# First FP7 Monitoring Report

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### 0. EXECUTIVE SUMMARY

This first FP7 Monitoring Report covers the year 2007 and is the first one based on a completely new approach: While in FP6 and previous Framework Programmes monitoring had been implemented through annual panels of independent experts which selected specific areas of FP implementation and performance to analyse and report on, the FP7 monitoring system is designed as an internal management tool, based on a coherent system of indicators. The present is thus intended to be a first of a series of annual reports, all structured along the same principles and thus allowing for the first time a kind of longitudinal analysis of the FP7 implementation.

This document explains in Part 1 the new monitoring system in more detail. Part 2 presents a detailed factual analysis of the main elements of the overall FP7 implementation, whereas Part 3 takes a closer look at some new elements and specific fields of the FP. The current situation with regard to the simplification process is described in Part 4, whereas Part 5 is a first attempt to look at impacts and achievements.

Although the report is based essentially on existing material which has been already (at least partially) released, it offers for the first time a more holistic view on the different strands of activities.

A couple of selected facts and figures for 2007 in a snapshot style might illustrate the relevance of such a  $360^{\circ}$  analysis:

- § For calls launched in 2007, some 23.000 applications were received and some 2.800 proposals finally retained.
- § Proposals retained included some 19.500 applicants and requested Community funding of €5,7 billion.
- § 10% of these applicants in retained proposals are located in the new Member States.
- § In terms of funding, the Russian Federation, India, China and the USA are the "Third Countries" that benefit the most from the FP.
- § About 19% of the project contact points (team leaders) are women.
- § 96% of the evaluators found the quality of the FP7 proposal evaluation they attended "satisfactory" to "excellent", 91% judged it "similar" or "better" than national proposal evaluation exercises they attended.
- § Only 0,045% of proposals had to be re-evaluated following the newly introduced redress procedure.
- § Time to grant is overall still in a range between 10 and 12 months.
- § 245 ethical reviews were launched, with no project being stopped.
- § NCPs recognise a considerable progress in simplification from FP6 to FP7.
- § New rules in FP7 will lead to a 90% reduction for the number of ex-ante financial capacity checks as well as for the number of audit certificates required.

The next Annual Monitoring Report, covering the activities in 2008, will for the first time allow for some comparative analysis over time in order to identify trends and developments in the FP7 implementation.

As this report represents a pioneering exercise, feedback from the readers and users is most welcome to help us improving the next annual reports under the FP7 system.

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### 1. Monitoring System for FP7

### 1.1 Context

The new monitoring system is based on Article 7(1) and 6(1) of the EC and Euratom FP7 Decisions<sup>1</sup> which states that:

"The Commission shall continually and systematically monitor the implementation of the Seventh Framework Programme and its specific programmes and regularly report and disseminate the results of this monitoring."

Further information on the detail of the new system is provided by the Ex ante Impact Assessment on FP7<sup>2</sup> which was presented by the Commission at the same time as the FP7 proposal:

"Monitoring of implementation management would be ensured by operational senior management within the Commission on a continuous basis with annual check points and using a common set of management performance indicators. Adequate resource would be given to this process. The annual results of this exercise will be used to inform senior management and as an input to the ex post assessment exercise."

The commitment made in the FP7 Ex ante Impact Assessment for a new monitoring system reflected the need to update the evaluation system generally, particularly in the light of the increasing scale and complexity of the Framework Programme.

The introduction of a new monitoring system that is also supposed to complement, where applicable, the DG RTD evaluation strategy, is further supported by the 2007 Special Report<sup>3</sup> of the European Court of Auditors concerning the Commission's system for evaluation and monitoring the Framework Programmes where the need for better coordination of evaluation and monitoring activities and the need to improve the relevance and credibility of these activities in terms of the decision making process were highlighted.

The changes to evaluation and monitoring introduced under FP7 are predominantly directed towards making these activities better suited to support policy and decision making, to improve their credibility and utility by strengthening the quality and consistency of the evidence base, and to enhance the overall coherence of the separate evaluation and monitoring activities carried out. Coherence in this context includes that between evaluation and monitoring activities within a given period and over time, so as to allow a comprehensive

Council Decision 2006/970/EURATOM of 18 December 2006 concerning the Seventh Framework Programme of the European Atomic Energy Community (Euratom) for nuclear research and training activities (2007 to 2011).

<sup>&</sup>lt;sup>1</sup> Decision No 1982/2006/EC of the European Parliament and of the Council of 18 December 2006 concerning the Seventh Framework Programme of the European Community for research, technological development and demonstration activities (2007-2013).

<sup>&</sup>lt;sup>2</sup> This was explained more fully in the Commission staff working paper: Annex to the Proposal for the Council and European Parliament decisions on the 7th Framework Programme (EC and Euratom) - Main Report: Overall summary – Impact assessment and ex ante evaluation (SEC(2005)430)

<sup>&</sup>lt;sup>3</sup> SPECIAL REPORT No 9/2007 concerning 'Evaluating the EU Research and Technological Development (RTD) framework programmes — could the Commission's approach be improved'? together with the Commission's replies (2008/C 26/01)

picture to be built up. It also means ensuring that evaluation and monitoring fit with other similar activities for reporting and assessment such as the Annual Report and the components of the management cycle such as the Annual Management Plan (AMP) and Annual Evaluation Review (AER). The annual Monitoring exercise will also contribute to the Progress Report on FP7 implementation, due in 2009, and the FP7 Interim Review, foreseen in 2010.

### 1.2 Key Features, Coverage, Indicators

### 1.2.1 Key Features

Taking into account both Article 7.1 of the FP Decision and the FP7 Ex ante Impact Assessment, the new monitoring system is:

- § Carried out by the Commission internally;
- § An annual exercise with resulting report covering the year preceding the report's publication;
- § Based on performance indicators;
- § Targeted at the needs of senior Commission management;
- § Laying the basis for the FP level evaluation exercises such as the Interim and Ex post Evaluations of FP7.

Further features are desirable in view of the need to minimise burden on services, maximise the potential impact and utility of the system and promote transparency:

- § Complementary to existing systems of data gathering and monitoring at operational level and within different DGs; extensive use made of existing data sources and information from other reports (e.g. Annual Management Plan, Annual Activity Report, Art. 173);
- § Collection of new data to be kept to a minimum;
- § Number of indicators to be kept to a minimum (following the style being adopted in the Annual Management Plan);
- § The indicators selected to allow coverage of the entire range of activities carried out under the FP, while also ensuring that the assessment is sensitive to the distinctive character of each element;
- § Coverage predominately for implementation issues and in a more limited way (reflecting data availability) research outputs;
- § Review after the first full implementation.

### 1.2.2 Coverage

The new monitoring system is intended to cover all activities under the Framework Programme. The one exception is the direct (in house) research actions carried out by the Joint Research Centre  $(JRC)^4$ .

Since this monitoring report addresses activities being carried out in 2007, activities under FP6 and FP7 are covered. The analysis clearly distinguishes between the different FPs wherever possible. It should be kept in mind that as 2007 is the first full year of FP7

Monitoring of JRC direct actions is carried out through the Annual Activity Reports (<a href="http://ec.europa.eu/atwork/synthesis/aar/doc/jrc\_aar.pdf">http://ec.europa.eu/atwork/synthesis/aar/doc/jrc\_aar.pdf</a>) and by the JRC Board of Governors based on the information contained in the JRC Annual Report

implementation, only limited information (in particular information related to FP7 grant agreements) is available.

One consequence of the limitations in data availability is that it is not possible to be both informative and consistent in the definition of "2007" throughout the report. Where reference is made to "2007 calls", calls with a "2007 call-ID" are included. Where little or no information is available for 2007, the report refers to the latest available data.

### 1.2.3 Indicators

The core of the new monitoring approach involves the selection of key indicators on priority and sensitive issues. Taken together, these are expected to provide a clear snapshot of the effectiveness and efficiency Framework Programme implementation, as well as the level and quality of output. The list of indicators and sub-indicators for the first full implementation of the new monitoring system is presented in Table 1. Further details, including the main data sources, are provided in Annex 1.

Table 1: List of key indicators used for the first piloting full implementation of the new monitoring system

	INDICATOR / ISSUE	Sub-indicator						
		1.1	Number of attendees at launch days					
1.	Promotion of FP7	1.2	Number of information days					
		1.3	Commission organised meetings of NCPs					
		2.1	Success rate (overall) by priority area and funding scheme					
2	Dayformones of the calls	2.2	Success rate for different types of organisation by priority area and					
2.	Performance of the calls	2.3	funding scheme Success rate for different types of organisation by priority area and					
		2.3	funding scheme & success rates per country					
		3.1	Overall quality assessment of the proposal evaluators on the FP					
		3.2	proposal evaluation process (evaluators survey)  Assessment of quality by the evaluators between the FP evaluation					
3.	Performance of the proposal	3.2	process and other equivalent systems (evaluators survey)					
	evaluation and redress	3.3	Time to contract/grant					
	procedures	3.4	Percentage of experts reimbursed within the specified 45 days					
		3.5	Redress cases upheld (i.e. leading to a re-evaluation) – numbers and percentages					
4.	Quality of on-going research	4.1	Average results of independent project review process by priority area					
	projects	4.2	Percentage of projects by priority area covered by reviews					
5.	Project performance by outputs	5.1	Average number of project publications per project by priority area and funding scheme					
		5.2	Average number of other forms of dissemination activities per project by priority area and funding scheme					
		5.3	Average number of different types of intellectual property protection per project by priority area and funding scheme					
		6.1	Total number of active projects by priority area					
6.	FP activity	6.2	Average financial size of projects by priority area and funding scheme					
Ο.	i r activity	6.3	Participation by types of organisation by priority area funding scheme					
		6.4	Participation totals per country					
		7.1	Number of male and female coordinators in proposals					
		7.2	Number of male and female coordinators in projects					
7.	Achieving gender equality	7.3	Gender breakdown (by seniority) of project participants					
		7.4	Percentage of male and female members in Advisory Groups and Programme Committees					
		8.1	Number of projects going through the review process/ % by area/ programme					
8.	Observing sound ethical principles in FP research	8.2	Number of ethical reviews where the result showed sufficient or insufficient attention had been given					
	principles in the research	8.3	Number of projects stopped as a results of the ethical review					
		8.4	Number of screenings by services					
9.	Performance of International Cooperation activities	9.1	Total numbers of participations of 3 <sup>rd</sup> countries by priority area and funding scheme					
		9.2	Success rates of 3 <sup>rd</sup> countries in calls by priority area and funding scheme					
		9.3	EC contribution to 3 <sup>rd</sup> countries					

	9.4 Number of international outgoing / incoming fellowships
	10.1 Do stakeholders perceive that the FP is getting simpler to use in terms of financial and administrative procedures?
10. Simplification of the FP	10.2 How do stakeholders find the ease of use of the FP compared to similar international research actions and large national schemes?
	10.3 Are there any aspects of FP procedures which are adversely affecting to a significant extent the quality of research carried out and the quality of participation in the FP?

### 2. FP7 IMPLEMENTATION IN 2007 – GENERAL OVERVIEW

### 2.1 Aims and Objectives of FP7

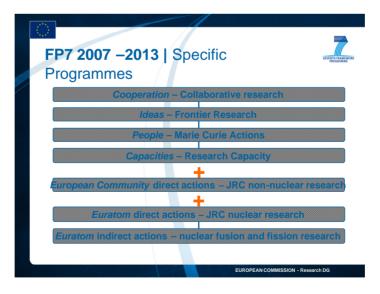
The legislative basis for FP7<sup>5</sup> states that "the overriding aim of the Seventh Framework Programme is to contribute to the Union becoming the world's leading research area. This requires the Framework Programme to be strongly focused on promoting and investing in world-class state-of-the-art research, based primarily upon the principle of excellence in research...The objectives...should be chosen with a view to building upon the achievements of the Sixth Framework Programme towards the creation of the European Research Area and carrying them further towards the development of a knowledge-based economy and society in Europe which will meet the goals of the Lisbon strategy in Community policies."

### 2.2 Structure and Novelties of FP7

### 2.2.1 Structure

A new structure was designed to capture the broad range of research activities funded by the European Union under FP7. The broad objectives of FP7 have been grouped into four categories: "Cooperation", "Ideas", "People" and "Capacities". For each type of objective, there is a specific programme corresponding to the main areas of EU research policy. In addition, the Joint Research Centre's (JRC) direct actions relating to non-nuclear research are grouped under a specific programme with its own budget allocation. JRC direct actions in the field of nuclear research and the indirect actions supported by the EURATOM 7<sup>th</sup> Framework for Programme for Nuclear Research and Training Activities comprise distinct strands of FP7. This structure is illustrated in the diagram below.

Figure 1: Structure of FP7 - Specific Programmes



<sup>&</sup>lt;sup>5</sup> Decision No 1982/2006/EC of the European Parliament and of the Council of 18 December 2006 concerning the Seventh Framework Programme of the European Community for research, technological development and demonstration activities (2007-2013).

That structure can be further broken down into the general headings given in the diagram below. In broad terms:

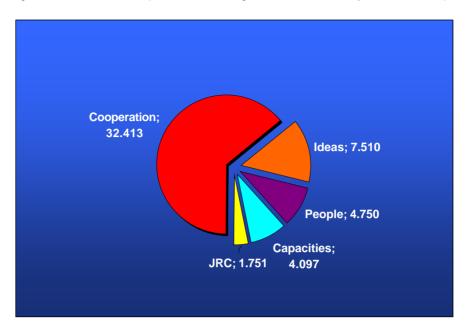
- § The "Cooperation" programme provides project funding for collaborative, transnational research. The programme is organised through thematic priorities such as health, energy, transport etc.
- § The "Ideas" programme provides project funding for individuals and their teams engaged in frontier research. This programme is managed by the European Research Council (ERC).
- § The "People" programme funds actions to improve the mobility of researchers between sectors and countries world wide. It is managed under the Marie Curie programme.
- § The "Capacities" programme funds actions that are designed to improve Europe's research infrastructure and the research capacity of SMEs. It also hosts smaller programmes relating to *Science in Society*, *Regions of Knowledge* and *International Cooperation*.

Figure 2: Structure of FP7 – Thematic Areas

	Health
	Food, Agriculture, and Biotechnology
	Information and Communication Technologies
Z O	Nanosciences, Nanotechnologies, Materials and new Production Technologies
Ĕ	Energy
R	Environment (including Climate Change)
COOPERATION	Transport (including Aeronautics)
S	Socio-economic sciences and Humanities
	Space
	Security
	General Activities
IDEAS	Starting Independent Researcher Grants
(ERC)	Advanced Investigator Grants
Ø	Initial Training of Researchers
PEOPLE (Marie Curie Actions)	Lifelong Learning and Career Development
PEOPLE farie Cur Actions)	Industry - Academia Partnerships / Pathways
PE Mari Ac	The International Dimension
5	Specific Actions
	Research Infrastructures
S	Research for the Benefit of SMEs
CAPACITIES	Regions of Knowledge
AC	Research Potential
AP	Science in Society
ပ	Coherent Development of Research Policies
	Activities of International Cooperation
EURATOM	Fusion Energy
	Nuclear Fission and Radiation Protection
JOINT RESE	EARCH CENTRE (JRC) Direct Actions

The budget breakdown for each of these elements is shown below.

Figure 3: FP7 budget breakdown in € million (EURATOM FP budget of €2.7 billion over 5 years not included).



### 2.2.2 Novelties

FP7 builds on the achievements and good practice of earlier Framework Programmes and there is a good deal of continuity both at an operational level and in terms of strategic objectives. There are, however, some novelties which represent a significant change compared to previous Framework Programmes. These are highlighted below.

The European Research Council: The European Research Council (ERC) is the first pannational European funding body set up to support investigator-driven frontier research. It was formally launched in February 2007. Its main aim is to stimulate scientific excellence by supporting and encouraging the very best scientists, scholars and engineers to be adventurous and to take risks in their research. ERC grants are awarded through open competition to projects headed by starting and established researchers, irrespective of their origins, who are working or moving to work in Europe - the sole criterion for selection is scientific excellence. The aim here is to recognise the best ideas, and retain and confer status and visibility to the best brains in Europe, while also attracting talent from abroad. It currently operates two major grant schemes: The ERC Starting Independent Researcher Grant scheme (for early career researchers) and the ERC Advanced Investigator Grant scheme.

Joint Technology Initiatives (JTIs): JTIs are one of the flagships of FP7. JTIs are public-private partnerships set up at European level in the field of industrial research, in order to boost European competitiveness in key areas. They are legally established bodies ('Joint Undertakings'), set up on the basis of Article 171 of the EC Treaty. Strategic Research Agendas have been developed for the areas addressed by JTIs through intense collaboration between industry (including SMEs) the research community, civil society organisations and other stakeholders. The role of European Technology Platforms has been crucial in this consultation process. In line with the FP7 Cooperation Specific Programme, Council Regulations have been adopted in the following four areas on the basis of Commission proposals:

- § Innovative Medicines Initiative (IMI)
- § Embedded Computing Systems (ARTEMIS)
- § Aeronautics and Air Transport (Clean Sky)
- § Nanoelectronics Technologies 2020 (ENIAC)

The Commission proposal in relation to a fifth JTI - *Hydrogen and Fuel Cells (FCH)* - was adopted and submitted to the Council and Parliament in October 2007.

Redress Procedure: The quality of Commission evaluations have been consistently rated very highly by the experts who take part (see Section 2.8). In order to ensure that this standard is maintained, and that the evaluation process is consistent with the principles of transparency and equal treatment that underpins all Commission evaluations, a formal redress procedure has been introduced as part of FP7 (see FP7 Rules for Participation1 (EC, article 16.3; Euratom, article 15.3). The procedure also has the advantage of formalising, in a more coherent way, the *ad hoc* approaches for dealing with complaints that existed (at least in part) in previous programmes.

Guarantee Fund: The Guarantee Fund is a mutual benefit instrument that establishes solidarity among participants in research projects. It replaces the financial collective responsibility between participants that was a feature of FP6. It aims primarily at covering the financial risks incurred by the Community and the participants during the implementation of the projects. It can be viewed as a kind of insurance contract by the participants in the research project to protect against financial losses that might be incurred. The introduction of the fund also allows the abolition of ex ante financial viability checks for the majority of participants, thereby helping to reduce the overall administrative burden on the research community.

Risk-sharing Finance Facility (RSFF): It has long been acknowledged that finding private funding sources for R&D projects can be difficult due to a number of factors – the complex products and technologies involved, the market for these technologies and products is often unproven, and the intangible assets underpinning them can be difficult for the financial sector to manage and evaluate.

In response to these difficulties, the European Commission and the European Investment Bank (EIB) have joined forces at the outset of FP7 to set up the Risk Sharing Finance Facility (RSFF). RSFF is an innovative scheme to improve access to debt financing for private companies or public institutions promoting activities in the field of research, development and innovation (RDI). RSFF is built on the principle of credit risk sharing between the European Community and the EIB and extends therefore the ability of the Bank to provide loans or guarantees with a low and sub-investment grade risk profile (involving financial risks above those normally accepted by investors). The facility will create an additional financing capacity of up to €10 billion in support of eligible RDI activities.

### 2.3 Awareness Raising and Launch Events

The European Commission Research web site on *Europa* has currently over 25.000 pages and provides up-to date information on latest decisions or latest advances in European Research. In 2007, 7,5 million visits were counted for this site leading to 16,65 million page views.

CORDIS, the Community Research and Development Information Service for Science, Research and Development, is run separately and is designed primarily for current and potential participants in the Framework Programmes. In addition to being the official source of information on FP7, CORDIS is intended to enhance exploitation of research results and to promote the dissemination of knowledge. Key figures for 2007 are shown below.

Table 2: CORDIS usage statistics in 2007

MICITO	Total amounts of visits	40.807.258
VISITS	Daily average of visits	111.495
PAGES	Total amount of page accesses	73.692.567
	Number of users ( IP addresses)	343.595
USERS	With only one visit	60.753
	With >1 visit	282.842
DOCUMENTS	Number of documents downloaded (correct & incorrect)	7.510.175
DOCUMENTS	Total size of documents downloaded	2.845,820 GB

National Contact Points (NCPs) play an essential role in providing information and assistance to potential applicants and are hence vital for ensuring transparency and equal access to the Framework Programmes. Moreover, by transnational networking and by facilitating EU wide integration of research, they can contribute significantly to the implementation of the FP.

In December 2007, guidelines for establishing and operating the NCP systems for FP7 and for their relations with the Commission services and each other have been published<sup>6</sup>. These guidelines address the network architecture, the nomination and recognition process and the operational modalities.

For the launch of FP7, the Commission organised two major training events for all NCPs on 11-12 and 19-20 December 2006 with around 800 participants. Meetings of the national NCP coordinators were organised on 9 February and 15 October 2007. Two further meetings for the FP7 NCPs on legal and financial matters were organised on 18 June 2007 and 8 October 2007, both attended by around 55 participants. The June meeting was dedicated to legal and financial issues related to the FP7 grant agreement, while the redress procedure in relation to proposal evaluation was one of the topics addressed by the second meeting.

Thematic NCP meetings were organised by the operational Directorates. Given the different areas and levels and also the complexity of the NCP system, numbers are difficult to retrieve. Nevertheless, a 2007 survey of NCPs regarding FP7 promotion and implementation issues, (see 2.13) provides some information on numbers of Launch Days and Info Days. These were broken down according to Thematic Priorities, Specific Programmes and the Framework Programme in general. Although there were differences in the interpretation of an event among the respondents, a first order analysis shows a great deal of activity in promoting FP7 in the Member States. All respondents reported at least one big launch event taking place in 2007 with several Member States having numerous (up to 50) smaller launch events. The number of participants ranged from hundreds in smaller countries, to several thousands in larger countries. Most Member States chose to focus on the Thematic Priorities and Specific Programmes, with considerably more Info Days taking place on these topics than for the Framework Programme in general.

### 2.4 General Participation Patterns

This chapter is aiming at providing a comprehensive statistical overview on the FP7 implementation in 2007. Data presented are mainly originating from the CORDA data

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<sup>&</sup>lt;sup>6</sup> Guiding principles for setting up systems of National Contact Points (NCP systems) for the Seventh EU Framework Programme on Research and Technological Development (FP7) (December 2007)

warehouse. Further details can be found in the document FP7 Subscription and Performance during the first year of implementation, European Commission, June 2008.

### 2.4.1 Overall participation and success rates

### 2.4.1.1 Calls and subscription

The report is based on statistical data collected for 54 calls for proposals which were concluded at the time of data extraction (25/02/2008), 46 of which were one-stage calls. "Concluded" in this case means that data on the evaluation and selection outcome are available and have already been communicated to the respective FP7 Programme Committees.

These calls attracted 23.202 applications for funding, half of which (11.746) were submitted to one-stage calls.<sup>7</sup>

Much of the analysis of participation patterns and success rates in this report is based on the dataset of "included proposals" .This dataset excludes:

- § ineligible proposals, i.e. submitted proposals that do not fulfil the formal eligibility criteria set by the respective calls for proposals;
- § duplicates as well as proposals that are withdrawn by the project coordinators;
- § in the case of two-stage calls, all eligible first stage proposals.

. Almost half of all submitted proposals (12.442) are included and almost a quarter of included proposals (2.854) have been retained for funding negotiations.

More than a third of all proposals (8.030) were submitted under the Specific Programme "Cooperation". More than half of total included proposals (6.880) and about 43% of all retained proposals were concentrated in this programme.

Marie Curie Actions (Specific Programme "People") were targeted by 18,1% of all applications (4.195), and constituted the second most sizeable group of included proposals (3.404 or 27,3% of the total) and of retained proposals (1.102 or 38,6% of the total).

European Research Council (ERC) calls (Specific Programme "Ideas") were heavily oversubscribed: Almost 40% of all submitted proposals in 2007 (9.167) addressed ERC calls, which are two-stage calls, but only 6% (547) were admitted to the second stage and as little as 2% (201) were retained.

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<sup>&</sup>lt;sup>7</sup> The reference population does not include the first stage proposals of 5 two-stage calls, which did not report detailed applicant data from that stage, namely FP7-NMP-2007-SMALL-1, FP7-NMP-2007-LARGE-1, FP7-NMP-2007-SME-1, FP7-PEOPLE-2007-1-1-ITN and FP7-SME-2007-2. Proposals addressing General Activities under the Specific Programme "Cooperation" (a total of 7 eligible proposals with 45 participants and EUR 7,5 million of requested EC contribution) have not been included in the population under consideration either.

**Table 3:** Submitted, included and retained proposals for FP7 calls launched in 2007.

SPECIFIC PROGRAMME	Submitted I	Proposals	Included P	roposals	Retained	Proposals	Success Rates	
SPECIFIC PROGRAMIME	no.	%	no.	%	no.	%	%	
COOPERATION	8.030	34,6	6.880	55,3	1.229	43,1	17,9	
IDEAS	9.167	39,5	547	4,4	201	7,0	36,7	
PEOPLE	4.195	18,1	3.404	27,4	1.102	38,6	32,4	
CAPACITIES	1.753	7,6	1.557	12,5	307	10,8	19,7	
EURATOM	57	0,2	54	0,4	15	0,5	27,8	
Total	23.202	100,0	12.442	100,0	2.854	100,0	22,9	

### 2.4.1.2 Signed grant agreements

Figures on signed grant agreements are continuously updated as new grant agreements are added to the CORDA database. At the time of the submission of this report (27/11/2008), 2.265 grant agreements out of a total of 3104 retained proposals corresponding to 61 concluded calls have already been signed – or 73% of the retained proposals.

A more complete picture of grant agreements statistics will be presented in future annual reports.

### 2.4.1.3 Applicants and budget

Included proposals involved 87.152 applicants and a total estimated project cost of  $\le 37,1$  billion with a requested Community financial contribution of  $\le 26,3$  billion. After evaluation and selection, the number of applicants in retained proposals was reduced to 19.541, the total estimated project cost to approximately  $\le 8$  billion and the requested EC contribution to  $\le 5,7$  billion – approximately 72% of the total estimated cost.

Table 4: Applicants in included and retained proposals and their success rates for FP7 calls launched in 2007.

	APPLICANTS								
SPECIFIC PROGRAMME	Include	ed	Retain	Success Rate					
	no.	%	no.	%	Success Nate				
COOPERATION	68.029	78,1	14.018	71,7	20,60%				
IDEAS	604	0,7	214	1,1	35,40%				
PEOPLE	6.063	7	2.075	10,6	34,20%				
CAPACITIES	11.873	13,6	3.028	15,5	25,50%				
EURATOM	583	0,7	206	1,1	35,30%				
Total	87.152	100	19.541	100	22,40%				

Table 5: Budgets of included and retained proposals and their success rates for FP7 calls launched in 2007.

	E	STIMAT	ED PROJE	CT COS	T	REQUESTED EC CONTRIBUTION				
SPECIFIC PROGRAMME	Include	Included Retained		ed	Success	Included		Retained		Success
	€M	_%_	€M	_%_	Rate	€M	_%	€M	%	Rate
COOPERATION	33.477,40	90,2	6.819,70	85,8	20,40%	23.392,40	88,9	4.802,40	83,9	20,50%
IDEAS	788,3	2,1	286,4	3,6	36,30%	770	2,9	278,8	4,9	36,20%
PEOPLE	11,4	0	7,1	0,1	62,30%	9,5	0	5,8	0,1	61,10%
CAPACITIES	2.541,30	6,8	716,6	9	28,20%	1.962,80	7,5	565,6	9,9	28,80%
EURATOM	300,4	0,8	122,8	1,5	40,90%	193,2	0,7	71,7	1,3	37,10%
Total	37.118,90	100	7.952,70	100	21,40%	26.327,90	100	5.724,30	100	21,70%

### 2.4.1.4 Success rates

In this report, success rates are calculated as *ratios of retained to included proposals*, given the very limited availability of complete data on grant agreements at the time of drafting the report (see also above). The overall application success rate in 2007 was 22,4 %. This seems to be considerably higher than the average overall success rate of FP6 (18%).

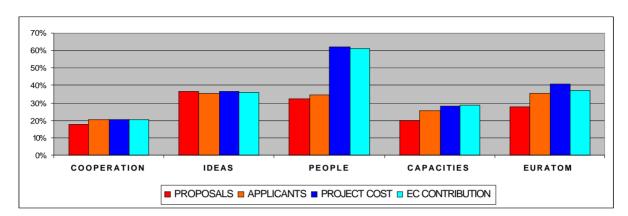


Figure 4: Success rates by Specific Programme for FP7 calls launched in 2007.

### 2.4.1.5 Specific Programme "Cooperation"

Both in terms of participations and budget, the Specific Programme "Cooperation" enjoys the lion's share of FP7, namely 71,7% of participations and 85,8% of budget (requested EC contribution) in retained proposals during the first year of implementation.

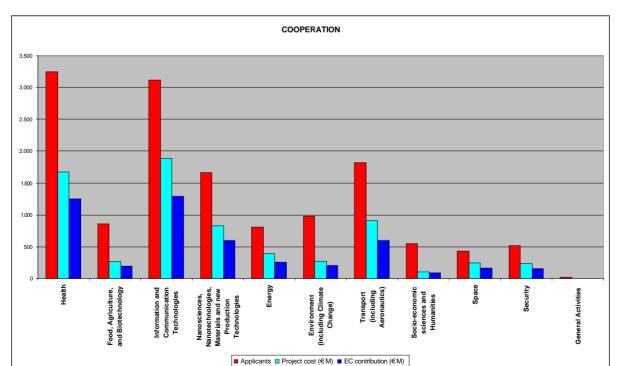


Figure 5: Number of applicants and budgets (in € million) of retained proposals in the thematic priorities of Specific Programme "Cooperation" for FP7 calls launched in 2007.

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<sup>&</sup>lt;sup>8</sup> This reference is, however, only indicative given that FP6 success rates are calculated as the ratio of *signed* contracts to included proposals.

"Cooperation" consists of 10 thematic areas and so-called General Activities. The coverage of these areas is, in general terms, comparable to that of the 7 thematic priorities of the FP6 Specific Programme *Integrating and Strengthening the ERA*, with the notable addition of the thematic area *Security*.

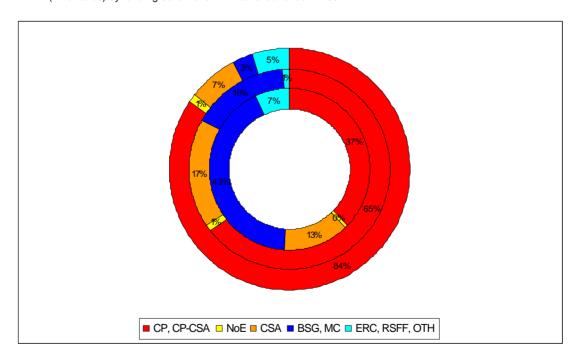
Health and Information and Communication Technologies are the two largest thematic areas with more than a fifth of the total FP7 budget each. They are roughly equal in terms of numbers of applicants and budget sizes in retained proposals. Nanosciences, Nanotechnologies, Materials and new Production Technologies and Transport are also roughly equal in terms of participation figures and form the second largest group of thematic areas.

### 2.4.2 Participation by funding scheme

Data on FP7 participation is aggregated according to the following funding schemes:

- § Collaborative Projects, including combinations of Collaborative Projects and Coordination and Support Actions (CP/CP-CSA)
- § Networks of Excellence (NoE)
- § Coordination and Support Actions (CSA)
- § Research for the benefit of specific groups and Marie Curie Actions (Support for training and career development of researchers) (BSG/MC)
- § Support for frontier research (European Research Council), risk sharing finance facilities and others (ERC/RSFF/OTH)

**Figure 6:** Requested EC contribution (outer torus), number of applicants (middle torus) and number of retained proposals (inner torus) by funding scheme for FP7 calls launched in 2007.



Collaborative projects occupied in 2007 by far the biggest share in FP7 budget both in terms of total project costs (87%) and requested EC contribution (84,4%) and they also have the highest number of applicants in retained proposals – approximately two thirds of the total (64,3%). BSG and Marie Curie Actions have the highest number of retained proposals (1194 or 41,8% of the total) similar to that of collaborative projects (1.065 or 37,3% of the total). For Networks of Excellence, on the other hand, 11 proposals were retained, with 236 applicants and 1,1% of total requested EC contribution in retained proposals - all in the thematic area *Information and Communication Technologies*.

Figure 7 and Figure 8 present the breakdown of the shares of the different funding schemes by specific programme during the first year of implementation of FP7.

Figure 7: Number of applicants in retained proposals by funding scheme and specific programme for FP7 calls launched in 2007.

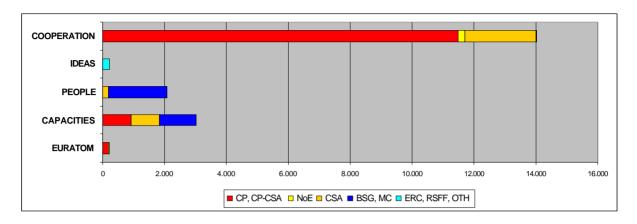
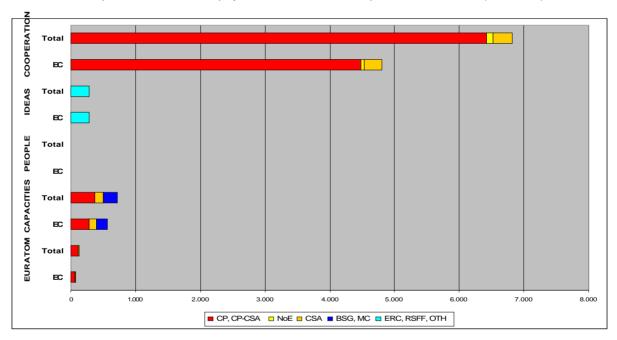


Figure 8: Budgets of retained proposals by funding scheme and thematic area for FP7 calls launched in 2007; the first column represents total estimated project costs and the second requested EC contribution (in € million ).



### 2.5 Participation Patterns by Organisations (including SMEs)

### 2.5.1 Participation by type of activity

Data on the type of activity of the participating organisations in FP7 is collected according to a revised classification scheme which groups organisations in the following 5 categories:

- § *Higher or secondary education* (HES)
- § *Private for profit* (excluding education) (PRC)
- § Public body (excluding research and education) (PUB)
- § Research organisations (REC)
- § Other (OTH)

Higher (and secondary) education institutes are the main beneficiaries of the FP7, with more than a third of applicants and requested EC funding in retained proposals in 2007. Together with research organisations they account for 60% of applicants and 59% of the budget. The

participation of the private sector during the first year of implementation of FP7 involves a quarter of all applicants and requested EC funding, which seems to be a modest improvement compared to FP6 (21% of applicants from industry).

**Figure 9:** Requested EC contribution (outer torus) and number of applicants (inner torus) by activity type in retained proposals for FP7 calls launched in 2007.

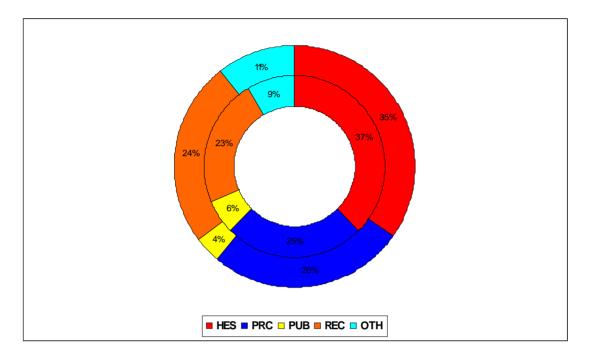
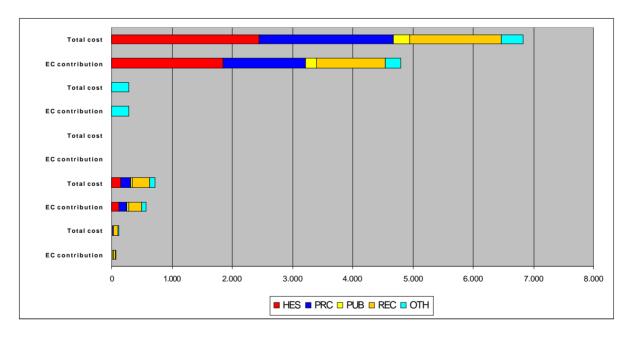


Figure 10: Project cost and requested EC financial contribution (in € million) by activity type and specific programme in retained proposals for FP7 calls launched in 2007.



Data on activity type broken down by thematic area reveal some interesting patterns already familiar from FP6: Private sector participation is particularly strong in the thematic areas of *ICT*, *Nanotechnologies*, *Energy*, *Transport*, *Space and Security* – in the first two it is comparable to that of universities and in the others significantly larger in terms of applicants and even more so in terms of requested EC contribution. On the other hand, academic participation is particularly strong in the areas of Health, Food, Environment, and Social Sciences and Humanities.

Figure 11: Number of applicants in retained proposals for FP7 calls launched in 2007 by activity type and thematic priority.

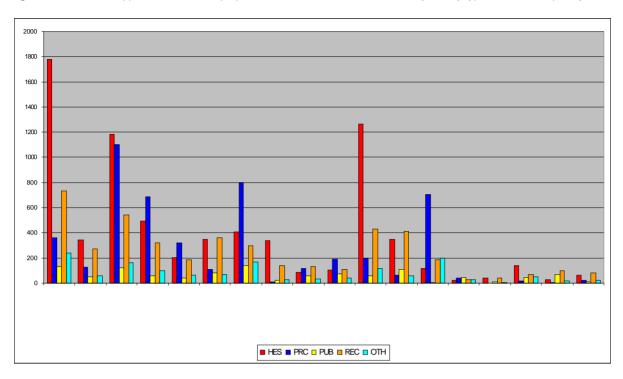
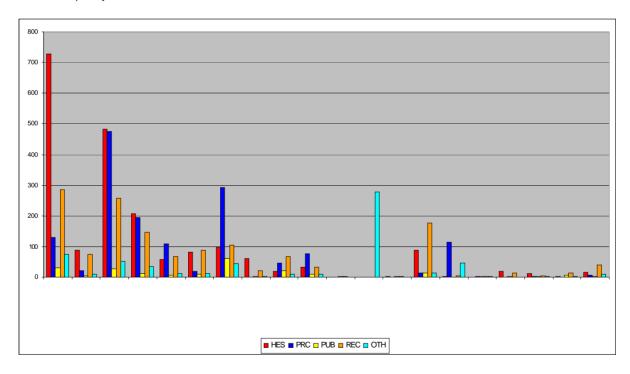


Figure 12: Requested EC contribution in retained proposals for FP7 calls launched in 2007 by activity type and thematic priority.



### 2.5.2 SME participation

The 2<sup>nd</sup> Progress Report of the FP7 SME Inter-service Task Force<sup>9</sup> includes an analysis of SME participation across the thematic areas of the "Cooperation" Specific Programme during the first year of FP7, with an overview of the various actions included to encourage greater

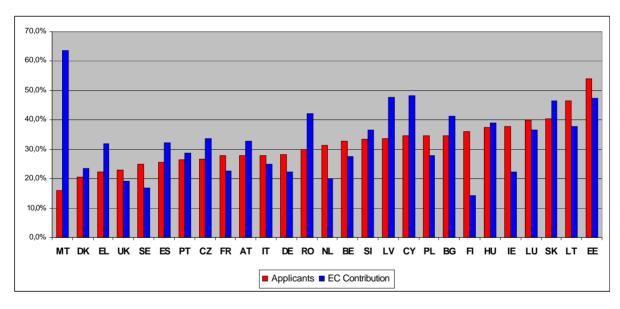
<sup>9</sup> European Commission (2008): 2<sup>nd</sup> Progress Report on SMEs in the 7<sup>th</sup> R&D Framework Programme. Brussels.

SME participation, as well as an overview of SME participation in the "Capacities" and "People" Specific Programmes. This report draws on a dataset of included and retained proposals on the basis of a population of 43 concluded calls launched in 2007; it also analyses data on signed grant agreements up until 13 August 2008, which, despite the incompleteness of the dataset, gives a fairly realistic picture of SME participation shares. The report also highlights that 33% of all self-declared SMEs at the proposal submission stage drop out of the SME category after the verification of their status at the negotiation stage, resulting in the downward adjustment of the figures presented in the report (see also Annex 2 – Data Quality).

According to the report, the adjusted overall share of SME participants in retained proposals during the first year of implementation of FP7 is estimated to be 16,4% in terms of numbers of applicants and 14,0% in terms of requested EC contribution. In signed grant agreements the participation shares are 15,8% and 13,2% respectively; the latter figure is below the 15% target established in FP7.

An estimated 92,2% of requested EC contribution by SME applicants falls under the *Collaborative Projects* funding scheme, and approximately one third of it – by far the largest share – is in the *ICT* thematic area followed by *Health* (18,3%), *Nanotechnologies* (16%) and *Transport* (13,3%).

Figure 13 presents the share of SME participation in terms of numbers of applicants and requested EC contribution in the overall country participation in submitted proposals; it is interesting to notice the considerable discrepancies between the two rankings.



**Figure 13:** Shares of SMEs in numbers of applicants and requested EC contribution in submitted proposals for FP7 calls launched in 2007 (ordered according to numbers of applicants) by EU Member State.

# 2.6 Participation Patterns by Country (Member States, Candidate & Associated Countries)

### 2.6.1 Overall participation of EU Member States

The following graphs present various aspects of the participation patterns of EU27 Member States during the first year of implementation of FP7:

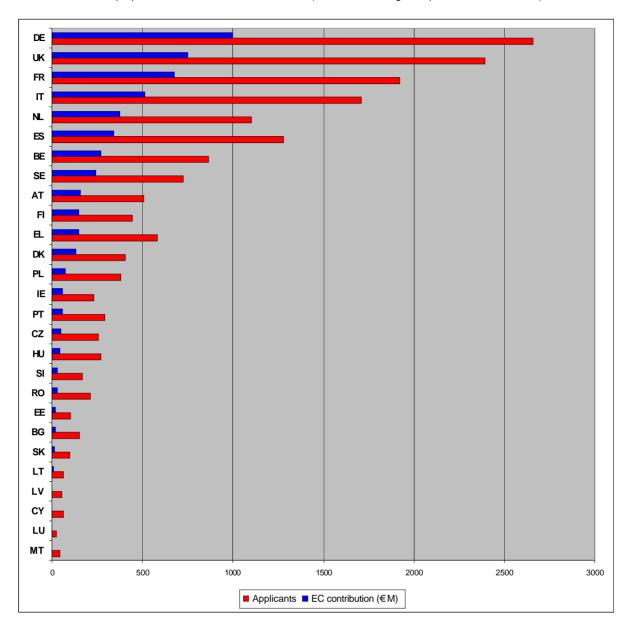
§ Figure 14 presents absolute numbers of successful applicants and their requested EC funding for the 27 EU Member States;

- § Figure 15 presents for each Member State the requested EC contribution per successful applicant;
- § Figure 16 presents for each Member State the success rates of applicants (calculated as the ratio of applicants in retained to included proposals); and finally
- Figure 17 presents for each Member State the estimated share of FP7 funding in the Gross Domestic Expenditure on R&D (GERD)<sup>10</sup>; this figure is indicative for comparison purposes given that it is based on the ratio of the total requested EC contribution in retained proposals to the expected GERD in 2007.

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<sup>&</sup>lt;sup>10</sup> Gross Domestic Expenditure on R&D (GERD) is the total intramural expenditure on R&D performed on the national territory during a given period. GERD includes R&D performed within a country and funded from abroad but excludes payments for R&D performed abroad. GERD is constructed by adding together the intramural expenditures of the four performing sectors, namely the business enterprise, the government, the private non-profit and the higher education sectors (Frascati Manual , OECD, Paris 2002).

Figure 14: Number of EU Member States applicants and their requested EC contribution (in € million) by Member State in retained proposals for FP7 calls launched in 2007 (ordered according to requested EC contribution).



**Figure 15:** Requested EC financial contribution per applicant from EU member states (in € thousand) by country in retained proposals for FP7 calls launched in 2007.

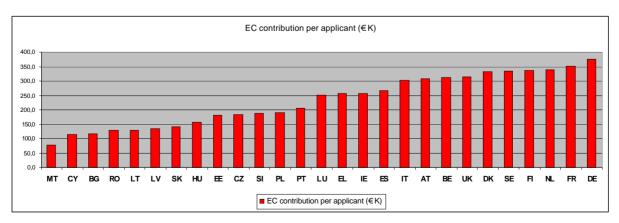


Figure 16: Success rates of applicants from EU member states by country in retained proposals for FP7 calls launched in 2007.

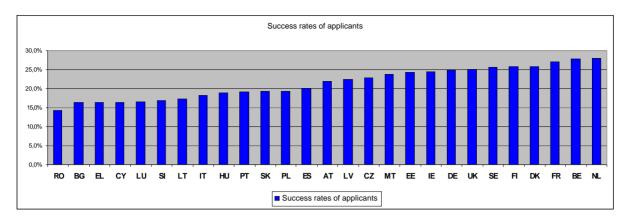
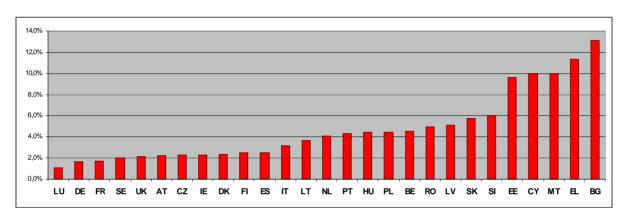


Figure 17: Requested EC financial contribution in retained proposals for FP7 calls launched in 2007 as percentage of estimated GERD in 2007.



### 2.6.2 Participation of New Member States

A recent study<sup>11</sup> of the subscription and performance of the 12 "new" EU Member States (hereafter "EU12") *vis-à-vis* the "older" EU Member States (hereafter "EU15") in the "Cooperation" and "Capacities" Specific Programmes during the first year of FP7 implementation presents a mixed picture. While EU12 participation in terms of numbers of submitted and retained proposals is lower than their share of the EU27 research workforce, the performance is significantly better when one compares their share of GERD to their share of EC contributions. More specifically:

- § EU12 researchers represent 14% of the total EU27 population of researchers; the corresponding shares of EU12 applicants during the first year of implementation of the FP7 are 12% in terms of submitted proposals and 10% in terms of retained proposals.
- § The EU12 share of the EU27 2006 GERD is 2,8% while the aggregate requested EC contribution to EU12 applicants in retained proposals in 2007 is close to 6%.
- § In 2007 the requested FP7 financial contribution of EU12 applicants expressed as percentage of the EU12 GERD is close to 5%, more than double that of EU15 (2,4%).

These findings should however be put in the context of the current S&T socio-economic conditions in EU27. For example, in 2006 the R&D expenditure per researcher (GERD per number of researchers) in EU15 amounted to €121.000 – four times that of the corresponding EU12 figure of €31.000. An internal reflection process took place within DG RTD to analyse

<sup>&</sup>lt;sup>11</sup> European Commission – DG RTD (2008): Subscription and Performance in the FP7 "Cooperation" and "Capacities" Specific Programmes – EU12 vs. EU15. Brussels.

the reasons for EU12 underperformance in terms of success rates for applications and to take appropriate actions to enhance participation rates of EU12 in FP7.

Measures already taken that will help to enhance participation rates of EU12 in the Framework Programme include efforts put in place by DG RTD in support of a strong NCP network, and the establishment of Technology Platforms at the national level that have proven to be successful in involving industry in R&D activities.

It was highlighted that EU12 is not a homogeneous group, which is why it may be more pertinent to refer to low- and high-performing Member States in FP7. The reasons for low performance are manifold and refer for example, to national research landscapes with specific problems, to the lack of a competitive research environment at national level, and to problems encountered by smaller countries that cannot be expected to be competitive in all thematic fields of the FP.

### 2.6.3 Participation of Candidate and Associated Countries

The classification of countries according to their relation with the EU (Member State, Candidate Country, Associated Country) remains the same in FP7 as in FP6. However, the composition of these country groups has changed: Bulgaria and Romania have since become member states, while Albania, Serbia, Montenegro, and Bosnia and Herzegovina have signed in 2007 and 2008 "Memoranda of Understanding" based on the General Agreement on "Association of Candidate Countries to Community Programmes", thus joining the group of Associated Countries; however, only the new association agreement with Serbia has retroactive validity for 2007. In any case, these new memberships have only a marginal effect on the aggregate characteristics of their respective groups.

Switzerland has by far the largest share of participation within the group of Associated Countries; the participation of Norway and Israel is also very significant. Candidate and Associated Countries account for 7,4% of FP7 participation in 2007 both in terms of applicants and of EU financial contribution. They have an average success rate of 21,4% for applicants and 20,2% for EC financial contribution – very similar to the EU member state average (22,7% and 22% respectively).

### 2.7 International Participation under FP7

### 2.7.1 Third Country Participation in FP6

Eligible applicants in FP6 came from 178 different 'third countries' – i.e. countries and other geopolitical entities that participate in the Framework Programmes other than EU Member States, Candidate and Associated Countries – of which 116 were places of origin of contract participants. In this last group the top participants were the Russian Federation, the USA, China, Brazil, India, Serbia and Montenegro, Morocco, Canada, and South Africa.

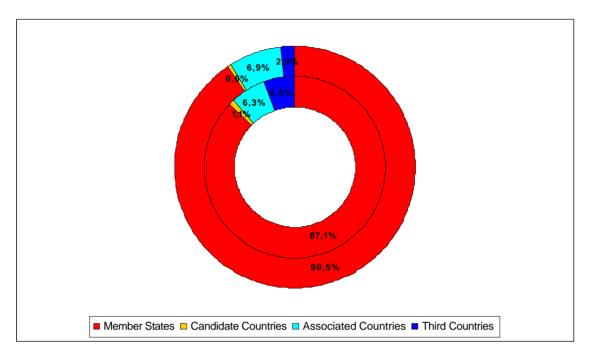
Under FP6, EC financial contribution to participants from third countries represented 1,94% of the overall EC financial contribution. This figure is significantly lower than their share of numbers of participants at 5,3%. This is partially explained by the fact that industrialised third countries receive limited EC financial contribution for their participation.

Under FP6 the three top countries, namely the Russian Federation, the USA and China accounted for approximately one third of the total third country participation. The 17 countries which have signed S&T agreements with the EU (see paragraph 3.5.2) account for 67% of the total third country participation, which amounts to 2.632 out of 3.942 participations in projects.

### 2.7.2 Third Country Participation in FP7

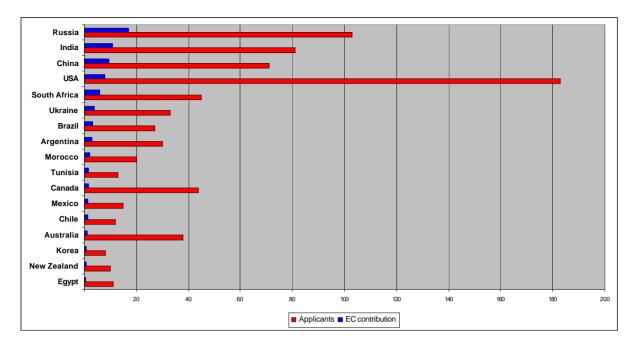
FP7 participants from third countries in 2007 represent a relatively small part of the total number of successful applicants and receive an even smaller part of the total EC financial contribution to projects – just 5,5% and 2,0% respectively. These figures, compared to corresponding FP6 figures, imply that third country participation in the first year of implementation of FP7 is at roughly the same levels as under FP6.

**Figure 18:** EC financial contribution (outer torus) and number of applicants (inner torus) by group of countries in retained proposals for FP7 calls launched in 2007.



Applicants participating in eligible proposals come from as many as 139 countries, while those participating in retained proposals come from 94 countries. In this very diverse group, the biggest participant in terms of EC financial contribution is the Russian Federation followed by India, China, the USA and South Africa, whereas in terms of number of successful applicants the USA is in the lead, followed by the Russian Federation, India, China, South Africa, and Canada.

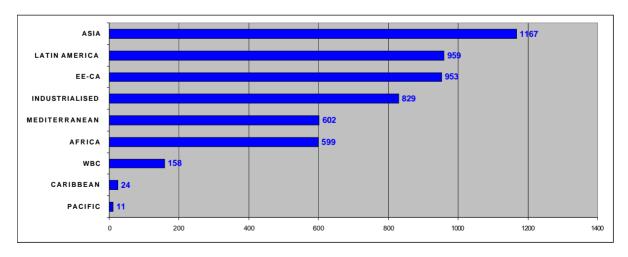
Figure 19: Participation of third countries with S&T agreements in retained proposals for FP7 calls launched in 2007 in terms of EC financial contribution (in € million) and numbers of applicants.



Considering data on third country participation in terms of submitted proposals addressing calls launched in 2007 under the FP7 "Cooperation" and "Capacities" Specific Programmes (extracted in June 2008), the three leading countries, The Russian Federation, China and the USA, retain the same ranking as in FP6: The Russian Federation ranks first with 697 participations in submitted proposals, China second with 548 and the USA third with 492 participations. India follows in the fourth position with 422 participations exhibiting a significant increase in terms of number of participations.

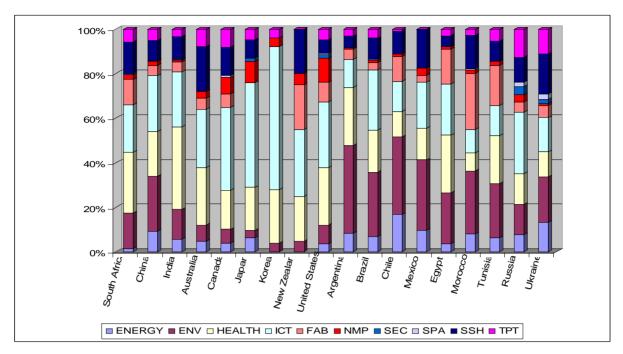
In terms of the geographical distribution of submitted proposals, Asia leads followed by Latin America and East European and Central Asia.

Figure 20: Numbers of applicants in submitted proposals for FP7 calls launched in 2007 by geopolitical group.



In terms of the thematic focus of submitted proposals addressing calls launched in 2007 under the FP7 "Cooperation", participation of third countries follows FP6 trends and is high in major global challenges, in particular in *Health*, followed by *Environment*, *Food*, *Agriculture and Biotechnology*, and to a lesser extent *Energy*. Altogether, submitted proposals in these thematic areas account for 61% of the total number of submitted proposals with third country participation. 32% of submitted proposals are concentrated in technology areas, led by *ICT*.

**Figure 21:** Relative shares of FP7 thematic areas in the participation of third countries with S&T agreements in submitted proposals for FP7 calls launched in 2007.



Within the group of third countries with S&T agreements three sub-groups with different thematic focuses can be distinguished:

- § In general, *industrialised countries* concentrate efforts on *ICT* and *Health* with the United States being the most active industrialised country participating in the FP activities.
- § Most *emerging economies* split efforts in three major areas, i.e. *Health*, *Environment* and *ICT*. *ICT* is the favoured theme for participants from The Russian Federation and China and ranks second for Brazil, India and South Africa, while *Environment* ranks first for Brazil and South Africa. Health research is the most attractive theme for participants from India. *Social Sciences and Humanities*, *Energy*, *Transport* and *Food*, *Agriculture and Biotechnology* have also seen increasing rates of participation by emerging economies.
- In the case of *developing countries* participants are more active in the areas of *Health*, *Environment* and *Food*, *Agriculture and Biotechnology*. However, *ICT* is increasing its share in terms of the rate of participation. Egypt is the leading developing country participating in FP7 with a significant number of participants in applications submitted to the *ICT* programme. Morocco has concentrated its efforts in the *Environment* field, closely followed by participations in *Food*, *Agriculture and Biotechnology*, while *Social Sciences and Humanities*, *Energy* and, to a lesser extent, *Transport* are also attracting a significant number of participations from developing countries.

### 2.8 Gender Equality and FP7

### 2.8.1 Gender Data for FP6 Participation

Detailed information on FP6 participation patterns and success rates can be found in the Gender Equality Report for FP6. The overall percentage of female scientific co-ordinators for both FP6 proposals and FP6 funded projects is 17%. There are however differences regarding funding instruments and FP6 activities. Apparently, female researchers were more likely to submit proposals for the smaller funding instruments, such as Specific Support Actions and Coordination Actions, rather than for the larger instruments like Integrated Projects and Networks of Excellence. The same trend is visible for funded projects.

As regards the different activities and areas, Science and Society is the thematic area with the highest percentage for both, female researchers submitting proposals (37%) and female scientific co-ordinators (41%). The lowest proportions can be found for Aeronautics and Space with 8% and 9%, respectively.

In order to ascertain how many women scientists were involved in community funded research in FP6, all FP projects were required to report to the Commission, at the end of the first reporting period and at the end of the project, on the number of men and women involved in that project. In this context, Workforce Statistics Reporting Questionnaires were designed to be completed by all personnel involved in each project. Although these questionnaires were mandatory for all FP6 projects, in October 2007 only about 10% of the projects had them completed. This is due to a number of reasons, one of them being that SESAM, the reporting software used for the collection of workforce statistics from projects, was not ready for the first reports and then did not work properly for most of FP6.

In addition to the Workforce Statistics Reposting Questionnaires, Networks of Excellence and Integrated Projects were asked to submit Gender Action Plans (GAPs) with their proposals and to report to the Commission at least once during the course of the project, and at the end of the project, on the progress made, using Gender Action Plan Reporting Questionnaires to be completed by all contractors. Although these reports were mandatory for all IPs and NoEs, less than half the projects had them completed by October 2008. Again, SESAM, the reporting software, was not ready for the first reports. Project Officers did not always insist on receiving hard copies, and when the software was available, it still remained difficult to use.

### 2.8.2 Gender Data for FP7 Participation

For FP7, no comprehensive information is available yet for grant agreements given that 2007 was the first year of FP7 with only a limited number of grant agreements signed. As regards FP7 proposals, and at the time of the writing of this report, almost 30% of the "Principal Investigators" and about 19% of the "Contact points" (main scientists or team leaders) indicated in the proposals were female.

With a view to reporting requirements, for FP7 projects a questionnaire addressing also gender issues needs to be completed as part of the respective Final Report.

### 2.8.3 Gender repartition in FP7 Advisory Groups, Programme Committees and EURAB/ERAB

In 1999, during early FP5, the Commission adopted a Communication in which it undertook the commitment to develop a coherent approach towards promoting women in research financed by the European Communities. The Commission's stated aim was to achieve at least a 40% representation of women in Marie Curie scholarships, advisory groups, assessment panels and monitoring panels of FP5. This target was subsequently expanded to include all groups, panels, committees and projects involved in the Framework Programmes. The 40% target remained in place for FP6 and is currently in place for FP7.

As is stated in the Gender Equality Report for FP6,<sup>13</sup> the objective of having close to equal representation of female and male experts and researchers in FP funded projects was partially met (see Figure 23). The report recommends, among other things, to consider new upwardly revised targets, adapted to the specific situation of the scientific fields.

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<sup>&</sup>lt;sup>12</sup> COM(1999) 76 Final of 17.02.1999

<sup>&</sup>lt;sup>13</sup> Gender Equality Report – Framework Programme 6 (October 2008)

In order to monitor the 40% target, statistics on all groups, panels, committees and projects associated with the Framework Programme were collected on an annual basis.

Figure 23 presents the distribution of women in groups, panels and committees from FP4 to FP7. It should be noted that very limited data is available for FP4 and that the information available for FP7 is also limited at this stage.

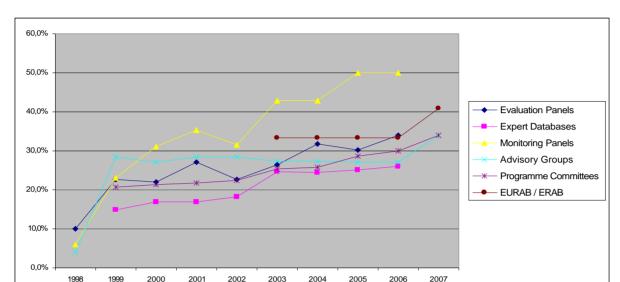
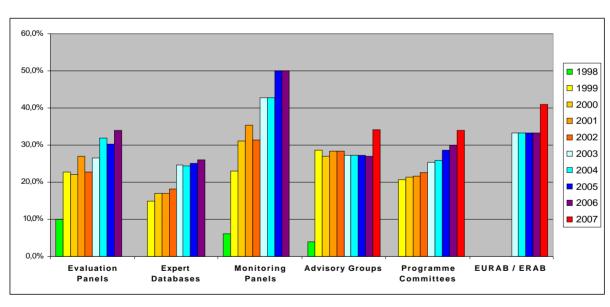


Figure 22: Evolution of women's share in groups, panels and committees (from FP4 to FP7)





For FP7, 15 Advisory Groups<sup>14</sup> were set up in summer 2006, 13 of which are managed by DG RTD, and 2 (Space and ICT) by other DGs (respectively DG ENTR and DG INFSO). A sixteenth Advisory Group (for Security) was created in November 2007.

<sup>14</sup> Health; Food agriculture and biotechnology; ICT; Nanosciences, nanotechnologies, materials and new production technologies; Energy + Euratom; Environment; Transport; Socio-economic sciences and humanities; Space; People; Research for SMEs; Regions of knowledge; Research potential; Science in society; Activities of

international cooperation.

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The gender statistics for these 16 Advisory Groups are:

The percentage of women in the 13 Advisory Groups managed by DG RTD is 36,6% (103 women out of 281), while the percentage of women in all Advisory Groups is 34,1% (120 women out of 352). These percentages are still under the general target of 40%, but they have been clearly improved from FP6 to FP7 (27% for all DGs in FP6 Advisory Groups).

The membership in FP7 Advisory Groups was to be renewed in November 2008. On this occasion, an additional emphasis has been given to this issue. As a result, the percentage of women, at least for Advisory Groups managed by DG RTD, should increase, so that it can be expected to reach 40% or be very close to this target.

The overall percentages for male and female members of FP7 Programme Committees are 66% and 34 %, respectively. These figures should be understood as representing the overall trend only, given the continuous process of updating the lists and considering that during nominations, the gender of the representatives is not always mentioned.

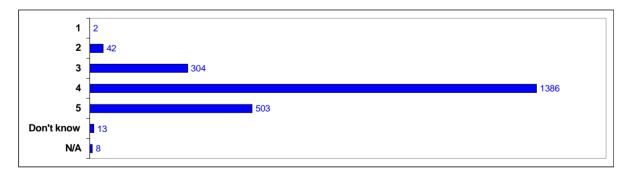
Throughout its existence, the percentage of female members of the European Advisory Board EURAB, the high level advisory board established for FP6, was 33%. The European Research Area Board ERAB, the new consultative body responsible for advising the EU on the realisation of the ERA, has 40.9 % of female members.

### 2.9 Quality Assessment of Proposal Evaluation

In order to receive the independent experts' opinion on the quality of the proposal evaluation process and procedures, an anonymous on-line survey of all experts who participated in the evaluation of proposals during the first year of FP7 was carried out. In total 3630 experts were invited to participate in the survey. The survey is based on 2281 responses which were recorded between 30 July and 30 November 2007.

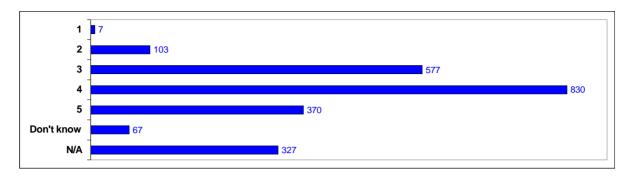
The data collected from the first year of FP7 give a positive picture of the quality of the evaluation process. Across the calls 96% of the respondents found the quality of the evaluation overall 'satisfactory' to 'excellent' (the same percentage as in the last year of FP6).

Figure 24: Responses to the question "How would you rate the quality of the evaluation overall?" on a scale from 1 (= very poor) to 5 (= excellent)



Of the evaluators that had previously evaluated research proposals for national or international research funding schemes 91% found the EU evaluation process similar or better (also the same percentage as in the last year of FP6). The results demonstrate that the high quality of the evaluations has been maintained despite the increase of activities and number of calls under FP7.

Figure 25: Responses to the question "If you have evaluated research proposals before for national or international research funding schemes, how do you rate the overall quality of the EU process in comparison?" on a scale from 1 (= much worse) to 5 (= much better)



In all aspects covered by the survey, evaluators were generally very satisfied with the way in which the evaluations were conducted, both with respect to efficiency and fairness.

There are nevertheless a number of results pointing towards issues for attention:

- § *Remote Evaluation*: While there is, like in FP6, a clear preference among evaluators for remote individual evaluation, remote consensus enjoys practically no support at all.
- § Available time: A large majority (>80%) believes there is sufficient time for the reading and the individual evaluation of proposals. However, a minority of the experts (around 17%) thought they had too little or totally insufficient time for this part of the evaluation, which is similar to the figure recorded in FP6 (~15,5%). Many evaluators would also like to see more time for consensus discussions.
- § *Evaluation criteria*: Asked whether they thought that the evaluation criteria were appropriate and consistently applied 90% believed they were. Less than 9% thought only part of the evaluation criteria were appropriate. The 'impact' criterion was found most difficult to apply.
- § Conflicts of interest: As many as 25% of the evaluators answered 'YES' when asked if they were aware of any possible conflicts of interest. However, an overwhelming majority believed that these possible conflicts of interest were handled correctly. The comments of the experts who thought otherwise have been examined, and there is no evidence that the rules on conflict of interest have been breached. Nevertheless, the Commission of course takes such reports seriously and will continue to follow this issue closely.
- S Logistical aspects: An overwhelming majority of the experts (~95%) rates the overall organisation of the evaluation 'satisfactory' to 'excellent'. Nevertheless many comments and recommendations have been made with respect to the logistics of the evaluation, such as access to Internet, the working of the RIVET system<sup>15</sup> and other supporting infrastructure.

### 2.10 Redress Procedure

### 2.10.1 Background

The FP7 Rules for Participation stipulate that the Commission shall provide a redress procedure for applicants. The intention of the legislator was to formalise the *ad hoc* approaches for dealing with complaints that existed in previous programmes.

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<sup>&</sup>lt;sup>15</sup> RIVET – Commission IT system used for evaluations.

In line with these requirements, a redress procedure has been set up that aims to be both efficient and consistent with the principles of transparency and equal treatment that underpins all Commission evaluations.

### 2.10.2 Implementation

Following the work of the "submission to ranking" working group, redress guidelines were drafted, setting out the more operational aspects of the new procedure. In particular:

- § The redress committee meets in various configurations according to the different calls for proposals. Directorates nominate officials for "jury service".
- § The configurations work independently, and deliver their advice to the responsible directors. They may take account of possible comments from the director, and from the redress office (see below).
- § A "redress office" (RO), located in unit RTD/A1, is responsible for registering and tracking redress requests, supporting the committee configurations, and ensuring that policy is coherent and consistent over time, based on case histories.

These guidelines have since been endorsed by the Legal Service, and some of the most salient guidelines have been incorporated into the evaluation rules<sup>16</sup>.

### 2.10.3 Results from first rounds of redress

For FP7 calls launched in 2007 (except ERC, see below), the results of the redress procedure can be summarised as follows:

- § Out of 17.418 proposals received <sup>17</sup>, 41 redress cases were all or partly upheld, but did not lead to a re-evaluation, because the proposal failed anyway for other reasons or because the identified problem was minor and not crucial to the experts' evaluation.
- § There were in total 8 cases leading to a re-evaluation (0,045 % of proposals received).

Problems leading to a re-evaluation were, for example, related to the eligibility of proposals (scope, number of participants), or to serious factual errors, or to insufficient specialist expertise on the part of the experts.

### 2.10.4 Redress - ERC

In 2007, the ERC put in place redress procedures, following the model established for FP7, but with a separate "Ideas" configuration of the redress committee. The ERC now has its own formal procedure, including its own redress committee and guidelines. Information on 2007 cases can be found in Section 3.1.

### 2.11 Time to Contract / Grant

In FP6, the average time to contract was 384 calendar days. 50% of FP6 contracts were signed within 365 calendar days from the call deadline, and 75% of FP6 contracts were signed within 454 calendar days (approx. 15 months). Time to contract here is defined as the time elapsed

<sup>&</sup>lt;sup>16</sup> Rules for submission of proposals, and the related evaluation, selection and award procedures (*Version 3, 21 August 2008, COM(2008)4617*)

<sup>&</sup>lt;sup>17</sup> The number of proposals here is derived from 65 FP7 calls with a 2007 call-ID for which redress information was available at the time of data extraction (January 2009).

between the deadline for submission of proposals and the signature of the contract. The time-to-contract figures cited above are based on some 5,300 signed contracts under all FP6 priority areas, except HRM actions and calls for proposals that employed a 2-stage evaluation procedure.

The time to grant statistics reported here for FP7 are based on grant agreements signed by the date of the last data extraction (3/10/2008), and relate to calls for which at least 70% of all expected grant agreements have been signed. These grant agreements correspond to approximately three quarters (73%) of the total number of retained proposals for calls launched during the first year of the implementation of FP7. The figures are thus not final, but given that a high degree of retained proposals are successfully negotiated, they probably represent a reasonably good approximation to the final figure. It should be noted that several thematic priorities are not reported here at all due to the fact that they had not passed the abovementioned 70% completion threshold at the time of the last data extraction.

Taking into account the data availability limitations as described above, the average time to grant overall is 291 days (median 287 days). According to this data, the thematic area with the shortest time to grant is *ICT*, followed by *INCO* and *Marie Curie Actions*; the average time to grant for the ERC, on the other hand, is longer than the average. As a number of calls are not included yet in this analysis, and as also in the calls included some projects were still under negotiation, the figures presented here should be regarded as preliminary and subject to change.

### 2.12 Ethics Reviews

The main objective of the Ethics Review is to safeguard that all research activities carried out under FP7 follow fundamental ethical principles contained in international and EU legal documents. The Ethics Review process is described in some detail in Annex A (Ethical review procedures) of the "Rules for submission of proposals, and the related evaluation, selection and award procedures" *Version 3, 21 August 2008 COM (2008)4617*.

DG RTD's Ethics Review Sector is in charge of organising an ethics review of those proposals that have successfully passed the scientific evaluation step and have been found to involve sensitive ethical issues that have not been adequately addressed. The organisation of the Ethics Review involves the appointment of the members of the Ethics Review panels and the procedural coordination of the entire evaluation process.

Research proposals involving interventions on human beings (surgical interventions etc.), non human primates, or human embryos/embryonic stem cells are automatically referred for ethical review at EC level. An ethics review at EC level is also organised for those cases where necessary ethical safeguards would not otherwise be in place, such as in cases of international co-operation where national ethics bodies are not effective, or not in place, in co-operating countries.

In 2007, Ethics Screening was introduced in order to facilitate the selection of projects that required Ethics Review at the EC level. The screening is the responsibility of the programmes that receive the applications. Screening is mostly conducted by ethics experts.

During 2007, 245 ethical reviews were organised by the Ethics Review Sector. The project proposals that were reviewed involved a wide variety of issues and belong to different research programmes. In total, 79 experts participated in the 2007 Ethics Review process.

Health is the theme with the highest number of ethics reviews (112), followed by the ICT and Security themes, and the "Ideas" Programme (ERC).

No project was stopped as a result of the ethical review project, but 44 proposals that were found by the expert panels to have insufficient safeguards in place were requested to modify their project according to contractually binding requirements.

### 2.13 Experts Reimbursement

For experts, a distinction has to be made between so-called *Meeting Experts*, i.e. experts without appointment letter, and *Experts with Appointment Letter*, covering evaluators, reviewers, monitoring experts as well as evaluation observers.

Reimbursement procedures for evaluators and evaluation observers are being dealt with by PMO. Here, 6,1% of payments in 2007 were on-time. It should be noted that 2007 was the first year for PMO to be responsible for these payments. Prior to 1 January 2007, evaluators and evaluation observers were paid by DG RTD with on-time payments also below 10%.

PMO is also in charge of reimbursement procedures for meeting experts. Here, the percentage of on-time payments in 2007 was 41,84%.

DG RTD is in charge of the reimbursement for reviewers and monitoring experts, appointed by DG RTD. The percentage of on-time payments for these experts in 2007 was 47,84%.

# 2.14 Independent Assessment of FP7 implementation by National Contact Points

A survey was conducted amongst the National Contact Points (NCP) to collect their views, comments, and suggestions regarding the promotion and implementation of FP7 during 2007. The questionnaire consisted of 6 questions on FP7 implementation, each covering a different phase of the project cycle, which were rated on a scale of 1 (poor), 2 (basic), 3 (fair), 4 (good) to 5 (excellent). 58 NCP National Coordinators in 38 countries were contacted; 21 responded, representing 19 different countries.

On this basis, the results obtained should not be regarded as being fully representative.

The average score for the category "information received on FP7 calls" was 4.1, which is slightly better than 'good'. All responses were in the categories 'fair', 'good' and 'excellent' with no negative responses received. Most respondents refrained from commenting.

Regarding the procedures for the evaluation of proposals, the average score was 3.95, thus slightly below the category 'good'. Again, all responses were in the categories 'fair', 'good' and 'excellent'. It was mentioned twice that the evaluation procedures took too long. Other comments call for elucidating the scoring process and a better representation of industry amongst the evaluators.

As to the handling of contract negotiations by Commission Services, an average score of 3.0 was given, which falls in the category 'fair'. This was the lowest average score given and none of the respondents classified the handling of contract negotiations as 'excellent'. Numerous respondents commented on the lengthy time to contract, describing it as 'inordinate' and 'lasting forever'. Problems with the Unique Registration Facility (URF) were the second most frequent point of criticism. Nevertheless, many respondents were optimistic that once these problems are overcome and the electronic system is fully operational, the negotiation process will accelerate as a result. It was also mentioned that the negotiations were too dependent on the individual project officers' views.

The management of FP7 projects by Commission Services was given an average score of 3.63, which is well below the category 'good'. The management was classified as 'excellent' once, and no negative scores such as 'poor' or 'basic' were given. No comments were made on the management of FP7 projects.

Further, the aspect of simplification of administrative procedures was addressed. Here the average score given was 3.6, which is again below the category 'good'. All responses were in the categories 'fair', 'good' and 'excellent'. Comments pointed at an improvement compared to FP6, yet changes in terminology were said to have caused confusion.

Many comments were made on the procedures that were thought to negatively affect the quality of research and inhibit the implementation of FP7. Most respondents pointed to the administrative procedures and the associated delays. Legal and financial procedures, delays in validation and negotiation as well as changes in terminology and difficulties in understanding FP7 rules, in particular the different rules for FP7 instruments and the differences in procedures by DGs, were perceived as inhibitory. Further comments pertain to the Commission procedures, with the communication with staff being described as difficult and the decisions of project officers being elusive. In particular, the rotation of Commission staff was said to cause a 'knowledge drain'. Better assistance on IP issues was deemed necessary, alongside a clearer definition of SMEs. Finally, financial burdens were quoted as inhibitory for participation in FP7, especially for small participants from the New Member States as well as for some universities.

In order to ease the administrative burdens on participating partners, it was proposed that the NCPs should take the responsibility for validation. Further, it was proposed that validation should take place when consortia first come together, to speed up the process.

Finally, the NCPs were asked to rate the ease of use of FP7 compared with similar international research actions or large national schemes. Here the average score was 2.71, with the categories being 1 (much more complex), 2 (more complex), 3 (about the same), 4 (less complex) and 5 (much less complex). Thus FP7 was overall perceived to be more complex than comparable funding schemes, the main reason being the amount of paperwork involved.

It is foreseen to consult NCPs periodically on FP implementation issues and to conduct another survey in the context of the 2008 Monitoring exercise.

## 3. FP7 IMPLEMENTATION IN 2007 - SPECIAL FOCUS

## 3.1 European Research Council

#### 3.1.1 The "Ideas" programme

The European Research Council (ERC) has been given the mandate to deliver competitive research funding at the frontier of knowledge, and at EU level, thus adding value to and complementing national research funding schemes. This presents new and exciting opportunities for frontier research in Europe.

The Scientific Council has designed the ERC grant schemes to promote research excellence in all fields of knowledge and scholarship, and to secure the corresponding human capital, by both retaining in Europe and progressively recruiting from overseas some of the top research talent of both the current and the next generation.

The ERC has developed and launched two "core" schemes within the FP7. Both operate without predefined thematic priorities; individual research investigators have the opportunity to propose "bottom-up" research projects including high risk, interdisciplinary projects, that are evaluated on the sole criterion of excellence.

- § *ERC Starting Grants*: Supporting the independent careers of excellent researchers, whatever their nationality, located in or moving to the Member States and associated countries, who are at the stage of starting or consolidating their own independent research team or, depending on the field, establishing their independent research programme.
- § *ERC Advanced Grants*: Supporting excellent, innovative investigator-initiated research projects across the Member States and associated countries, directed by leading advanced investigators of whatever age, who have already established themselves as being independent research leaders in their own right.

## 3.1.2 Promoting the ERC activities to the research community and wider public

The ERC has promoted it activities through:

- § Establishment of the ERC website at http://erc.europa.eu (launched on 14 February 2007);
- § An ERC launch conference on 27/28 February 2007 in Berlin, co-organised by the Deutsche Forschungsgemeinschaft, DFG (German Research Foundation) and the European Commission.
- § Establishment of National Contact Points (ERC NCPs) in more than 36 countries (27 EU Member States, 9 Associated Countries and some third countries);
- § An awareness-raising campaign on the ERC focusing on the first Starting Grant call, with over 90 presentations at FP7 and ERC launch events in 23 countries, as well as the dissemination of 5.000 posters announcing the call to research organisations and intermediaries;
- § Production and broad dissemination of a brochure introducing the Scientific Council to 75.000 contacts in Europe, including key stakeholders in research, policy and economy;
- § Development of the ERC logo, which has been used to create a recognisable and durable visual identity for the ERC.

## 3.1.3 The ERC peer review evaluation process

Setting up the ERC peer review system was a major priority for the Scientific Council during 2007. It established Panels covering all scientific domains - Social sciences and Humanities (SH), Life sciences (LS) and Physical and Engineering Sciences (PE) covering a broad range

of topics, to ensure that proper consideration would be given to high quality, interdisciplinary proposals. Twenty panels were set up for the first ERC Starting Grant call covering all scientific domains. Based on the experience gained from the call, the number of panels has been increased to 25 for the first ERC Advanced Grant call.

41% of experts which served in the first stage evaluation of the ERC Starting grant (2007) were reimbursed within 45 days. Delays mainly depend on PMO processes. Due to this the average time for payment is 56 days.

The ERC put in place redress procedures, following the model established for FP7. The "Ideas" configuration of the redress committee considered 245 redress requests relating to the 9167 proposals submitted following the stage 1 peer review evaluation; this number represents approximately 3% of the total number of applications. The redress committee concluded that 15 of these cases (6% of complaints; 0.16% of proposals received) required a re-evaluation, resulting in 1 proposal being passed to stage  $2^{18}$ . Following the stage 2 evaluation procedures, 27 cases were received and have been processed, but none were retained.

#### 3.1.4 Performance of the calls

The first Starting Grant call was published in December 2006 with a deadline in April 2007. The budget announced for the call was approximately €290 million.

A total of 9167 proposals were received of which 8794 were peer reviewed.

At the end of the first stage, 559 successful applicants (6%) were invited to submit a more detailed proposal for the second stage evaluation by the deadline of 17 September.

The outcome of the evaluation process was a list ranking the proposals according to the conclusions of the panels. With applications averaging ∼€1 million, 299 (54%) applicants were funded.

The ERC made no pre-determination of research areas or disciplines in advance and in fact a significant proportion of the proposals submitted were highly interdisciplinary. However, classifying the proposals broadly according to their main scientific focus, the breakdown of the 299 proposals (by budget) is as follows:

- § Physical sciences and engineering: 46%
- § Life science including medicine: 39%
- § Social sciences and humanities: 15%

Of the successful applicants, 5% are not currently living in Europe. Regarding host institutions, the majority of them (86%) are located in the EU with the remaining 14% are situated in an associated country. 61% of the principal investigators will undertake their projects in higher education establishments, 32% in public research centres, 5% in private (non profit) research centres / foundations and the reminder in private / commercial research centres and international research centres.

In spite of the simplicity of the programme, "grant preparation time" is very variable – it has been as short as 71 days, but the typical time is 115 days. Discussions are needed between the host institution and the Principal Investigator to integrate the ERC project into ongoing activities resulting in about 60% of "grant preparation time" being with the host institution and principal investigator.

<sup>&</sup>lt;sup>18</sup> There remains one stage 1 request pending (Ombudsman case n° 485/2008/(IG)IP)

#### 3.1.5 Researchers' profile and Research areas or disciplines

Of the successful applicants, the majority of principal investigators completed their PhD studies between 5 to 8 years before applying for an ERC Starting Grant, irrespective of the domain and their average age is just less than 36 years.

Gender distribution differs largely between the various domains, with a considerably higher number of women selected in the area of Social Sciences and Humanities (48%), as opposed to the domains Life Sciences (20%) and Physical Sciences Engineering (21%).

## 3.1.6 Observing sound ethical principles of FP research

Of the 299 projects, 95 were screened by an external ethics panel of which 40 were subjected to a full ethical review. One project involves the use of human embryonic stem cells and has been submitted for opinion of the "Ideas" Programme Committee for regulatory approval (October 2008).

## 3.2 Joint Technology Initiatives

Joint Technology Initiatives (JTI) are one of the flagships of FP7. JTIs are public-private partnerships set up at European level in the field of industrial research, in order to boost European competitiveness in key areas where research and technological development can contribute to European competitiveness and quality of life. Strong reasons for setting up JTIs are the rapid pace of technological change, the rising costs of research, the increasing complexity and interdependence of technologies, and the potential economies of scale to be gained by cooperation across Europe.

JTIs arise primarily from the work of European Technology Platforms. In a small number of cases, European Technology Platforms have achieved such an ambitious scale and scope that they will require the mobilisation of high public and private investments as well as substantial research resources to implement important elements of their Strategic Research Agendas. JTIs represent an effective means of meeting the needs of this small number of European Technology Platforms.

In practical terms, a JTI is a legally established body (a 'Joint Undertaking'), set up on the basis of Article 171 of the EC Treaty. Strategic Research Agendas have been developed for the areas addressed by JTIs through intense collaboration between industry, including SMEs, the research community, civil society organisations and other stakeholders. These agendas provide clear and sound bases for the work programmes of the JTIs, which show a significant leverage effect. JTI members are jointly responsible for monitoring progress, guiding the evolution of the initiatives and adapting the work programmes in response to changing needs. In this respect, each JTI produces an annual activity report and reports to the Council and European Parliament. In addition, the Commission will undertake midterm and final evaluations of each JTI. JTIs have a dedicated budget and staff. The Joint Undertaking provides a framework for the public and private players to work and take decisions together. It organises calls for proposals, oversees selection procedures and puts in place contractual arrangements for projects set up to implement the JTI research agenda. It allows funds from different sources to be jointly managed and is responsible for communication and dissemination activities. Each Joint Undertaking includes one or more decision-making bodies, an Executive Director and staff, as well as internal or external advisory bodies.

In line with the FP7 Cooperation Specific Programme, the Commission presented proposals for Council Regulations for the first four JTIs in mid-2007 - *Innovative Medicines Initiative* (*IMI*), *Clean Sky* (aeronautics and air transport), *ARTEMIS* (embedded computing systems) and *ENIAC* (nanoelectronics). These Regulations were formally adopted on 20 December

2007 and published in the Official Journal on 04 February 2008<sup>19</sup>. The Hydrogen and Fuel Cells Initiative FCH Regulation was adopted on 30 May 2008 and published in the OJ on 12 June 2008<sup>20</sup>.

The first calls for proposals for these JTIs were launched during 2008.

## 3.3 Risk Sharing Financial Facility

The Risk Sharing Financial Facility (RSFF) represents the result of a joint vision and common effort of the European Commission and the European Investment Bank to develop new financial instruments for the knowledge economy. Up to €1 billion will be made available from each institution for RSFF over 2007-2013, allowing the fund to make available financing in the order of €10 billion for investments in research, development and innovation. RSFF is managed by the European Investment Bank (EIB).

RSFF target beneficiaries are European research-intensive entities and research infrastructures, irrespective of size and ownership, which contribute to the objectives of FP7. The financing may be provided either to entities active in the field of research and innovation or to individual research-related projects, often at a demonstration stage.

Smaller companies and projects involved in research, development and innovation may benefit via the intermediation of financial institutions with which the EIB has established, or will enter into, risk-sharing agreements.

RSFF is a risk-bearing instrument by which the EIB covers, through capital allocations and provisions, the risks it bears when lending directly or when guaranteeing loans made by intermediaries.

The RSFF Co-operation Agreement between the European Community and the European Investment Bank was signed on 5 June 2007 and entered into force on signing.

Over 30 seminars, workshops and meetings, and 17 conferences were organised with the stakeholders of FP7 and with potential RSFF borrowers in 2007.

A network of RSFF liaison officers has been established that is regularly updated on RSFF progress. RSFF team continues to present RSFF to colleagues from DG RTD and other DGs of the research family, either in the form of dedicated presentations or within the framework of FP7 training sessions.

In 2007,  $\leq$  128 million have been transferred to the EIB. The balance of 2007/2008 commitment, amounting to  $\leq$ 76,2 million, has been paid in June 2008.

RSFF sector distribution as of mid 2008 demonstrates a balanced portfolio with life sciences, energy and automotive sectors taking the lead.

By October 2008, financing decisions for 19 RSFF operations have been taken by the EIB. Total financing requested from the bank was over €2 billion, out of which authorised RSFF supported financing volume has just exceeded €1 billion. Close to 70% of those transactions have been signed. More facts and analysis will be presented in the 2008 Monitoring Report.

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<sup>&</sup>lt;sup>19</sup> OJ L30, 4.02.2008, p. 1-20, p. 21-37, p. 38-51, p. 52-68, p.

<sup>&</sup>lt;sup>20</sup> OJ L153, p. 1-20

## 3.4 Participants Guarantee Fund

Two Participants Guarantee Funds (PGF) have been established respectively under the EC and EURATOM Framework Programmes for Research.

The PGF are *mutual benefit instruments* establishing solidarity among participants in indirect actions at the level of the Framework Programme. The PGF aims primarily at covering the financial risks incurred by the Community and the participants during the implementation of the indirect actions of FP7, its capital and interests constituting a *performance security*.

But moreover, as a consequence of its immediate effectiveness and securing effects, it allows the Community to exempt participants from *ex ante* financial viability controls (except in a limited number of cases) and from the imposition of any sort of financial securities, including bank guarantees or retention of pre-financing. It therefore facilitates the efforts of the Commission to reduce time to contract and paperwork. Moreover, it allows small actors such as SMEs to access Community funding under the same conditions as major research stakeholders.

All participants in indirect actions taking the form of a grant shall contribute to its capital for the duration of the action (5% of the maximum EC contribution set in the grant agreement). As such they are the owners of the PGF. The Community, represented by the Commission, is their financial executive agent. At the end of a project, participants to a grant agreement shall recover their capital if all eligible costs are accepted, except for some participants (1) in case the PGF should incur losses and (2) within the limit of 1% of the grant owed to them.

The PGF entered into force with the first FP7 grant agreements in 2007. By the end of 2008, approximately €310 million had been paid into the PGFs by the participants, generating approximately €6.5 million in interest. Only a few repayments have been made; none of them have involved the retention of the participants' contribution.

#### 3.5 International Dimension

International scientific and technological cooperation has been part of the EU RTD policies, since the launch of FP1 in 1983. Initially, this cooperation targeted developing countries and included research themes related to sustainable development issues and key challenges, such as health, food safety, agriculture, natural resources, water, environment protection, etc. In the beginning of the 1990s, similar scientific and technological cooperation activities were established with Central and Eastern European Countries and emerging economies, all of these brought together in 1994, by the INCO Programme, a dedicated programme for international cooperation under FP4 (1994 - 1998) and FP5 (1998 - 2002). The ERA Communication adopted in January 2000 identified the need to enhance the international dimension of research within and beyond Europe, and more systematic efforts to open the ERA to the world started to be implemented in FP6. Under this FP, Third Country researchers had the possibility to participate into two ways: through the dedicated INCO programme<sup>21</sup> and through the innovative general opening of thematic areas to all third countries.

<sup>&</sup>lt;sup>21</sup> Under the FP6 the INCO Programme was organised around groups of countries, addressing the following thematic areas and with the following allocated budget:

<sup>(</sup>a) *Developing countries* – health and public health; rational use of natural resources; food security – 152,7 million euro;

The later dimension was strengthened for FP7. A new approach towards international cooperation was developed, aiming to reinforce international research collaboration throughout the Framework Programme. Special instruments (SICAS, INCO-NETS) were established to implement these objectives allowing both geographical and thematic targeting<sup>22</sup>.

Association agreements and EC bilateral S&T agreements play also an increasingly important role in reinforcing international cooperation activities.

## 3.5.1 S&T association agreements with third countries (EC and EURATOM)

Association agreements are concluded for the EC under Article 170 (2) in conjunction with Article 300 EC Treaty and, for EURATOM, under Article 101 EURATOM Treaty.

Such association agreements are enjoying increased popularity despite the significant financial effort entailed for the Associated Countries. Currently 12 countries (Albania, Croatia, Former Yugoslav Republic of Macedonia, Montenegro, Serbia, Bosnia and Herzegovina, Turkey, Iceland, Liechtenstein, Norway, Israel, and Switzerland) are currently associated to FP7 and a number of other countries have flagged their interest to enter into association negotiations with the European Community. The year 2007 saw the successful association of 10 of those countries, most of them with retroactive validity from the actual beginning of the FP on 1<sup>st</sup> January 2007. This achievement allowed the Commission to respect its most ambitious targets and the countries concerned to start benefiting from association since the early stages of FP7 implementation.

### 3.5.2 EC bilateral S&T agreements with Third Countries

S&T agreements, concluded for the EC under Article 170 (2), in conjunction with Article 300 EC Treaty and, for EURATOM, under Article 101 EURATOM Treaty, establish a legal framework to promote S&T cooperation activities between the Communities and Third Countries.

Since 1998, the European Community has concluded S&T agreements with 17 countries. They can be grouped according to different economic, geographical, and geo-political categories:

- § Industrialised countries: Australia, Canada, New Zealand, Republic of Korea, USA.
- § Emerging and smaller emerging economies: the 'BRICs' (Brazil, The Russian Federation, India, China), Argentina, Chile, Mexico, and South Africa.
- § European Neighbourhood Policy (ENP) partner countries: Egypt, Morocco, Tunisia, and Ukraine.

The Commission is currently finalising S&T agreements with Jordan and continues the negotiation for an S&T agreement with Japan.

<sup>(</sup>b) *Mediterranean partner countries* – environment, including water renewable energies and cultural heritage; health – 64,9 million euro;

<sup>(</sup>c) Western Balkan countries – environment; health – 19,8 million euro;

<sup>(</sup>d) *The Russian Federation and NIS* – environmental protection - adjusting the system for industrial production; communication and health protection – 85,2 million euro.

<sup>&</sup>lt;sup>22</sup> Further details, also on targeted opening activities, in: SEC (2007) 47 "A New Approach to International S&T Cooperation in the EU's 7th Framework Programme (2007-2013)", 12 January 2007

<sup>&</sup>lt;sup>23</sup> The only exception being Albania whose association agreement will be effective from 01/01/2008. The association agreements with Montenegro and Bosnia and Herzegovina were signed in 2008 and they do not have retroactive validity.

Under FP7 the role of S&T agreements has been reinforced and new tools have been designed to support the implementation of activities resulting from joint decisions taken under each S&T Joint Steering Committee. The new approach of implementing international cooperation activities under FP7 has opened new prospects for the management of S&T Agreements: the research priorities, commonly identified by the Joint Steering Committees can now be translated into targeted calls for proposals and eventually joint collaborative research projects (see following section). The Joint Steering Committees have thus become fora for substantial bilateral policy dialogue and prioritisation. The follow-up of their deliberations is systematically monitored through operational Rolling Road Maps. These are country-specific overviews of the jointly agreed cooperation activities and initiatives. They serve the double purpose of keeping track of joint commitments and future cooperation activities and aligning the respective programming cycles.

#### 3.6 EURATOM

The 7th Euratom Research Framework Programme (Euratom FP7) covers a five-year period from 2007 to 2011. Euratom FP7 has two specific programmes, one covering indirect actions in the fields of fusion energy research and nuclear fission and radiation protection, the other covering direct actions in the nuclear field undertaken by the Commission's Joint Research Centre (JRC).

#### 3.6.1 Nuclear Fission and Radiation Protection

Euratom FP7 provides important EU funding for R&D in such areas as nuclear technology, nuclear safety, radiation protection and radioactive waste management. This is especially important in view of the increased focus on low-carbon energy technologies, the need to maintain high levels of nuclear and radiation safety and the steady progress towards the implementation of deep geological disposal of high-level radioactive waste.

RTD services and the embryonic SNE-TP (see below) made important contributions to the Commission's Strategic Energy Technology Plan (SET-Plan), adopted on 22 November 2007. In this document the potential of nuclear fission as a sustainable technology is clearly recognised, in particular the plan to launch a European Industrial Initiative on advanced fission reactors.

The official launch, on 21 September 2007, of the Sustainable Nuclear Energy Technology Platform (SNE-TP- see <a href="www.snetp.eu">www.snetp.eu</a>) provided a strong basis for the development of the proposed SET-Plan industrial initiative. This initiative will be crucial for maintaining a baseload supply of safe and sustainable low-carbon electricity in the EU and for ensuring that nuclear expertise and know-how are retained within Europe. SNE-TP brings together the nuclear industry, the electricity supply sector, research institutes and academia to define a Strategic Research Agenda and a corresponding deployment strategy. The European Commission has been an important catalyst in this process. Efforts are also on-going to establish a second Technology Platform in the specific field of geological disposal.

Euratom's Illustrative Nuclear Programme for the Community (PINC), published in January 2007, is one of the supporting documents for the Commission paper *An Energy Policy for Europe* and clearly recognises the role and importance of research and the need to establish Technology Platforms in the above fields.

The High-Level Expert Group (HLEG) on low-dose risk was launched at the very end of 2007 to promote joint programming between key Member States and the Euratom FP research on the risks of low and protracted doses of radiation.

Enhanced cooperation at the international level is one of the key objectives of the Euratom Framework Programme, and 2007 saw important steps towards closer collaboration with research programmes in the Russian Federation in nuclear technology, nuclear safety, radiation protection and radioactive waste management. The Euratom – Russia Working Group on nuclear fission energy research, established in 2007, identified activities for inclusion in future Euratom work programmes and has allowed coordinated calls covering topics of common interest to be introduced in the Euratom Work Programme 2009, one of the key areas being research on Generation-IV reactor systems. At a meeting in Beijing, November 2007, the first steps were taken towards similar arrangements with China.

#### 3.6.2 Fusion Energy

The objective of fusion research in the 7th Euratom Framework Programme is to develop the knowledge base for the creation of prototype reactors for power stations which are safe, sustainable, and environmentally responsible, and to realise ITER<sup>24</sup> as the major step towards this goal. ITER is listed in the SET Plan as a key EU technology challenge for the next 10 years to meet the 2050 vision towards complete decarbonisation.

A key milestone was achieved on 24 October 2007 when the ITER Agreement entered into force, following ratification by all 7 parties (Euratom, China, USA, India, Japan, Korea and The Russian Federation). Euratom has played a major role in the establishment of the ITER International Organisation, providing financial, organisational and personnel support. In 2007 the ITER Organisation carried out a design review with the aim of updating the previous baseline design of 2001. Euratom, in cooperation with France, began the preparation of the site in Cadarache in France for the construction of ITER. The first Procurement Arrangements, for approximately 400 tons of conductor for the superconducting magnets, were signed by the Japanese and European domestic Agencies. These will be the largest superconductor procurements ever made.

The *Broader Approach Agreement (BA)* between the EU and Japan entered into force on 1 June 2007. This agreement centred on three projects in support of ITER and an early realisation of fusion energy. The Commission coordinated the preparatory work necessary for the implementation of the BA Agreement.

## Establishment of the Joint Undertaking 'Fusion for Energy'

The European Joint Undertaking for ITER and the Development of Fusion Energy (F4E) was established by Council Decision of 27th March 2007. Located in Barcelona, F4E will manage the EU's contribution to ITER (as EU Domestic Agency) as well as the BA Agreement. The Commission has prepared the operational framework and procedures for the functioning of F4E (legal, administrative, financial and personnel issues), including the practical and logistical aspects (building, offices, IT system, etc). The main effort has focused on making F4E autonomous by early 2008, enabling the Joint undertaking to sign contracts for example.

The European Fusion Development Agreement was extended to cover the year 2007. It was approved by the Commission and signed by the Associates in December 2007. The agreement aims to encourage more coordinated action regarding fusion technology R&D in the Associations, including a number of urgent tasks for ITER, pending the full operational capacity of F4E. Building on the successful start-up of the Euratom Fusion Training Scheme (EFTS) in 2006, EFDA has been given an increased role in training of scientist and engineers. The need for a fresh impetus for training activities has been considered as crucial for the

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<sup>&</sup>lt;sup>24</sup> For more information see http://www.iter.org

fusion programme to maintain its scientific strength in the longer term, and to meet its present and short-term obligations (such as JET enhancements, construction of Stellarator W7-X, R&D for ITER and procurements for the ITER heating, diagnostics and test blanket activities).

Three new fusion Associations were formed in 2007, in Bulgaria, Lithuania and Slovakia, bringing the total number to 26. Institutions in Cyprus, Estonia and Malta became "Transnational Research Units" within existing Associations, so that all Member States (and Switzerland) now participate fully in the fusion energy research programme.

The JET (Joint European Torus) facility in Culham, UK, remains a major focus of EFDA coordination. It was successfully exploited in 2007 by task forces consisting of scientists from the Fusion Associations and an ambitious, ITER-relevant enhancement programme was initiated. Following a call for participation in experimental campaigns, the number of scientists that participated in the JET 2007 Campaigns was 241 from 17 Associations. They were at JET for a total of 6059 working days. Building on the 2007 and previous experimental campaigns, 72 papers were submitted in 2007 for publication in scientific journals. In addition, 95 submissions were made for presentations to major international conferences.

Besides entry into force of the ITER and Broader Approach agreements, international cooperation in the field of fusion energy was further strengthened in 2007 by Commission activities on bilateral agreements in the field of fusion energy research with ITER and non-ITER parties. The agreement between EURATOM and the Republic of Korea entered into force on 20 December 2007. Following discussions on the establishment of bilateral agreements on fusion energy research with India, China and Brazil, the Commission initiated in 2007 the procedures to request a mandate for negotiation from Council. These agreements would complement and support the implementation of the ITER Agreement. The Commission also initiated the procedure to request a mandate from Council for negotiation with Brazil which has expressed an interest in accession to the ITER Agreement and in cooperating with the EU in the field of nuclear fusion research. Regarding cooperation with the Russian Federation, a bilateral discussion was held on closer cooperation in areas such as the exploitation of JET, sharing ITER tasks, and collaboration in technology and DEMO related activities.

## 4. SIMPLIFICATION

The EC Framework Programmes are by far the most substantial international research programmes worldwide. Over the last decades, this has led to a certain complexity in their organisation and to a corpus of rules and procedures, which are not always easy to understand for new applicants.

Against this background the European Commission has undertaken a number of initiatives to simplify the implementation modalities of the Framework Programmes. While gradual improvements could be achieved in previous years, the launch of FP7 offered the unique opportunity to simplify procedures in a far more fundamental way.

While it is still much too early to draw any conclusions on the overall effects of these measures, the present chapter is intended to illustrate the different initiatives taken und to highlight wherever possible the first results obtained.

#### Certification of costs – fewer audit certificates

The number of audit certificates has been substantially reduced in FP7 compared to FP6: Only beneficiaries receiving more than €375.000 will have to provide a certificate (in FP6, every beneficiary had to submit at least one audit certificate at the end of the project, regardless of the amount involved). A simulation based on the population of FP6 contracts shows that only 18% of the participations receive EC contributions above €375.000. Assuming a similar distribution of funding in FP7, this would mean that for 82% of FP7 participations no certificates would be necessary – a reduction of the number of certificates by a factor of ten compared to FP6.

## Fewer ex ante financial capacity checks and protective measures

The introduction of the guarantee fund in FP7 allowed the abolition of ex ante financial viability checks for the majority of participants. These checks are now only necessary for coordinators and participants requesting more than €500 000 EC contribution. In FP6, only 11% of the participations received more than €500 000 EC contribution. Assuming a similar distribution of funding in FP7, this would mean that **nine out of ten participants in FP7 would be exempt from any ex ante financial capacity check**.

In addition, bank guarantees, blocked accounts, reduced pre-financing or other measures of financial protection are no longer requested by the Commission.

Both the increase of the threshold and the abandonment of protective measures simplify participation in particular for SMEs and start-ups.

## Unique registration of participating legal entities

Repeated requests for the same documents on the existence and legal status of participants were a major cause of complaints in previous Framework Programmes. Since the start of FP7, the principle of unique registration is introduced. A central validation team has been in operation since mid-2007. Legal documents have to be provided only once and validation by the central team holds for all future participations in FP7. The second phase of this project was the introduction of the Unique Registration Facility (URF), a Web-based system where the participants themselves can access and change their legal data online. This system that is common to all DGs in the research family is in operation since the beginning of May 2008. More than 8000 entities are already registered. The unique identifier (Participant Identification Code – PIC) given to each legal entity will provide for several improvements in the future FP7 grant and programme management:

- § It provides easy traceability of participations through the complete project lifetime and in all IT systems. It improves thus the quality and coherence of statistics and reporting.
- § It allows an easy propagation of changes to the legal entity data to all systems and parties concerned in all grants in which an organisation participates.
- § It provides for a more coherent implementation and extrapolation of audit results
- § It gives each organisation the possibility of easy monitoring of their participations in FP7 (via the Legal Entity Appointed Representative LEAR, who will have online access to the list of participation of his organisation)

## Certification of methodology

Methodology certification tackles one of the main sources of errors that beneficiaries made as participants in former research Framework Programmes, i.e. the use of incorrect cost rates. The beneficiary's method of calculating personnel costs and indirect costs, either calculated as an average or an actual rate, can therefore be certified, providing reassurance that the method conforms to the FP7 Grant Agreement requirements.

Methodology certification reduces the administrative burden, waiving the need for separate audit certificates for interim payments. Procedures for the final payment are also made easier, as for claimed personnel costs and indirect costs auditors only need to verify that the calculation complies with the certified methodology.

Applied correctly, certification will also result in a lower error rate; in the end, error correction activities will require less time and effort. The criteria for certification will be decided shortly.

## Grant agreement negotiation

A new Web-based electronic system for negotiation, used by all research DGs, was introduced by the end of 2007. The system allows online interaction between participants and Commission project officers. Since May 2008 it is linked to the unique registration facility, providing for seamless data exchange on legal entities.

In accordance with the Rules for Participation, all Research DGs within the Commission have adopted harmonised and transparent rules to ensure consistent ex-ante verification of the existence and legal status of participants, as well as their operational and financial capacities.

To the same end, a "financial viability check tool" has been provided to participants, allowing them to self-assess their financial capacity.

#### **Project reporting**

Several elements of simplification are being introduced in the processes and rules for intermediate and final reporting in FP7 projects:

- § The reporting guidelines and the structure of reports were considerably streamlined.
- We strive for an extension of average reporting and payment periods from 12 months (in FP6) to 18 months. This could reduce the overall number of reports and payment transactions by 17% (estimation based of simulations on the FP6 portfolio), thus reducing the workload both for the participants and the Commission services.
- § The amount of data collected in reports is considerably reduced. Detailed questionnaires on wider societal implications will no longer be required with each intermediate report but only once (in the final report).
- § A Web-based electronic reporting system is planned that will simplify interactions between participants and the Commission and will provide better possibilities for the dissemination of project results.

#### Amendments

Amendments to ongoing contracts/grant agreements represent a considerable administrative workload both for participants and the Commission. The FP7 amendment guidelines were therefore prepared with the aim of identifying all possibilities for simplifying rules and procedures. The main result is that in FP7 the coordinator can not only request amendments on behalf of the other beneficiaries (as in FP6) but can also accept them on behalf of them. Also, some changes (such as changes in the address or legal name of the beneficiary) in ongoing grants will not require a formal amendment in each of the grant agreements where the beneficiary participates but just the sending of one information letter to the legal entity. Important simplifications in the amendment processes will be enabled by the unique registration facility. Changes to the status of a legal entity will now be automatically propagated to all grants concerned (in all research DGs) and to the respective participant, coordinators and project officers.

## Streamlining and harmonisation of documentation

Documentation and guidance notes on the various aspects of FP7 implementation are clearer and simpler and adapted jointly by the research DGs. This has been preceded by consultation with external stakeholders e.g. via comments received directly from beneficiaries in the inquiry service (helpdesk) or via the network of legal and financial national contact points.

## Perception of Simplification in FP7 by National Contact Points

The NCP Survey conducted in the context of the 2007 Monitoring exercise reflects a widespread perception that progress has been made with regard to the simplification of FP procedures. The responses to the question "Do you think that FP is getting simpler to use compared to previous FPs?" on a scale from 1 (= strongly disagree) to 5 (= strongly agree) produced an average score of 3,6 for FP7, which compares favourably to the 2,78 average score for FP6.

## 5. IMPACTS AND ACHIEVEMENTS

Any monitoring of a major research programme would be crucially incomplete without a closer look at the results obtained and the impacts achieved. The system of FP7 monitoring indicators (see Annex 1) does therefore include a number of key indicators related to the output of projects and programmes. Based on the revised project reporting system, the information provided in the future should be far more substantial than under previous Framework Programmes. As 2007 marks the start of FP7, the present report cannot yet provide this type of information. In order to illustrate, however, the various types of impacts and achievements generated through the Framework Programmes, three FP6 projects are briefly presented here. The selection of these projects is meant to be illustrative only – they are not intended to be representative of the large number of FP6 projects across the scientific spectrum which have been brought to successful conclusion and have contributed to achieving the objectives of the Framework Programme. A full list of projects, together with information on their results, is available through both the *CORDIS* and *Europa* websites.

### Healthy Aims

The Healthy Aims project, lead by a consortium of EU, Swiss and Israeli scientists, has developed a new range of intelligent medical implants and diagnostic systems, combining expertise in micro-, bio- and nano-technologies. These include a functional electrical simulation device (FES) implant used to help restore muscle movement or bladder control following a stroke or illness, and an eye implant restoring partial sight in certain cases of blindness. Further, a cochlear implant under development could help restore lost hearing and reduce the size of external hearing aids. A number of important diagnostic tools are also emerging from the projects, such as an implant to measure the pressure inside the brain cavity or a contact lens incorporating a 'strain gauge' to help diagnose glaucoma. From the European Union's perspective, these new generation medical implants have the potential to improve quality of life for millions of Europeans and reduce the costs of long-term treatment.

#### **HEATOX**

The HEATOX project shed light on the formation of acrylamide, a molecule thought to cause cancer in humans, in common food products such as bread, French fries, chips, biscuits and breakfast cereals. In this context, methods for cooking and processing these foods were introduced such as to reduce the levels of acrylamide in the final product. The Commission Recommendation on the monitoring of acrylamide levels in foods (2007/331/EC) is based heavily on HEATOX project results with regard to the products to be monitored, the sample numbers and frequencies as well as the analytical requirements. Further, the Acrylamide Toolbox which was produced by the European Food and Drink Federation (CIAA) was checked and updated using the findings from the HEATOX project.

#### POF-ALL

The POF-ALL project's aim was to demonstrate that cheap and robust plastic fibres can replace glass fibres to carry high-speed communications the last few hundred metres into homes and businesses from the core network. The installation costs can be reduced by using plastic fibres as there is no need for special tools or skilled technicians. Speeds of 1 Gbit/s are already within reach with a potential of 10 Gbit/s in the future. Plastic optical fibres will make Europe independent of extra-European technologies for the peripheral network, as is currently the case with ADSL. Further, European companies can enhance their competitiveness in the communications industry by exporting the new technology and promoting further investments.

## **ANNEX 1: MONITORING INDICATORS**

The following table provides the detailed list of indicators used for the full implementation of the new monitoring system including respective sets of sub-indicators as well as the main data source. The corresponding chapter of this report is also indicated.

INDICATOR / ISSUE		SUB-INDICATOR	Main Data Source	MONITORING REPORT
1. Promotion of FP7	1.1	Number of attendees at launch days	Annual NCP Survey	Chapter 2.3
	1.2	Number of information days	Annual NCP Survey	Chapter 2.3
	1.3	Commission organised meetings of NCPs	DG RTD	Chapter 2.3
2. Performance of the calls	2.1	% overall success rate (aggregate) for the year by priority area and funding scheme	CORDA	Chapter 2.4
	2.2	% success rate (aggregate) for different types of organisation by priority area and funding scheme	CORDA	Chapter 2.4
	2.3	% success rate (aggregate) for different types of organisation by priority area and funding scheme & success rates per country	CORDA	Chapter 2.4
Performance of the proposal evaluation and redress procedure	3.1	Overall quality assessment of the proposal evaluators on the FP proposal evaluation process (evaluators survey);	Annual Evaluators' Survey	Chapter 2.9
	3.2	Assessment of quality by the evaluators between the FP evaluation process and other equivalent systems (evaluators survey)	Annual Evaluators' Survey	Chapter 2.9
	3.3	Time to contract/grant	CORDA	Chapter 2.11
	3.4	% of experts reimbursed within the specified 45 days	DG RTD	Chapter 2.13
	3.5	Redress cases upheld (i.e. leading to a re- evaluation) – number and %?	DG RTD	Chapter 2.10
Quality of on-going research projects	4.1	Average results of independent project review process by priority area	FP6: Self- Assessments & Highlights FP7: SESAM data (not existing yet for 2007)	Chapter 5
	4.2	% of projects by priority area covered by reviews	FP6: Self- Assessments & Highlights FP7: SESAM data (not existing yet for 2007)	Chapter 5
5. Project performance by outputs	5.1	Average no of project publications per project by priority area and finding scheme	FP6: Self- Assessments & Highlights FP7: SESAM data (not existing yet for 2007)	Chapter 5
	5.2	Average number of other forms of dissemination activities per project by priority area and funding scheme	FP6: Self- Assessments & Highlights FP7: SESAM data (not existing yet for 2007)	Chapter 5
	5.3	Average number of different types of intellectual property protection per project by priority area and funding scheme	FP6: Self- Assessments & Highlights FP7: SESAM data (not existing yet for 2007)	Chapter 5
6. FP activity	6.1	Total number of active projects by priority area	CORDA	Chapter 2.4
	6.2	(June) Average financial size of projects by priority area and funding scheme	CORDA	Chapter 2.4
	6.3	Participation by types of organisation by priority area funding scheme	CORDA	Chapter 2.5
	6.4	Participation totals per country	CORDA	Chapter 2.6

7. Achieving gender equality	7.1	Number of male and female coordinators - proposals	FP7: CORDA, DG RTD	Chapter 2.8
	7.2	Number of male and female coordinators - projects	FP7: CORDA, DG RTD	Chapter 2.8
	7.3	Gender breakdown (by seniority) of project participants	FP7: CORDA, DG RTD	Chapter 2.8
	7.4	Percentage of male and female members in Advisory Groups and Programme Committees	DG RTD	Chapter 2.8
8. Observing sound ethical principles in FP research	8.1	Number of projects going through the review process/ % by area/ programme (available from the sector)	DG RTD	Chapter 2.12
	8.2	Number (%) of ethical reviews where the result showed sufficient or insufficient attention had been given (available from the sector)	DG RTD	Chapter 2.12
	8.3	Number of projects stopped as a results of the ethical review (available from the sector)	DG RTD	Chapter 2.12
	8.4	Number of screenings by services (information would need to be requested from services)	DG RTD	Chapter 2.12
9. Performance International cooperation	9.1	Total numbers of participations of 3 <sup>rd</sup> countries by priority area and funding scheme	CORDA, DG RTD	Chapter 2.7
	9.2	Success of 3 <sup>rd</sup> countries in calls by priority area and funding scheme	CORDA, DG RTD	Chapter 2.7
	9.3	EC contribution to 3 <sup>rd</sup> countries (ICPPs)	CORDA, DG RTD	Chapter 2.7
	9.4	Number of international outgoing/incoming fellowships	DG RTD	Chapter 2.7
10.Simplification of the FP	10.1	Do stakeholders perceive that the FP is getting simpler to use in terms of financial and administrative procedures?	Annual NCP Survey	Chapter 4
	10.2	How do stakeholders find the ease of use for the FP, compared with similar international research actions and large national schemes?	Annual NCP Survey	Chapter 4
	10.3	Are there any aspects of FP procedures which are adversely affecting to a significant extent the quality of the research carried out and the quality of participation in the FP?	Annual NCP Survey	Chapter 4

The indicators for the new monitoring system have been developed in early 2008 by a working group comprised of participants involved in research evaluation and monitoring activities from the research family DGs and representing the different structural features and types of research within the Framework Programmes.

# ANNEX 2: DATA COLLECTION AND REPORTING METHODS AND DATA QUALITY

#### Background

The FP7 proposals and participants database contains information on 110.101 applicants involved in 23.202 proposals that were submitted in response to 54 FP7 calls for proposals for which validated evaluation and selection data is available centrally (as of 25 February 2008) and have already been communicated to the respective FP7 Programme Committee configurations.

This list is by no means a static one. Call-specific evaluation and selection results enter the system almost on a daily basis. However, before such data is released they need to be validated by the responsible Commission services and undergo a series of quality checks. Therefore, it is possible that not all concluded FP7 calls for proposals are already in the system. Those missing, together with the more recent calls, will be included in the next update scheduled to take place by the end of September 2008.

The FP7 proposals and participants database is delivered via e-CORDA to the members of the specific configuration of the Programme Committee for the "Cooperation" specific programme as well as to authorised users nominated by the FP7 participating countries.

#### Data quality

Overall, data quality is considered to be acceptable. In any case, it should be noted that the Commission services cannot be held responsible for the quality and content of applicant-supplied information contained in submitted FP7 proposals. The Commission services treat proposal information as it is provided by the applicants. No attempt is made to alter data content or improve data quality.

In FP6 the most serious data quality problems concerned the incomplete and non-validated data on participants' SME status and the existence of multiple entries on participants; both problems were attributed to the absence of a central registry of FP6 contractors. In FP7 these issues are addressed by the introduction of a 'Unique Registration Facility' (URF) for participants. However, during the first year of implementation of FP7 this new facility was not globally implemented and, as a result, reported data was still subject to some measurement error.

Moreover, information on the type of activity and legal status, including SME status, at the proposal submission phase is provided by the applicant organisation; this information is not verified by the Commission services before the proposal is retained for negotiation. This imposes limitations to the reliability of this type of data: The 2<sup>nd</sup> Progress Report on SMEs in FP7 reports an error rate in the SME self-declared status of 33% in signed grant agreements in 2007. It is also reported that 26,9% of Public Bodies in eligible proposals are SMEs, when it is known that only in exceptional cases can a public body be considered as an SME. It is expected that such inconsistencies will be sorted out with the introduction of more intelligent data acquisition system, such as a revised version of EPSS (the Electronic Proposal Submission System).

Still the overall participation data quality has been considerably improved as compared to that of FP6 and will be further improved in the coming years as more and more data is processed and cleaned by the statistical services of DG RTD and contract data is made available.

Quantitative comparisons of participation patterns between FP7 and FP6 is generally limited by the significant differences in the overall structures of the two Framework Programmes; the

differences in the funding instruments; and finally, the changes in the nomenclature and taxonomy of organisations, including changes in the definition of SMEs. Quantitative comparisons are currently further restricted, in the case of the 2007 FP7 monitoring, by the fact that data collection and processing is at an early stage.

## FP7 calls for proposals involving two-stage proposal submission and evaluation procedures

The available data includes information from a total of 6 FP7 two-stage calls for proposals including the ERC call. As the handling of information and treatment of data from these calls are subject to a number of restrictions (mainly of business process / technical nature), the final statistics and success rates need to be carefully interpreted.

First stage proposals are, in most cases, reduced or outline versions of the full proposal and they do not provide data on participants other than the coordinator and, therefore, no meaningful statistics on participant nationality or type of activity can be compiled. Following evaluation, each proposal is associated to an Evaluation Summary Report (ESR) and the resulting evaluation outcome.

Those proposals that pass to the second stage of the evaluation are submitted in full together with complete participants' data, thus allowing for statistical analysis. Following the second stage evaluation each proposal is once again associated with the corresponding ESR, evaluation outcome and, finally, an EC decision. In this context, it is important to note that all first stage proposals that pass to stage 2 have their data overwritten by the data of the second stage proposals, including ESRs and evaluation outcome. The calculation of success rates is heavily influenced by the above-described process and needs to be considered when assessing final FP7 participation and performance statistics.

#### Financial data in FP7 proposals submitted in response to "Ideas" and "People" calls

Applicants' data in proposals submitted in response to the "Ideas" (ERC) and "People" specific programmes (with a few exception listed below) refer to hosting organisations / institutions and not to individual applicants.

In proposals submitted in response to the "Ideas" (ERC) specific programme, no activity types are specified for the hosting organisations / institutions.

In proposals submitted in response to "People" (Marie Curie) calls for proposals, data on total cost and requested EC contribution are not provided. There exist, however, three "People" related calls for proposals namely, FP7-PEOPLE-2007-5-1-1-NIGHT, FP7-PEOPLE-2007-5-3-ERA-MORE and FP7-PEOPLE-2007-5-4-NCP that invite proposals for Coordination and Support Actions (CSA). Proposals submitted in response to these calls contain data on total cost and requested EC contribution both at proposal and applicant level.

The above-mentioned limitations in the availability of financial data in "Ideas" and "People" proposals need to be carefully considered when drawing conclusions on the basis of reported statistics.

### Summary statistics and success rates

Summary statistics on FP7 included proposals, applicants and success rates by funding scheme, applicant activity type and nationality, are based on (i) eligible proposal and participants data submitted to single stage calls for proposals and (ii) second stage eligible proposal and participants data for FP7 calls for proposals involving two-stage proposal submission and evaluation procedures. It is therefore important to note that the summary statistics reports on included and retained for funding proposals and success rates do not take into account data from proposals submitted to the first stage of FP7 calls that involve a two-

stage proposal submission and evaluation procedure. The main reason for this limitation is the limited amount of data and information provided in the first stage proposals.

With regard to proposals submitted to the "People" (Marie Curie) specific programme, financial data is not available neither at proposal level not at host level. Therefore, the corresponding statistics and success rates cannot be compiled. Your attention is drawn, however, to the CSA proposals submitted in response to the three "People" calls mentioned above. Given that these proposals contain full financial data, they are reported and they should be interpreted correctly, i.e., that this data refers only to CSA proposals which are listed in detail under the CSA heading.

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## **FURTHER INFORMATION**

Further reports (Statistical Analysis of FP6; previous Monitoring Reports; Annual Reports) can be found on:

http://ec.europa.eu/research/index.cfm?lg=en&pg=reports