are necessary to develop an understanding of, and to address issues related to, the emergence of a knowledge –based society and new forms of relationships between its citizens, on the one hand and between its citizens and institutions, on the other.
	More information	http://www.cordis.lu/fp6/lifescihealth/rtd-genomics-biotech@cec.eu.int rtd-diseases@cec.eu.int	http://www.cordis.lu/ist/ist@cec.eu.int	http://www.cordis.lu/fp6/nmp.htm rtd-nmp@cec.eu.int	http://www.cordis.lu/aerospace/ rtd-aerospace@cec.eu.int	http://www.cordis.lu/fp6/food/ rtd-food@cec.eu.int	http://www.cordis.lu/sustainable/ rtd-energy@cec.eu.int rtd-sustainable@cec.eu.int rtd-transport@cec.eu.int tren-energy@cec.eu.int	http://www.cordis.lu/fp6/citizens/ rtd-citizens@cec.eu.int

Table 2: The seven thematic priorities: Main objectives

	1. Life sciences, Genomics and Biotechnology for Health	2. Information Society Technologies	3. Nano-technologies and nano-sciences, knowledge-based functional materials, new production processes and devices	4. Aeronautics and Space	5. Food Quality and Safety	6. Sustainable Development, Global Change and Ecosystems	7. Citizens and Governance in a knowledge-based society
Thematic areas	<p>Advanced genomics and its application for health:</p> <ul style="list-style-type: none"> – gene expression and proteomics – structural genomics – comparative genomics and population genetics – bioinformatics – multidisciplinary functional genomics approaches to basic biological processes – new, safer, more effective drugs including pharmacogenomics approaches – new diagnostics – new in vitro tests to replace animal experimentation – new preventive and therapeutic tools, such a somatic gene and cell therapies and immunotherapies – post-genomics with high potential for application <p>Combating major diseases:</p> <ul style="list-style-type: none"> – application-oriented genomic approaches to major diseases – combating cancer – confronting the major communicable diseases linked to poverty 	<p>Applied IST research addressing major societal and economic challenges:</p> <ul style="list-style-type: none"> – trust and security – ambient intelligence, e-inclusion – e-business, e-government, e-Work systems, e-learning – complex problem solving <p>Communication, computing and software technologies</p> <ul style="list-style-type: none"> – communication and network technologies – software technologies <p>Components and microsystems</p> <ul style="list-style-type: none"> – micro, nano and optoelectronics – micro- and nanotechnologies, microsystems, displays <p>Knowledge and interface technologies</p> <ul style="list-style-type: none"> – knowledge technologies and digital content – intelligent interfaces and surfaces <p>IST future and emerging technologies</p> <ul style="list-style-type: none"> – new IST-related science and technology fields 	<p>Nano-technologies and nano-sciences</p> <ul style="list-style-type: none"> – long-term interdisciplinary research into understanding phenomena, mastering processes and developing research tools – nanobiotechnologies – nanometre scale engineering techniques – handling and control devices – applications <p>Knowledge-based multifunctional materials</p> <ul style="list-style-type: none"> – development of fundamental knowledge – technologies for production, transformation and processing – engineering support for materials development <p>New production processes and devices</p> <ul style="list-style-type: none"> – new processes and flexible and intelligent manufacturing systems – systems research and hazard control – optimising life-cycles 	<p>Aeronautics</p> <ul style="list-style-type: none"> – strengthening competitiveness by reducing development costs, aircraft direct operating costs and improving passenger comfort – emissions and noise – aircraft safety – increasing operational capacity and safety of the air transport system <p>Space</p> <ul style="list-style-type: none"> – Galileo: development of multisectorial systems, equipment, tools and user equipment – GMES: stimulate evolution of satellite-based information services by development of technologies (e.g. sensors, data and information models, services for global environment, land-use, desertification, disaster management) – Satellite telecommunications 	<ul style="list-style-type: none"> – 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 technologies and healthier foodstuffs – Impact of animal feed on human health – Environmental health risks 	<p>Sustainable energy systems</p> <ul style="list-style-type: none"> – short term impact (clean energy sources, savings and efficiency, alternative motor fuels) – long term impact (fuel cells, carriers/transport storage, renewable energy technologies, capture and sequestration of CO₂) <p>Sustainable surface transport</p> <ul style="list-style-type: none"> – environmentally friendly and competitive transport systems – safer, more effective and competitive rail and maritime transport <p>Global change and ecosystems</p> <ul style="list-style-type: none"> – greenhouse gas – water cycle and soil – biodiversity – desertification, natural disasters – sustainable land management – operational forecasting and modeling – complementary research 	<p>Knowledge based society and social cohesion</p> <ul style="list-style-type: none"> – improving the generation, distribution and use of knowledge and its impact on economic and social development – options and choices for the development of a knowledge-based society – the variety of paths towards a knowledge society <p>Citizenship, democracy and new forms of governance</p> <ul style="list-style-type: none"> – implications of European integration and enlargement for governance and the citizen – articulation of areas of responsibility and new forms of governance – issues connected with resolution of conflicts and restoration of peace – new forms of citizenship and cultural identities

Table 3: The seven thematic priorities: Thematic areas covered

1.1.2 RTD supporting European policies

The activities under this heading will underpin the formulation and implementation of Community policies; in particular the common agricultural policy (CAP), the common fisheries policies (CFP), environment, energy, transport, health, development aid, consumer protection, enterprise policy etc.

Research in this area will be mainly carried out by means of Specific targeted projects and Co-ordination Actions. In duly justified cases, limited use can be made of Integrated Projects (IPs) and Networks of Excellence (NoEs); for a description of the instruments, see pp. 12 to 19.

1.1.3 New and emerging science and technologies (NEST)

To help European scientists take a leading position in the latest scientific opportunities, the Sixth Framework Programme introduces a new activity to support research in 'New and Emerging Science and Technology' - NEST. Standing slightly apart from the other activities, NEST aims to support unconventional and visionary research with the potential to open new fields for European science and technology (<http://www.cordis.lu/fp6/nest/>).

A key strength of the NEST "Adventure" projects will be their ability to respond to unforeseen new scientific opportunities or to apply innovative and multidisciplinary approaches to address long-standing challenges. NEST "Insight" projects will focus on potential risks to society of newly discovered phenomena or new scientific developments. In today's complex world, it is crucial to identify such problems at an early stage. NEST "Pathfinder" initiatives will support a group of complementary projects focussed on specific, highly challenging objectives, to advance work in emerging scientific and technological fields.

Research in this area will be mainly carried out by means of Specific targeted projects and Co-ordination Actions. In duly justified cases, limited use can be made of IPs and NoEs.

1.1.4 Specific research activities for SMEs

SMEs are encouraged to participate in the activities implemented under the priority thematic areas within NoEs, IPs, and specific targeted research projects. At least 15% of the budget relating to the seven thematic priorities will be allocated to SMEs.

In addition, two specific schemes for SMEs having the ability to innovate without adequate research capacity, are foreseen. Within these schemes - Collective Research and Co-operative Research ("CRAFT") - SMEs or industrial groupings where SMEs are prominent may entrust research work to research performers (research institutes, universities etc.) to solve their particular problems.

As one of the measures to implement the international dimension of FP6, the SME actions are open to participation by organisations from third countries with funding included in the budget.

For further: <http://www.cordis.lu/sme/>

1.1.5 Specific measures in support of international cooperation

These measures cover specific international co-operation activities (INCO) with selected groups of countries (Developing Countries, Mediterranean Partner Countries, Western Balkan countries, Russia and the NIS (Newly Independent States of the former Soviet Union)) based on mutual interest and in support of Community external policy.

Conditions, thematic areas and budget details applying for the different groups of countries will be specified in the work programmes.

The second block of activities

1.2 *Attacking structural weaknesses - The specific programme "Structuring the ERA"*

This specific programme implements the second main block of activities of FP6. It will attack structural weaknesses of European research. The main objectives and activities are summarised in Table 4. By their nature and means of implementation, activities to be carried out within this programme are applicable to all fields of research and technology.

Specific Programme Structuring the European Research Area				
	1.2.1 Research and innovation	1.2.2 Human resources and mobility (Marie Curie Actions)	1.2.3 Research infrastructures	1.2.4 Science and Society
Objectives	Improving Europe's innovation performance by stimulating a better integration between research and innovation and by working towards a more innovation-friendly policy and regulatory environment. Enhancing the propensity to turn research into useful and commercially valuable innovations.	Providing broad support for the development of abundant and dynamic world-class human resources in the European research system, taking into account the inherent international dimension of research	Promoting the development of a fabric of research infrastructures of highest quality and performance in Europe and their optimum use on a European scale	Developing structural links between institutions and activities concerned with the dialogue between the scientific community and society at large
More information	http://www.cordis.lu/fp6/innovation.htm innovation@cec.eu.int	http://www.cordis.lu/fp6/mariecurie-actions/rtd-mariecurie-actions@cec.eu.int	http://www.cordis.lu/fp6/infrastructures/rtd-infrastructures@cec.eu.int	http://www.cordis.lu/fp6/science-society/rtd-sciencesociety@cec.eu.int

Table 4: Specific programme Structuring the ERA: Objectives

	2.2.1 Research and innovation	2.2.2 Human resources and mobility (Marie Curie Actions)	2.2.3 Research infrastructures	2.2.4 Science and Society
Actions	<p>Networking the players and encouraging interaction</p> <ul style="list-style-type: none"> – encourage and validate initiatives to promote creation of innovative businesses – exchange of good practices with regard to communication, training, transfer of knowledge <p>Encouraging transregional cooperation</p> <ul style="list-style-type: none"> – promote exchange of information, facilitate transfer of good practice and put in place regional innovation strategies <p>Experimenting with new tools and approaches</p> <p>Putting services in place and consolidating them</p> <ul style="list-style-type: none"> – CORDIS – Innovation Relay Centres – Information and support services in the field of intellectual and industrial property rights and access to innovation funding <p>Stepping up economic and technological intelligence</p> <ul style="list-style-type: none"> – the participation of SMEs/SME Groupings in the Sixth Framework Programme, particularly in integrated projects and networks of excellence; – facilitating the creation of groupings or clusters of SMEs that have similar innovation needs; – the promotion of trans-regional co-operation between SMEs; – the stimulation of networks of industrial incubators ; – identification and dissemination of best practice <p>Analysing and evaluating innovation in Community research projects</p>	<p>Host-driven actions</p> <ul style="list-style-type: none"> – Research Training Networks enabling training of researchers and transfer of knowledge within the frame of international collaborative research projects – Host Fellowships for Early Stage Research Training to provide post-graduate research training – Host Fellowships for the Transfer of Knowledge to develop research competencies and encourage industry-academia exchange – Conferences and Training Courses enabling early-stage researchers to benefit from the experience of leading researchers <p>Individual-driven actions</p> <ul style="list-style-type: none"> – Intra-European Fellowships providing advanced training to researchers, – Outgoing International Fellowships to carry out research in third countries – Incoming International Fellowships for third country researchers to work in Europe (with return phase) <p>Excellence promotion and recognition</p> <ul style="list-style-type: none"> – Excellence Grants providing support to research teams of highest excellence – Excellence Awards aiming at public recognition of excellent former beneficiaries of EC mobility and training grants – Chairs to attract world-class researchers to teaching/research posts and encourage them to resume their careers in Europe <p>Return and reintegration mechanisms</p> <ul style="list-style-type: none"> – European Reintegration Grants to support the reintegration of researchers into scientific careers in Europe after a Marie Curie mobility period. – International Reintegration Grants: Provision of grants for those European researchers who have spent long periods of research outside Europe and wish to return 	<ul style="list-style-type: none"> – Transnational access to major research infrastructures for research teams and individual researchers – Integrating activities combining cooperation networks with transnational access and research projects – Communication network development in conjunction with thematic priority 2 (Information Society Technologies) to establish a high-capacity and high-speed communications network for all researchers in Europe (GEANT) and specific high performance Grids and test-beds (GRIDs) – Design studies: feasibility studies for new infrastructures with European dimension – Construction of new infrastructures: contribution to their development alongside with other funding agencies 	<p>Bringing research closer to society</p> <ul style="list-style-type: none"> – science and governance: analyse and support best practice, develop new consultation mechanisms – scientific advice and reference systems: exchange of experience and good practice; monitoring the production of scientific advice worldwide <p>Responsible research and application of science and technology</p> <ul style="list-style-type: none"> – ethics: networking between existing bodies and activities, promotion of dialogue in a global context, awareness raising, training, research on ethics in relation to science and technology – uncertainty, risk and the precautionary principle: analysis and best practice <p>Stepping up the science-society dialogue and women in science</p> <ul style="list-style-type: none"> – public awareness of science and science communication – awards for scientific achievement, collaboration and communication – promoting young people's interest in science and scientific careers – women and science

Table 5: FP6 - Specific programme Structuring the ERA

The third block of activities

1.2.5 Strengthening the foundations of the ERA

The objective of this action is to stimulate the coherent development of research and innovation policy in Europe by supporting programme coordination and joint actions conducted at national and regional level as well as among European organisations. Activities may be implemented in any scientific and technological area. They will take the form of Coordination Actions ("ERA-NETs") and Specific Support Actions.

Strengthening the foundations of the European Research Area		
	Support for the co-ordination of activities	Coherent development of research and innovation policies
Objectives	Develop synergies between existing national activities; enhance the complementarity between Community actions and those of other European scientific co-operation organisations in all fields of science (examples: health, biotechnology, environment, energy)	Encourage coherent development of research and innovation policies in Europe by early identification of challenges and areas of common interest and by providing policy makers with knowledge and decision-aiding tools
Activities	<p>Co-ordination of national activities</p> <ul style="list-style-type: none"> – ERA-NET scheme : networking of national or regional programmes or parts of programmes; actors: research and innovation programme managers and programme makers, participants: mainly public authorities, research agencies, open call for proposals – Development of an integrated information system on national and regional research programmes, actor: the European Commission <p>Co-ordination at European level</p> <ul style="list-style-type: none"> – co-ordination of Framework Programme with COST, EUREKA, – collaboration and joint initiatives of European organisations (CERN, ESA, ESO, EMBL, ESRF, ILL etc.) 	<ul style="list-style-type: none"> – Analysis and studies relating to foresight, statistics and science and technology indicators – Benchmarking of research and innovation policies at national, regional and European level – Mapping scientific and technological excellence in Europe – Improving the regulatory and administrative environment for research and innovation
More information	http://www.cordis.lu/fp6/coordination/	http://www.cordis.lu/policysupport/

Table 6: FP6 - the third block of activities

2 Which type of project to choose - Available instruments and schemes

The different types of projects and actions to implement FP6 are also known as **the instruments**. There are a number of different instruments for multipartner research activities, individual and host-driven mobility schemes, special types of projects for SMEs, support for utilising and developing large scale research infrastructures etc. An overview of all available instruments is given below.

Not all instruments apply across the whole programme. A summary of their applicability is given in **Table 7**. The calls for proposals will indicate in detail which instruments are used for which research objectives.

2.1 Network of Excellence (NoE)

NoEs are multipartner projects aimed at strengthening scientific and technological excellence on a particular research topic by integrating at European level the critical mass of resources and expertise needed to provide European leadership and to be a world force in a given domain. This expertise will be networked around a joint programme of activities aimed primarily at creating a progressive and durable integration of research capacities of network partners while at the same time advancing knowledge on the topic.

NoEs are more than just schemes for the co-ordination of research and information exchange; and the research itself is not their main focus either. Participating institutions have to invest seriously in **structural change** aiming at a durable integration of their research capacities. This requires the commitment of all levels of decision-making in an institution, including top management, supervising and financing bodies.

The **main result** should be a **durable restructuring and reshaping** of the way research is carried out in Europe in a given area.

There must be a minimum of three participants from three different Member States or Associated States of which at least two are from Member States or Associated Candidate States. However, as an indication, and as a general rule there should be a minimum of six participants. Different minimum numbers may be specified in the calls for proposals.

It is expected that larger networks may involve several hundreds of researchers. Others may be of a much more limited size, provided that they pursue ambitious goals and gather the critical mass needed to ensure their achievement. The Community contribution, which will take the form of a grant for integration, may reach from several millions to several tens of millions of Euros. The financial regime for NoEs has been built on the following principles:

- a **grant for integration**, as a **fixed amount** to support the joint programme of activities;
- to be calculated taking into account (a) the degree of integration proposed by the consortium, (b) the number of researchers that all participants intend to integrate, (c) the characteristics of the field of research concerned and (d) the joint programme of activities;
- to be disbursed in **annual instalments**, with payment depending primarily on the network's progress towards achieving a durable integration and on condition that the costs incurred in implementing the joint programme of activities are greater than the grant itself.

Details on calculation of the grants will be provided in the model contracts.

NoEs will be applied in the 7 priority thematic areas and in the specific programme for nuclear research (see separate brochure on the Euratom FP). They may also be used, in duly justified cases, in research areas supporting policies and anticipating scientific and technological needs.

Further information: <http://www.cordis.lu/fp6/instrument-noe/>

2.2 Integrated Project (IP)

IPs are multipartner projects to support objective-driven research, where the **primary deliverable is generating the knowledge required to implement the thematic priorities**. IPs should bring together a critical mass of resources to reach ambitious goals aimed either at increasing Europe's competitiveness or at addressing major societal needs. They must contain a research component and may contain technological development and demonstration components, as appropriate, as well as perhaps a training component. A project may be at any point in the research spectrum. A single project may indeed span large parts of the spectrum, i.e. from basic to applied research.

Integration within an integrated project may take several forms:

- Vertical integration of the full “value-chain” of stakeholders from those involved in knowledge production through to technology development and transfer.
- Horizontal integration of a range of multidisciplinary activities.
- Activity integration: integrating various research activities from fundamental to applied research and with other types of activity, including take-up activities, protection and dissemination of knowledge, training, etc, as appropriate.
- Sectoral integration of actors from private and public sector research organisations, and in particular between academia and industry, including SMEs.
- Financial integration of public and private funding, with overall financing plans that may involve the European Investment Bank and co-operation with Eureka.

The effective management of knowledge and its dissemination and transfer, will also be an essential feature of each integrated project together with the analysis and assessment of the technologies developed and of the factors relating to their exploitation, where relevant.

There must be a minimum of three participants from three different Member States or Associated States of which at least two are from Member States or Associated Candidate States. Different minimum numbers may be specified in the calls for proposals. However, in practice, there are likely to be substantially more participants. The value of the activities integrated by a project are expected to range up to many tens of millions of Euros. However, there will be no minimum threshold, provided that the necessary ambition and critical mass are there. Funding will take the form of a grant to the budget, as a contribution to costs incurred, with specified maximum rates of support for the different types of activity within the project.

IPs will be applied in the 7 priority thematic areas and in the specific programme for nuclear research. In duly justified cases they may also be used in the research areas supporting policies and anticipating scientific and technological needs.

Further information: <http://www.cordis.lu/fp6/instrument-ip/>

2.3 Programmes implemented jointly by several Member States (“Article 169”)

This instrument requires co-operation at the level of national governments. It aims at integrating whole national or regional programmes on a particular topic by their joint implementation, e.g. through harmonised work programmes and common, joint or co-ordinated calls for proposals. Each possible arrangement requires a joint initiative of a number of Member States, possibly represented by their national programmes, and the European Commission in order to generate a proposal. Specific implementation structures will have to be set up. It may be used in all FP activities. The expected Community contribution is from some tens of millions of Euros upwards.

Further information: <http://www.cordis.lu/fp6/instrument-169/>

2.4 Specific Targeted Research Projects (STREP) and Specific Targeted Innovation Projects (STIP)

STREPs and STIPs are multipartner research, demonstration or innovation projects. They are an evolved form of the shared-cost RTD projects and demonstration projects used in FP5. Their purpose is to support research, technological development and demonstration or innovation activities of a more limited scope and ambition than IPs. The Community contribution may range from hundreds of thousands of Euros to a few millions of Euros and is paid as a grant to the budget (percentage of total costs of the project). There must be a minimum of three participants from three different Member States or Associated States of which at least two are from Member States or Associated Candidate States. Different minimum numbers may be specified in the calls for proposals. Special conditions for minimum numbers of participants apply for the “Specific international co-operation activities (INCO)” part of the programme (to be specified in the work programme).

STREPs are used in implementing the priority thematic areas, in other areas supporting Community policies and anticipating scientific and technological needs, in specific international co-operation research activities, and in research activities developing harmonious relations between science and society. STIPs are used in activities exploring, validating and disseminating new innovation concepts and methods at European level. I

Further information: <http://www.cordis.lu/fp6/instrument-strp/>

2.5 Coordination Action (CA)

CAs are multi-partner actions intended to promote and support the networking and co-ordination of research and innovation activities. They are a reinforced form of the concerted actions/thematic networks used in FP5. They will cover the definition, organisation and management of joint or common initiatives as well as activities such as the organisation of conferences, meetings, the carrying out of studies, exchanges of personnel, the exchange and dissemination of good practice, setting up common information systems and expert groups. EU funding is given for the costs of co-ordination (not for the research) in the form of a grant to the budget of up to 100% of the budget. There must be a minimum of three participants from three different Member States or Associated States of which at least two are from Member States or Associated Candidate States. Different minimum numbers may be specified in the calls for proposals. Special conditions for minimum numbers of participants apply for the “Specific international co-operation activities (INCO)” part of the programme (to be specified in the work programme).

Further information: <http://www.cordis.lu/fp6/instrument-ca/>

2.6 Specific Support Action (SSA)

Support activities are more limited in scope than the accompanying measures of the previous Framework Programmes. These projects aim to **contribute actively** to the implementation of activities of the work programme, the analysis and dissemination of results or the preparation of future activities, with a view to enabling the Community to achieve or define its RTD strategic objectives. Therefore, a significant emphasis has been placed on Support Actions:

- to promote and facilitate the dissemination, transfer, exploitation, assessment and/or broad take-up of past and present programme results (over and above the standard diffusion and exploitation activities of individual projects);
- to contribute to strategic objectives, notably regarding the European research area (e.g. pilot initiatives on benchmarking, mapping, networking, etc.);
- to prepare future community RTD activities, (e.g. via prospective studies, exploratory measures, pilot actions etc.);

as opposed to awareness and information exchange activities, e.g. annual Workshops and Conferences, that would take place anyway without Commission support. The latter activities will not be welcome if they do not **serve** the programme's strategic objectives, (in the sense of the European Research Area, improved co-ordination, public awareness, preparation of future Community initiatives, etc.). SSAs can be proposed by a single participant or by a consortium of several participants. The activities of a specific support action will be supported through a grant to the budget of up to 100% of the budget or, if necessary, as a lump sum.

Further information: <http://www.cordis.lu/fp6/instrument-ssa/>

2.7 Specific research projects for SMEs

2.7.1 Co-operative research projects (CRAFT)

They are projects whereby a number of SMEs (minimum three SMEs from two different countries) having specific problems or needs assign a significant part of the required scientific and technological research activities to RTD performers. These activities may also be carried out by innovative and high-tech SMEs in co-operation with research centres and universities. The SMEs retain ownership of the results.

2.7.2 Collective research projects

They are carried out by RTD performers on behalf of industrial associations or groupings in sectors where SMEs are prominent. The aim is to expand the knowledge base of large communities of SMEs and thus their general standard of competitiveness. The ownership of the results lies with the industrial associations.

Further information: <http://www.cordis.lu/sme/>

2.8 Specific actions to promote research infrastructures

2.8.1 Integrating Activities

The objective of this scheme is to support the integrated provision of infrastructure related services to the research community at European level. The final objective is to induce a long-term integrating effect on the way research infrastructures operate, evolve and interact with each other and with their users, thus contributing to the development of the European Research Area. To this end, the main characteristics of this scheme will be its capacity to mobilise a large number of stakeholders in a given class of infrastructures by combining networking, transnational access and joint research activities within a single contract. Participants will be operators of research infrastructures, universities and other public research organisations as well as industry and equipment manufacturers (e.g. SMEs). Integrating Activities will be implemented as Integrated Infrastructure Initiatives (I3s). The special case of Integrating Activities limited only to networking activities will be implemented through Coordination Actions.

An I3 will include at least three independent legal entities established in two different Member States or Associated States, of which at least one shall be a Member State or an Associated candidate country. At least one of these entities must operate a research infrastructure. In addition to entities from Member States or Associated States, organisations from third countries may also participate, with or without Community support, as specified in the “Rules for Participation” for FP6.

2.8.2 Communication Network Development

The objective of this scheme in support of existing research infrastructures is to create, in conjunction with the priority thematic research area on Information Society Technologies (IST), a denser network between related initiatives, in particular by establishing a high-capacity and high-speed communications network for all researchers in Europe (GÉANT) and specific high performance Grids and test-beds (GRIDs).

In general, the Communication Network Development scheme will be concerned with the development of a “cyber-infrastructure” for Research capitalizing on new computing and communication opportunities and will promote a further breadth and depth to the collaboration amongst researchers in Europe. In this context, broadband communication networks and Grid technologies are key; in general, they are also highly relevant to the political goals set out by the European Research Area and the eEurope+ initiative and should be used as a means to enhance scientific co-operation with third countries

2.8.3 Transnational Access

The objective of this scheme is to sponsor new opportunities for research teams and individual researchers to obtain access to major research infrastructures, which are unique or rare in Europe and provide world-class service essential for the conduct of top-quality research. Community support will cover up to 100% of the costs of providing access to an infrastructure for research teams working in Member States and Associated States other than that where the operator of the infrastructure is located. Access costs will be calculated either on the basis of the Unit Fee system, or of the actual additional costs connected with making the access available. Applications shall be made by the institutions operating the major research infrastructures. Opportunities for potential users in the infrastructures selected will be published on the Internet.

2.8.4 Design studies

The objective of this scheme is to contribute to feasibility studies and technical preparatory work concerning new infrastructures of European significance, undertaken by one or a number of national or international authorities. Studies related to future facilities of world-wide relevance which do not exist in Europe, but in which European institutions intend to participate, are also included. The upgrading of existing facilities may also be considered, provided the end result can be expected to be equivalent to, or capable of replacing, a new infrastructure. Applications shall be made by at least one national or international organisation. In addition to entities from Member States or Associated States, organisations from third countries may also participate, with or without Community support, as specified in the “Rules for Participation” for FP6.

2.8.5 Construction of new infrastructures

This scheme may provide limited support aimed at optimising the European nature of key new infrastructure of Europe-wide interest. Support may also be granted for a major enhancement or upgrading of existing infrastructures, in particular where this would constitute an alternative to the construction of a new infrastructure. Where appropriate, the scheme may also contribute to the construction of an infrastructure of world wide relevance that does not exist in Europe. In general, funding provided for new or enhanced infrastructures will be limited to the minimum necessary to catalyse the activity; the major part of construction and operation, and the long-term sustainability of the infrastructures in question being assured by national and/or other sources of finance. Applications shall be made by at least one national or international organisation. In addition to entities from Member States or Associated States, organisations from third countries may also participate, with or without Community support, as specified in the “Rules for Participation” for FP6.

Further information: <http://www.cordis.lu/fp6/infrastructures/>

2.9 *Marie Curie actions on mobility, training, knowledge transfer and excellence recognition*

These actions provide a variety of possibilities for individual researchers in different stages of their career as well as for institutions acting as hosts for these researchers. There will be no age limit; access to the different schemes is regulated by the definition of categories of experience (early-stage researchers means researchers within the first 4 years of research activity; experienced researchers are defined as those having at least 4 years of experience (or holding a PhD degree)). Some actions are open to experienced researchers with no more than 10 years research experience. The Marie-Curie actions typically require transnational mobility, i.e. a researcher cannot apply for a fellowship in his/her country of origin or residence.

2.9.1 Host-driven actions

Within these actions, support is provided for research organisations and enterprises for the provision of either transnational training or for knowledge transfer and mobility of individuals. Host institutions apply to the European Commission in response to a call for proposals. Successful hosts then promote the vacancies and select the best individual researchers themselves. The following actions are foreseen:

2.9.1.1 Marie Curie Research Training Networks (RTN)

RTNs will promote the training, mobility and professional development of researchers, through research and transfer of knowledge, within the frame of international collaborative research projects. Institutions involved in such projects can be universities, research centres, international organisations or enterprises mainly established in the EU or in an associated state. Fellows can be early-stage or experienced researchers from any country, but must be of different nationality from the one in which their host institute is based. Fellowships can range from three months up to three years.

2.9.1.2 Marie Curie Host Fellowships for Early Stage Research Training (EST)

ESTs are targeted at single and multiple partnerships from within higher education and research institutions, training centres and enterprises to reinforce their training capacity for researchers in the early stage of their career. Typically within the context of a PhD, training will focus on the acquisition of specific scientific and technological research competencies as well as complementary skills. The action will encourage researchers to take up long-term research careers and more co-ordinated approaches to the training at an international level. Training will be provided within fellowships of between three months and three years. The scheme will support early-stage researchers of all countries and nationalities.

2.9.1.3 Marie Curie Host Fellowships for the Transfer of Knowledge (ToK)

These actions are directed at European organisations in need of developing new areas of competence as well as at organisations in less-favoured regions. Transfer of knowledge will be supported by fellowships for experienced researchers of a duration between two months and two years. Fellows can be of any country or nationality other than that of the host organisation. There are two schemes contemplated:

- **Marie Curie Development Scheme** in which researchers transfer knowledge to develop the research potential of institutions. Entities in Less-Favoured Regions of the EU and in the Associated Candidate States will be given priority;
- **Marie Curie Industry-Academia Strategic Partnership Scheme** supporting long-lasting collaborations between enterprises and universities via exchange of researchers

2.9.1.4 Marie Curie Conferences and Training Courses (SCF, LCF)

These actions will enable researchers (with up to 10 years of research experience) to benefit from experience of leading researchers. Support will be available for the organisation of coherent series of specific training events (conferences, summer schools, laboratory courses etc.) and for the participation of researchers in large conferences selected for their specific training interest.

2.9.2 Individual-driven actions

These actions support individual researchers with a view to encouraging transnational mobility and to complementing individual competencies. Applications to the European Commission are made jointly by the fellow and in liaison with the host organisation. The following actions are foreseen:

2.9.2.1 Marie Curie Intra-European Fellowships (EIF)

These will allow experienced researchers who are nationals of an EU Member State or an Associated State to spend between one and two years doing research on a freely chosen topic in a research establishment in a Member or Associated country different from the country of their residence or origin.

2.9.2.2 *Marie Curie Outgoing International Fellowships (OIF)*

These will be awarded to experienced researchers from EU Member and Associated States to enhance their scientific excellence by working in a world-class research centre in a third country. The scheme includes a first phase abroad followed by a mandatory return phase in Europe. The overall duration can be up to three years. Stays of fellows range from one to two years for the outgoing phase plus up to one year for the return phase.

2.9.2.3 *Marie Curie Incoming International Fellowships (IIF)*

These aim at attracting top-class researchers from third countries to work in EU Member or Associated States with a view to developing mutually-beneficial research co-operation. For developing countries, emerging and transition economies, support for fellows to return to their country of origin may be included. Duration of stays can be one to two years (up to three years with return phase).

2.9.3 Promoting and recognising excellence

These actions focus on the promotion and recognition of excellence in European research, thereby increasing its visibility and attractiveness. The following actions are foreseen:

2.9.3.1 *Marie Curie Excellence Grants (EXT)*

These aim at the creation and development of research teams for leading edge or interdisciplinary research. The grant will cover a period of up to four years and will be based on a well-defined research programme around a researcher who has, early in her/his career, shown the potential to reach a high level of autonomy and excellence.

2.9.3.2 *Marie Curie Excellence Awards (EXA)*

These are scientific prizes to give public recognition to excellence achieved by former beneficiaries of EC mobility and training grants. Candidates may apply themselves or will be proposed by others.

2.9.3.3 *Marie Curie Chairs (EXC)*

This action supports world-class researchers of any nationality for a period of research and lecturing at a host organisation (e.g. an institution of higher education) and should in particular also attract European researchers of world reputation who are active outside the Member States and Associated States, to encourage them to resume or further develop their careers in Europe. Appointments will have a duration of one to three years.

2.9.4 Return and Reintegration Mechanisms

These mechanisms are aimed at supporting researchers' integration in their careers in Europe after a period of mobility. In both cases, they enable researchers to resume or continue their careers in their home country or elsewhere within a Member or Associated State. To take part, an individual researcher prepares and submits a proposal together with a host institution on the basis of a career development plan.

2.9.4.1 *Marie Curie European Reintegration Grants (ERG)*

These will be open to researchers who have just completed a Marie Curie fellowship of at least two years. The grant will consist of a lump sum in the form of a grant to be used within one year as a contribution towards the reintegration of the researcher in an organisation different from the one where the previous fellowship was held. Priority will be given to reintegration in the researcher's country or region of origin.

2.9.4.2 Marie Curie International Reintegration Grants (IRG)

To attract European researchers who have carried out research outside Europe for at least five years. This action consists of financial support for the professional reintegration projects in a host organisation located in a Member State or Associated State during two years.

3 The Sixth Framework Programme - Schematic overview of specific programmes, thematic and horizontal priorities and instruments

	Specific Programme Integrating and Strengthening the ERA											Specific Programme Structuring the ERA			
	Life sciences, genomics and Biotechnology for health	Information Society Technologies	Nano-technologies and nano-sciences, knknowledge-based multifunctional materials, new production processes and devices	Aeronautics and Space	Food Quality and Safety	Sustainable Development, Global Change and Eco-systems	Citizens and Governance in a knowledge-based society	RTD supporting policies and anticipating scientific and technological needs	Horizontal research activities involving SMEs	Specific measures in support of international cooperation	Strengthening the foundations of the ERA	Research and Innovation	Human Resources and Mobility	Research Infrastructures	Science and society
Network of Excellence	3	3	3	3	3	3	3	3							
Integrated Project	3	3	3	3	3	3	3	3							
Programmes implemented jointly by several Member States	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Specific Targeted Research Project	3	3	3	3	3	3	3	3		3					3
Specific Targeted Innovation Project											3				
Specific research projects for SMEs								3							
Integrated Infrastructure Initiative													3		
Marie Curie Mobility Actions									3			3			
Coordination Action	3	3	3	3	3	3	3	3		3	3	3		3	3
Specific Support Action	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Table 7 : Schematic overview on FP6 activities and instruments (only EC Framework Programme, for the Euratom Framework Programme on nuclear research a similar brochure is available)

4 Indicative Budget breakdown of FP6

	EUR million
EC Framework Programme	16 270
1. Focusing and integrating Community research	13 345
1.1 Thematic priorities ² :	11 285
1.1.1 Life sciences, genomics and biotechnology for health	2 255
1.1.1.1 <i>Advanced genomics and its applications for health</i>	1 100
1.1.1.2 <i>Combating major diseases</i>	1 155
1.1.2 Information society technologies ³	3 625
1.1.3 Nanotechnologies and nanosciences, knowledge-based multifunctional materials and new production processes and devices	1 300
1.1.4 Aeronautics and space	1 075
1.1.5 Food quality and safety	685
1.1.6 Sustainable development, global change and ecosystems	2 120
1.1.6.1 <i>Sustainable energy systems</i>	810
1.1.6.2 <i>Sustainable surface transport</i>	610
1.1.6.3 <i>Global change and ecosystems</i>	700
1.1.7 Citizens and governance in a knowledge-based society	225
1.2 Specific activities covering a wider field of research	1 300
1.2.1 Policy support and anticipating scientific and technological needs	555
1.2.2 Horizontal research activities involving SMEs	430
1.2.3 Specific measures in support of international co-operation	315
1.3 Non-nuclear activities of the Joint Research Centre	760
2. Structuring the European Research Area	2 605
2.1 Research and innovation	290
2.2 Human resources and mobility	1 580
2.3 Research infrastructures ⁴	655
2.4 Science and society	80
3. Strengthening the foundations of the European Research Area	320
3.1 Support for the co-ordination of activities	270
3.2 Support for the coherent development of policies	50
Euratom Framework Programme⁵	1 230
1. Priority thematic areas of research	890
1.1 <i>Controlled thermonuclear fusion</i>	750
1.2 <i>Management of radioactive waste</i>	90
1.3 <i>Radiation protection</i>	50
2. Other activities in the field of nuclear technology and safety	50
3. Activities of the Joint Research Centre	290
Total	17 500

Table 8 : Budget of FP6

² Including €285 million for international co-operation

³ Including up to €100 million for further development of Géant and GRID

⁴ Including up to €200 million for further development of Géant and GRID.

⁵ Details of the Euratom Framework Programme are given in a separate brochure (see http://europa.eu.int/comm/research/energy/index_en.html)

5 Who can participate?

Eligible participants in FP6 are legal entities (for example research institutes, universities and industry including SMEs, but also natural persons) **from any country in the world**. Different rules for participation and funding apply to different groups of countries. The following table gives an indicative overview for the specific programme “Integrating and strengthening the ERA”. Exact specifications and exceptions from the general rules will be given in the work programmes and calls for proposals. Special rules apply for the Marie Curie actions on mobility, training and excellence recognition.

Participant's country of establishment	Participation	Financing
European Union Member States ⁶ , Joint Research Centre)	No restriction	No restriction
Associated Candidate Countries ⁷	No restriction	No restriction
Other Associated Countries ⁸	No restriction	No restriction
International organisations of European interest	No restriction	No restriction
Russia, New Independent States, Mediterranean Countries, Western Balkans, Developing countries	No restriction over and above the minimum consortium composition	Within the limits of the budget available for specific measures in support of international co-operation
Third countries having a co-operation agreement ⁹	No restriction over and above the minimum consortium composition	If Community contribution is necessary and foreseen by the Work Programme
Other third countries	If participation is foreseen or if it is necessary for carrying out the project	If Community contribution is foreseen by the Work Programme or if it is essential for carrying out the project
Other international organisations	No restriction over and above the minimum consortium composition	If Community contribution is foreseen in the work programme or if it is essential for carrying out the

⁶ Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxemburg, The Netherlands, Portugal, Spain, Sweden, United Kingdom

⁷ Association to FP6 in force: Estonia (not Euratom FP6), Hungary, Latvia, Lithuania (not Euratom FP6), Poland (not Euratom FP6), Romania, Slovenia; Association not yet in force: Bulgaria, Czech Republic, Cyprus, Malta, Slovakia, Turkey (will enter into force when the countries inform the Commission that their internal adoption procedures are finalised)

⁸ foreseeable (association to FP6 is not yet in force for any of these countries, final list may change): Iceland, Israel, Liechtenstein, Norway, Switzerland

⁹ Argentina, Australia, Brazil, Canada, China, Chile, India, Japan, Kazakhstan, Russia South-Africa, Ukraine, USA (list as of September 2002, regular updates at <http://www.cordis.lu/fp6/>)

		project
--	--	---------

Table 9: Participation and funding overview

6 Flowchart: From proposal to contract

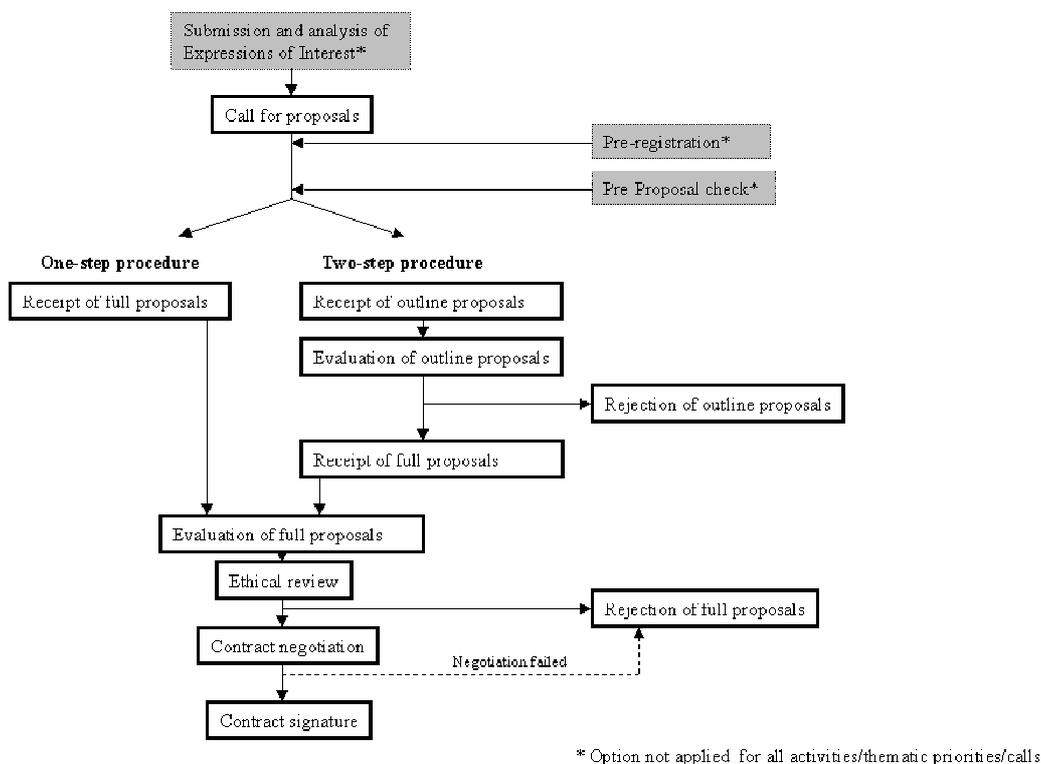


Figure 1: The submission and evaluation process in FP6

Additional explanations to Figure 1:

Expression of Interest: Before defining detailed thematic topics for future calls, the European Commission may invite the research community to submit ideas in the form of short and informal Expressions of Interest. This will be done through publication in the Official Journal and on the Internet. Proposals should be sketches of possible future projects and consortia. They are not subject to evaluation and ranking. Accordingly they can not be rejected either. Having submitted an Expression of Interest is not a pre-requisite for later participation in calls for proposals.

One-stage and two-stage procedure: Besides the usual one-stage submission, where a full-fledged proposal has to be submitted as the basis for evaluation, in FP6 the European Commission may also have recourse to a two-stage submission, where in a first stage an outline or an incomplete proposal will be evaluated. Only proposers having successfully passed this first evaluation will be asked to submit a full and complete proposal.

Pre-registration: Proposers are encouraged to pre-register their proposals electronically via the electronic proposal submission system on CORDIS.

Pre-proposal check: This option may be offered by the European Commission to potential participants for checking the relevance and eligibility of proposals - not the scientific quality. The purpose is to advise potential proposers on whether proposals seem to be within the scope of the call.

The co-ordinator sends a short description of the proposal he/she intends to submit, containing also details of the proposed project consortium, to allow an examination of the eligibility of the potential proposal.

In response the European Commission services will send by fax or electronic mail a standardised check list to the proposal co-ordinator - normally within 5 working days.

For more details see: Guidelines on Proposal Evaluation Procedures
<http://www.cordis.lu/fp6/>

7 Contractual relations

For proposals selected for funding, the European Commission will conclude a contract establishing rights and obligations of all participants. This concerns in particular provisions for the scientific, technological and financial monitoring, for the updating of objectives, changes in consortium membership, payment of the Community financial contribution and rules for dissemination and use of knowledge. The contract will be concluded between the European Commission and all participants. The European Commission has elaborated **model contracts** for the different instruments to facilitate the drawing up of individual contracts (see <http://www.cordis.lu/fp6/contracts/>)

To fix the conditions and modalities of co-operation between partners, the conclusion of a **consortium agreement** is obligatory for most of the actions (in particular for Networks of Excellence and Integrated Projects, the consortium agreement has to be signed before the signature of a contract). The European Commission will not be a party within this agreement and will not have to give its approval to it. It will however provide a checklist with points potentially to be covered by a consortium agreement. <http://www.cordis.lu/fp6/contracts/>

8 Intellectual Property Rights

In the rules for participation for FP6, a minimum set of basic principles concerning ownership of knowledge and access rights are fixed, leaving considerable flexibility to adapt to the specific situation of each individual project. More specific provisions may be specified in a consortium agreement.

The IPR provisions distinguish between two basic types of intellectual property:

Knowledge: all kind of intellectual property generated during the contract that did not exist before.

Pre-existing know-how: intellectual property owned by the partners before the start of the project (“background”) or created outside project during its duration (“sideground”).

Ownership resides with participants generating the knowledge (except for SME actions and activities where full costs are funded up to 100%). Transfer of ownership has to be announced to the other participants and to the European Commission. The European Commission may object to the proposed transfer.

The provisions governing access rights are much simpler than in FP5, and are summarised in the following table. An additional novelty in FP6 is that a participant may exclude – under specific conditions - pieces of pre-existing know-how from the obligation to grant access rights to the other participants

	Access rights to pre-existing know-how	Access rights to knowledge
For carrying out the project	<p>If a participant needs them for carrying out its own work under the project</p> <p>Royalty-free unless otherwise agreed before signing the contract</p>	Royalty-free
For use (exploitation and/or further research)	<p>If a participant needs them for using its own knowledge</p> <p>Non-discriminatory conditions to be agreed</p>	Royalty-free unless otherwise agreed before signature of the contract
	<p>Possibility for participants to agree on exclusion of specific pre-existing know-how before signature of the contract (or before entry of a new participant)</p>	

9 Rules on ethics to be applied in FP6

Researchers participating in Community funded projects must respect fundamental ethical principles, as set out for instance in the “Charter of Fundamental Rights of the EU”, as well as relevant international regulations/guidelines (by the Council of Europe, UN, UNESCO, WHO etc.). Researchers also have to follow European and international regulations/guidelines on animal welfare.

Research proposals, must conform to current legislation and regulations in the countries where the research will be carried out. They must describe the ethical implications of the research and, where required by national legislation or rules, participants must seek the approval of the relevant ethics committees prior to the start of the RTD activities that raise ethical issues.

The European Commission services will carry out an ethical review of those research projects containing ethically sensitive questions and, in some cases, an ethical monitoring may take place during the research project.

Some fields of research are excluded from funding:

- research activity aimed at human cloning for reproductive purposes;
- research activity intended to modify the genetic heritage of human beings which could make such changes heritable
- research activities intended to create human embryos solely for the purpose of research or for the purpose of stem cell procurement, including by means of somatic cell nuclear transfer. In addition during the year 2003 the European Commission will not fund research involving the use of human embryos or embryonic stem cells except for banked or isolated human embryonic stem cells in culture.

10 European Investment Bank & European Investment Fund— financing possibilities

As an FP6 participant, you may consider taking advantage of **loans** from the European Investment Bank (EIB; www.eib.org), European Investment Fund (EIF; www.eif.org) **venture capital** and/or EIF **guarantees** for R&D. Indeed, Commission research grants may be combined with EIB loans for research programmes (partly grant-aided) and covering the development stages through to commercialisation and full production.

EIB and EIF operate on the basis of the size of the borrower, the size of the project, and the scale of the finance. Large borrower requiring large amounts, including public or private research centres and promoters of investment in research infrastructure, may contact the EIB directly. (Telephone +352 43791 and ask for the lending department desk of the country where the main investment is taking place.) Typically, €20 million (or 50% of an investment of €40 million) represents the minimum size of EIB direct financing. However, in the context of FP6, EIB would consider the smaller size requests of, in particular, second-tier companies or large SMEs on a case-by-case basis. For

even smaller operations concerning, in particular, SMEs¹⁰, EIB and EIF operate through intermediaries. Interested FP6 participants should contact them. (See the table below.)

Facility	EIB and EIF intermediaries
EIB loan	"About EIB>Partners>The banking community>Intermediary banks and financing institutions" (http://www.eib.org/news/news.asp?cat=46&news=33)
EIF venture capital	"Venture Capital>List of Investments" (http://www.eif.org/vca/list.htm)
EIF guarantees	"Portfolio Guarantees >List of deals" (http://www.eif.org/pg/list.htm)

For further information and answers to FAQs, consult www.eib.org/fprtd-info (tentative).

11 Access to Information and Assistance

To help potential participants in FP6, several systems of information and assistance are available:

CORDIS: All the information necessary to participate in the Framework Programme, including an Electronic Proposal Submission System (EPSS) is available on the Internet at CORDIS, the **CO**mmunity **R**esearch and **D**evelopment Information **S**ystem (<http://www.cordis.lu/fp6/>).

National Contact Points (NCPs): The first address for direct advice and individual assistance are National Contact Points (NCPs) established in all Member States and Associated States. NCPs will provide help on all aspects of FP6 in the national language. Contact details for all NCPs are available at <http://www.cordis.lu/fp6/ncps/>

European Commission FP6 Infodesks: The European Commission infodesks for the thematic and horizontal priorities offer direct contact to European Commission services for questions that cannot be answered by the NCPs:

¹⁰ EIB and EIF define SMEs as enterprises with fewer than 500 employees and less than €75 million in net fixed assets. Generally, €12.5 million (up to 50% of investment cost) represents the maximum EIB individual allocation under SME schemes. Allocation are usually far smaller

Theme/Action	Infodesk e-mail
Life sciences, genomics and biotechnology for health	
- <i>Advanced genomics and its application for health</i>	rtd-genomics-biotec@cec.eu.int
- <i>Combating major diseases</i>	rtd-diseases@cec.eu.int
Information society technologies	ist@cec.eu.int
Nanotechnologies and nanosciences, multifunctional materials and new production processes and devices	rtd-nmp@cec.eu.int
Aeronautics and space	rtd-aerospace@cec.eu.int
Food quality and safety	rtd-food@cec.eu.int
Sustainable development, global change and ecosystems	
- <i>Sustainable energy systems</i>	rtd-energy@cec.eu.int tren-energy@cec.eu.int
- <i>Sustainable surface transport</i>	rtd-transport@cec.eu.int
- <i>Global change and ecosystems</i>	rtd-sustainable@cec.eu.int
Citizens and governance in a knowledge-based society	rtd-citizens@cec.eu.int
Specific activities covering a wider field of research	
- <i>Policy support and anticipating scientific and technological needs</i>	Policy support: to be defined NEST: rtd-nest@cec.eu.int
- <i>Horizontal research activities involving SMEs</i>	research-sme@cec.eu.int
- <i>Specific measures in support of international co-operation</i>	rtd-inco@cec.eu.int
Research and innovation	innovation@cec.eu.int
Human resources and mobility	rtd-mariecurie-actions@cec.eu.int
Research and infrastructures	rtd-infrastructures@cec.eu.int
Science and society	rtd-sciencesociety@cec.eu.int
Support for the coordination of policies	rtd-coordination@cec.eu.int
Support for the coherent development of R&D policies	rtd-policies@cec.eu.int
Euratom	rtd-euratom@cec.eu.int

National liaison offices: Several countries have liaison offices in Brussels representing their research organisations. These are also offering advice and assistance. They are interconnected in an Informal Group of Liaison Offices (IGLO). A complete list of contact details is available on the website of the group: <http://www.iglortd.org>.

Innovation Relay Centres: The Innovation Relay Centres (IRCs), present in many regions of the EU and candidate countries, can also be of assistance, especially on aspects related to innovation, technology transfer, SMEs. They are reachable via: <http://irc.cordis.lu/>

The **Pan-European Researcher's Mobility Portal**, on line as from May 2003, offers the opportunity to publish vacancies for research opportunities. In addition it offers adequate information on available grants and opportunities for researchers in Europe as well as on questions related to visa, access to employment, social security rights, fiscal matters and cultural aspects when

researchers move to another country. Moreover, researchers will have free access through the Portal to a Europe wide customised assistance service offered by the **European Network of Mobility Centres** to be launched in spring 2003. These Centres will assist researchers in all matters related to their professional and daily lives, including practical information on housing, schooling, day-care or language courses.

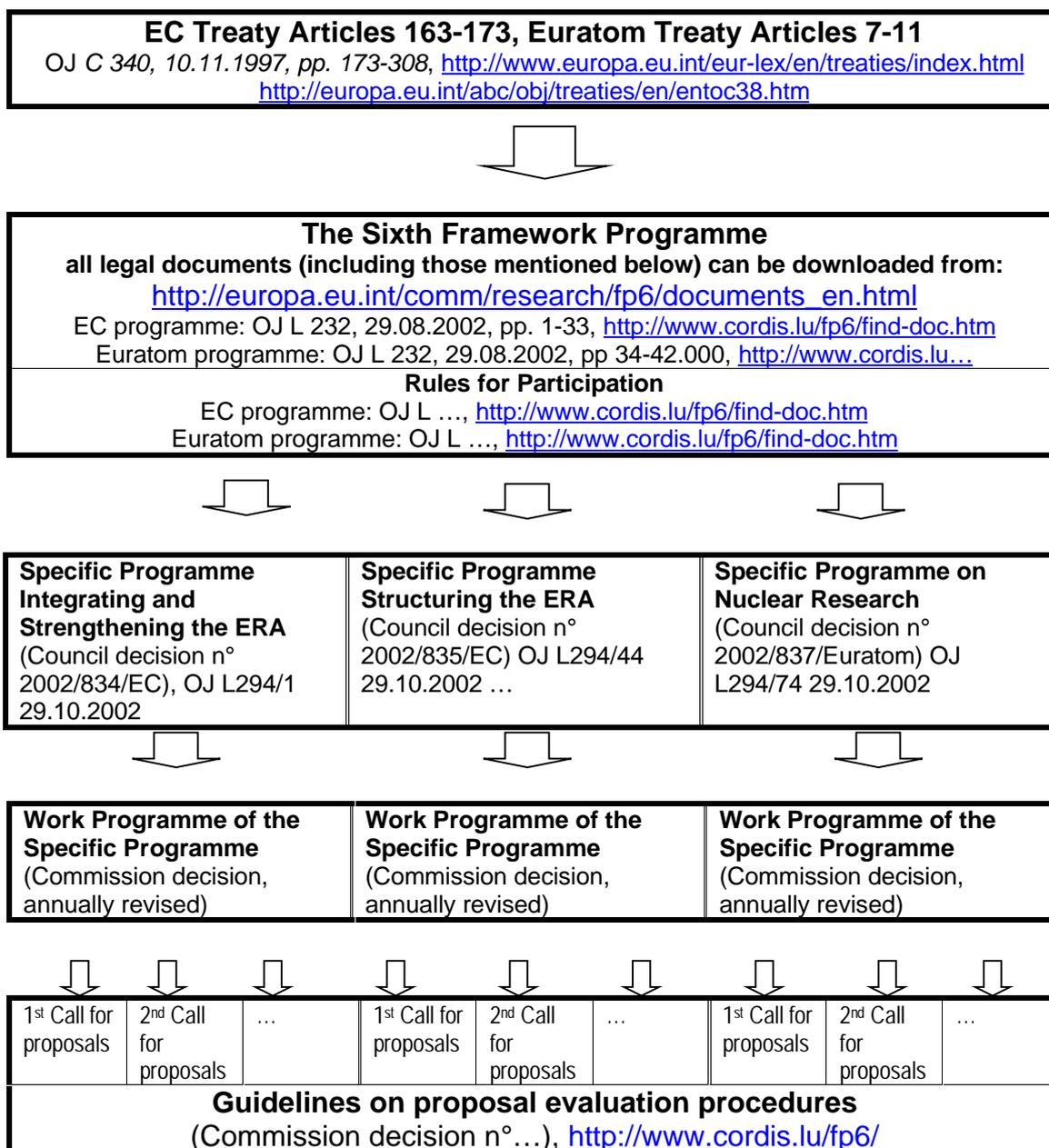
Information on the launch of these mobility-related services will be published at <http://europa.eu.int/comm/research/>.

Gate2Growth: Gate2Growth provides a one-stop-shop open for potential and current contractors taking part in Community funded projects seeking funding for the exploitation of research results. It provides tools for business plan preparation and offers a diagnostic service for business plans. Additionally, the user can list his or her business plan in the database of investment opportunities for free. Listing a business plan in the database of investment opportunities enables Gate2Growth to support the project and to check its interests with investment sources across Europe. Gate2Growth can provide access to expert advice and guide the user throughout the process if necessary: <http://www.Gate2Growth.com>.

The **IPR-Helpdesk** provides assistance to potential and current contractors taking part in Community funded RTD projects on IPR issues and in particular on Community diffusion and protection rules applied for transnational research projects. More information can be found in the web site www.ipr-helpdesk.org.

12 Reference documents:

The legal basis of the Framework Programme is a hierarchical set of legal documents derived from articles 163 to 173 of the EC Treaty and, for the part on nuclear research, from article 7 of the Euratom Treaty:



To actually prepare and submit a proposal, an information package specific to the call and to the instrument under consideration is necessary. Information packages will be available on CORDIS: <http://www.cordis.lu/fp6/calls.htm>.