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**REPORT FROM THE COMMISSION**

**Annual Report on research and technological development activities of the European  
Union in 2003**

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## Annual Report on research and technological development activities of the European Union in 2003

(Text with EEA relevance)

### 1. INTRODUCTION

European research policy is geared towards the realisation of the Lisbon objective to transform the European Union into a competitive and dynamic knowledge based economy, capable of sustainable economic growth. To this end, it has three interrelated objectives:

- To realise a European Research Area to allow the free movement of knowledge and researchers and overcome fragmentation and duplication of research policies and activities in Europe.
- Increasing the levels of research investment in Europe to 3% of the Union's GDP by 2010, with two thirds of this to come from the private sector.
- To support and strengthening research excellence to achieve the first two objectives and by reinforcing and complementing national and private sector research efforts.

This Report covers developments and activities during the period from January 2003 to March 2004. It has been prepared pursuant to Article 173 of the Treaty establishing the European Community,<sup>1</sup> and Article 4 of the decision on the Sixth Framework Programme.<sup>2</sup> It is accompanied by the annexed Commission Working Document providing more detailed reporting and a statistics annex. As an addition to previous Annual Reports, information is included on developments in research and technological development activities taking place within the Member States of the European Union.

### 2. COMMUNITY RESEARCH AND TECHNOLOGICAL DEVELOPMENT ACTIVITIES

#### 2.1. Implementation of the 6<sup>th</sup> Framework Programme

A major step towards the creation of a European Research Area was taken in 2003 with the first full year of the 6<sup>th</sup> Framework Programme. The Programme is one of the largest

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<sup>1</sup> “At the beginning of each year the Commission shall send a report to the European Parliament and the Council. The report shall include information on research and technological development activities and the dissemination of results during the previous year, and the work programme for the current year.”

<sup>2</sup> Decision No 1513/2002/EC of 27 June 2002. Article 4 “In the context of the annual report to be submitted by the Commission pursuant to Article 173 of the Treaty, the Commission shall report in detail on progress with implementing the sixth framework programme, and in particular progress towards achieving its objectives and meeting its priorities...; information on financial aspects and the use of instruments shall also be included.

international R&D programmes in the world, with a budget of 17.5 billion euro for the period 2002-06 (increased to 19.2 billion euro with the enlargement of the Union). As well as European Union Member States, the Programme is open to the participants from other countries through cooperation agreements.

### *Progress on objectives and priorities*

The 6<sup>th</sup> Framework Programme has attracted a very high level of response. During 2003 over 16000 proposals were submitted involving nearly 160000 participants from more than 50 countries. Some 2600 of these proposals were retained for funding (involving over 27000 participants).

Under the heading of Focusing and Integrating Community Research, more than 10000 proposals were submitted of which over 1,600 were selected for funding involving some 24000 participations. The majority of these (over 1100 proposals selected for funding) were in the seven thematic priorities identified in the 6<sup>th</sup> Framework Programme, and a significant number in the horizontal activities involving SMEs and the specific measures in support of international cooperation. In addition, the new activities introduced in the 6<sup>th</sup> Framework Programme on Scientific Support to Policy and NEST (New and Emerging Science and Technology) witnessed a considerable success with 128 proposals selected to be funded, including 11 proposals selected from a special call for proposals in response to the SARS epidemic.

Calls for proposals in the Structuring the European Research Area heading led to nearly 6000 proposals being received in 2003, the vast majority under the human resources and mobility actions. Some 880 of these proposals were selected for funding, of which over 700 were for human resources and mobility, and the others are for funding actions for Research and Innovation, Research Infrastructures and Science and Society. Furthermore, a Researcher's Mobility Portal was launched providing information on job and funding opportunities and the practicalities of a European research career.

Under the Strengthening the Foundations of the European Research Area heading, a new activity was introduced in the 6<sup>th</sup> Framework Programme, the ERANet initiative – to network and open up national and regional research programmes. The initiative has a successful start in 2003 with 74 proposals received in the first call of which over 30 were selected for funding.

Regarding the dissemination of results, the Research and Innovation actions in the 6<sup>th</sup> Framework Programme, including the network of Innovation Relay Centres, supported the use of research results for the purpose of innovation while the horizontal research activities involving SMEs allowed smaller companies to access research which meets their needs. Furthermore, the CORDIS internet service has focussed on providing open access to information about European projects as well as various technology brokerage activities. The uptake of research results by policy makers is a particular characteristic of the Scientific Support to Policy scheme, and wider public engagement in research is an aim of the Science and Society actions. At individual project level, rules have been introduced and reporting mechanisms defined to promote the use and dissemination of results.

The series of evaluations conducted during the year confirmed that Community research activities have provided very major contributions to Europe's scientific and technological knowledge base, creating extensive networking and collaborations between and amongst

European researchers in the private and public sectors and with significant European Value Added.

### *Financial aspects and instruments*

Implementation and budgetary execution of the Programme remained on track, a major achievement given the level of response. By the end of 2003 a total of 489 contracts were signed with a financial commitment of 1.64 billion euro. The rest of the budget for 2003 was committed globally, and then committed to individual contracts during 2004.

A major novelty of the 6<sup>th</sup> Framework Programme was the introduction of new instruments to enable a larger critical mass of resources and partners, and greater autonomy in project implementation. From the proposals submitted in 2003, over 400 major projects using these instruments were selected for funding. By the end of 2003, over 80 contracts for Integrated Projects were signed and 30 for Networks of Excellence. These represent 53 percent and 11 percent respectively of the EC financial commitment to contracts signed in 2003. A review of the effectiveness of the instruments started at the end of 2003 by an independent panel led by Professor Marimon; the panel reported in July 2004.

Finally, the first use of Article 169 of the Treaty, which allows Community participation in research undertaken jointly by Member States, was agreed in 2003 with the establishment of the European and Developing Countries Clinical Trials Partnership (EDCTP) to enable clinical trials for drugs and vaccines against HIV/AIDS, Tuberculosis and Malaria.

## **2.2. Other actions toward the creation of a European Research Area**

In addition to the Framework Programme, the European Union took a number of other important steps towards the creation of a European Research Area:

- Regarding the improvement of human resources, the Commission published proposals<sup>3</sup> for improving research careers in Europe, including the creation of a European Charter and Code of Conduct.
- The launch of a Europe wide debate on the future of European universities. A consultation document was published in January 2003 and a major conference held in Liege, Belgium, in April 2004.
- To further the international dimension of the ERA, negotiations for bilateral science and technology cooperation agreements were pursued with partners in the Mediterranean region, Switzerland, Mexico, Brazil, Chile, the US, Russia and the Ukraine.
- Progress was achieved on the Science and Society action plan, and three actions (Women and industry, women and enlargement, and research and foresight) were completed.
- Considerable progress was made in establishing a European space policy, with the publication of a Green Paper and then a White Paper during 2003, and a cooperation agreement signed between the European Union and the European Space Agency.

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<sup>3</sup>. COM (2003) 436, 18.7.2003.

- Debate about support to basic research in Europe and the creation of a European Research Council was elevated to a political level with a Commission Communication in January 2004.
- A first wave of Technology Platforms was established, to bring together stakeholders and define strategic research agendas for key technologies, including in areas such as hydrogen fuel cells and nano-electronics.
- A European strategy for life sciences and biotechnology was put in place in March 2003.
- A three year preparatory action for Security research was launched, to prepare the ground for a full Programme from 2007.
- The implementation of the Regions of Knowledge pilot action to stimulate the creation of regional knowledge based economies through research.

### **3. DEVELOPMENTS IN MEMBER STATES AND APPLICATION OF THE OPEN METHOD OF COORDINATION.**

2003 was also an important year for the implementation of the Open Method of Coordination in the field of research policy through its application to the objective of raising research investments towards 3% of GDP in the European Union. In April 2003, the Commission launched an Action Plan proposing measures to be undertaken at European, national and regional levels. Following this, groups of experts from Member States were established in six areas under the Scientific and Technical Research Committee (CREST) as a first cycle in the application of the Open Method of Coordination for the 3% objective.

In line with the 3% objective, nearly all Member States have set national targets for increasing R&D investment. Latest data suggests that a majority of Member States have increased their level of public funding of R&D since 2002, although substantial further progress is needed to reach the 1% of GDP. In terms of the public policy mix, support for R&D investment through fiscal measures are becoming increasingly important. Trends in private sector investments in research are less clear, and the situation varies considerable across Member States. Nevertheless, it is evident that major progress is required if the level is to reach 2% of GDP.

### **4. OUTLOOK**

The implementation of the Sixth Framework programme is well on track. The continued high level of response from the research community shows its important role in the promotion of the European research efforts.

The Work Programmes for the Specific Programmes of the Framework Programme have been updated several times. By the end of 2004, the Work Programme for the 'Integrating and strengthening' programme (EC Treaty) had been updated a total of 14 times, the work programme for the 'Structuring' programme (EC Treaty), a total of eight times, and the work programme for the 'Nuclear' programme (Euratom Treaty), a total of two times. Each updating generates the content for new calls for proposals. In all, over 120 calls for proposals were published by the end of 2004.

At the same time the Commission is making improvements to the implementation of the Programme in order to address concerns of the research community and the recommendations of monitoring and evaluation exercises, including the report of the high level panel on the effectiveness of the Instruments of the 6<sup>th</sup> Framework Programme.<sup>4</sup> The Commission has set out these measures in its response to the panel's recommendations and has established an action plan to rationalise and accelerate procedures.

The Commission has prioritised research in its budget and policy proposals for the period 2007-13.<sup>5</sup> In June 2004, the Commission launched the debate on preparing the 7<sup>th</sup> Framework Programme,<sup>6</sup> which foresees a more ambitious European policy to support research in order to progress towards the Lisbon objective. Following this debate, the Commission presented its proposals for the seventh Framework Programme in April 2005.

#### SOURCES OF FURTHER INFORMATION

More details are included in the Commission Working Document that accompanies this Report. For further information, the following are publicly available:

- Annual Monitoring Reports for the Framework Programme and Specific Programmes, which provide a concise, independent summary of the progress and quality of the measures taken to implement the programmes.
- Five-year Assessment Reports which examine implementation and achievements of Community research activities over the 5 previous years.
- The European Report on Science and Technology Indicators, which contains descriptions, statistics and detailed analyses of European and national RTD activities in the world context.
- Key Figures reports published each year, providing a set of indicators to take stock of Europe's position in science, technology and innovation.
- Research and Development: Annual Statistics (Eurostat): containing comparable international statistics on R&D budgets, R&D expenditure, R&D personnel and patents in the Member States, broken down by region.
- Statistics on Science and Technology in Europe, published as part of the "Panorama of the European Union" collection (DG Research/Eurostat).
- Studies and analyses published in connection with the Community RTD programmes and addressing issues specific to the fields of RTD which they cover.

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<sup>4</sup> COM(2004)574; SEC(2004)1057, 27.8.2004

<sup>5</sup> COM (2004) 101, 10.2.2004; COM (2004) 487, 14.7.2004.

<sup>6</sup> COM (2004) 353, 16.6.2004.

Most of these documents can be obtained or ordered from the Commission's Internet sites:

- The Commission's general EUROPA site: <http://europa.eu.int/>
- The CORDIS site containing comprehensive information on the RTD Framework Programme: <http://www.cordis.lu>
- The site of the Commission's Directorate-General for Research: <http://europa.eu.int/comm/research>
- The site of the Commission's Directorate-General for the Information Society: [http://europa.eu.int/information\\_society/index\\_en.htm](http://europa.eu.int/information_society/index_en.htm)
- The site of the Commission's Directorate-General for Enterprise: <http://europa.eu.int/comm/dgs/enterprise/>
- The site of the Commission's Directorate-General for Energy and Transport: [http://europa.eu.int/comm/dgs/energy\\_transport/index.html](http://europa.eu.int/comm/dgs/energy_transport/index.html)
- The Joint Research Centre (JRC) site: <http://www.jrc.cec.eu.int/>
- The Eurostat site: <http://europa.eu.int/comm/eurostat>