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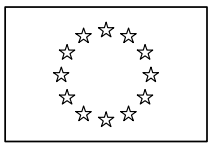

COMMISSION OF THE EUROPEAN COMMUNITIES

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REPORT FROM THE COMMISSION

Research and technological development activities of the European Union
2002 Annual Report

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LEGAL BASES FOR THE ANNUAL REPORT

Treaty establishing the European Community, Article 173: "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."

Decision No 182/1999/EC concerning the fifth framework programme (OJ L 26, 1 February 1999), Article 5: "The Commission shall regularly inform the European Parliament and the Council of the overall progress of the implementation of the framework programme and the specific programmes."

Decision No 1999/65/EC concerning the rules for participation (OJ L 26, 1 February 1999), Article 24: "The annual report which the Commission sends to the European Parliament and the Council in accordance with Article 173 of the Treaty shall contain information on the implementation of this Decision."

SOURCES OF FURTHER INFORMATION

– Annual Monitoring Reports published each year for the Framework Programme and each specific programme, which provide a concise, independent summary of the progress and quality of the measures taken to implement the programmes.

– Five-year Assessment Reports published every fourth year, both for the Framework Programme and for each specific programme, which present an independent retrospective evaluation of the relevance, efficiency, results and impact of the European Union RTD programmes during the previous five 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.

– Research and Development: Annual Statistics (Eurostat): an annual publication containing comparable international statistics on R&D budgets, R&D expenditure, R&D personnel and patents in the Member States, broken down by region.

– R&D and Innovation Statistics for the Candidate Countries and the Russian Federation (Eurostat).

– Statistics on Science and Technology in Europe, published as part of the "Panorama of the European Union" collection (Eurostat).

– Statistics in Focus under the theme "Science and technology" (Eurostat).

– The Commission's annual budgetary documents, i.e. the preliminary draft budget, the budget, the consolidated revenue and expenditure account and the balance sheet.

– Studies and analyses published in connection with the Community RTD programmes and addressing issues specific to the fields of RTD which they cover.

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 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/

– The site of the Commission’s Directorate-General for Enterprise: http://europa.eu.int/comm/enterprise/

– The Joint Research Centre (JRC) site: http://www.jrc.org

– The Eurostat site: http://europa.eu.int/comm/eurostat

Extensive information on European Union policies can be found on these sites, including — on the CORDIS site, which is devoted to the RTD Framework Programme, and on the sites of the Directorate-General for Research and of the other relevant Commission departments — all the reference documents, the texts of calls for proposals and a host of other information, in line with the Commission's transparency and information policy.

An annex that sums up the science and technology activities in 2001 and the outlook for 2002 for each of the specific programmes under the Fifth Framework Programme can be consulted on line at http://europa.eu.int/comm/research/report2002.html.

SUMMARY

This annual report covers the period from January 2001 to March 2002, which was marked by unprecedented development of the Community's research policy. The Commission has given further thought to all aspects of the European Research Area (ERA) and has drawn up a framework programme that can contribute fully to making it a reality.

The Commission adopted the proposals for the Sixth framework programme and the means for implementing it between February and September 2001. Following the first reading of the framework document, the Council and the Parliament reached broad agreement on the overall amount, the structure, the priorities and the instruments. The Commission amended its proposals relating to the means of implementation to reflect that agreement, with a view to the rapid adoption of the programme.

At the same time, the Commission drew up the procedures for implementing the various instruments, including integrated projects, networks of excellence, and participation in research programmes implemented by several Member States. For the latter, the Commission, in response to a request from the Council, collected suggestions from the Member States concerning the areas which should be eligible for Community financial support.

Major milestones in the construction of the European Research Area were reached with the publication of the first results of the benchmarking of national RTD policies and the mapping of scientific excellence in Europe and the adoption of a mobility strategy for researchers, the European innovation scoreboard, the action plan for science and society, and communications on the international and regional dimensions of the European Research Area.

A framework agreement on cooperation in the field of research was signed between the Commission and the European Investment Bank, and the GEANT European Scientific Communications Network became operational.

Implementation of the Fifth Framework Programme continued successfully in 2001 with the signing of nearly 5 000 contracts involving more than 23 000 participants and Community financial support of more than 3.7 million euros. Tools were developed and the analysis deepened with a view to better quantifying the socio-economic impact of Community research, resulting in further progress towards the objectives of increasing the share of small and medium-sized enterprises and the participation of women in research and paying greater attention to ethical aspects.

International cooperation was stepped up: agreements were signed with Malta, Ukraine, Russia and India and "bi-regional" relations were developed with Asia, Latin America, the Caribbean and the Balkans.

The various advisory groups which assist the Commission in the implementation of its research activities played their role to the full, with reports and opinions from the Scientific and Technical Research Committee (CREST), external advisory groups and the high-level groups set up by Commissioner Busquin in 2001. The EU Research Advisory Board (EURAB) was set up and started work in the second half of 2001.

1. A EUROPEAN RESEARCH AREA UNDER CONSTRUCTION

The European research area project is the fruit of a Commission initiative[1] and the European Council's wish, expressed for the first time at Lisbon, that research activities and policies should be better integrated and coordinated at both national and European level. It is implemented by the "open coordination method", under which varying groups of Member States join forces with the Commission to take specific steps towards the achievement of the objectives listed below.

A first progress report[2] on the construction of the European research and innovation area was drawn up for the European Council meeting in Stockholm in March 2001.

1.1. Coordination of research policies

1.1.1. Benchmarking of research policies

Based on a methodology and twenty indicators drawn up in partnership with the Member States,[3] the benchmarking of national research policies focused on the five themes selected by the Council in June 2000: public and private investment in research and development; scientific and technological productivity; the impact of research on economic competitiveness and employment; human resources; and the promotion of a scientific culture and public understanding of science. Five expert groups were given the task of analysing these themes. The data on the first fifteen indicators to be made available were published in June 2001[4], and work on the other five has continued in cooperation with Eurostat. The first progress report was published in June 2001[5]. The first results of the benchmarking exercise[6] were circulated during the seminar of research and industry ministers held in Gerona on 1 February 2002 and presented to the European Parliament's Committee on Industry, External Trade, Research and Energy (ITRE) on 26 February 2002; they were published on CORDIS[7] so that they could be widely discussed and enriched.

The benchmarking of national research policies is carried out in parallel with that of the European Trend Chart on Innovation, which each year publishes the European Innovation Scoreboard (see 1.3.1 below).

1.1.2. Mapping scientific excellence in Europe

The mapping of scientific excellence is intended to identify specific RTD capabilities existing in Europe, including less known and/or small ones and to assess their excellence. This should allow visibility-raising across borders, by disseminating the mapping results widely to policy makers, the scientific community, industry and investors. Intensified networking, increased intra-European mobility and knowledge transfer, and greater attractiveness of Europe could emerge as additional effects. At the instigation of the Lisbon European Council and to follow up the Council meeting of 15 June 2000, the Commission and the Member States defined a

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1 COM(2000)6
2 SEC(2001)465
3 SEC(2000)1842
4 Key Figures 2001 : ISBN 92-894-1183-X and http://www.cordis.lu/rtd2002.indicators.scoreboard.htm
5 SEC(2001)1002
6 SEC(2002)129
7 http://www.cordis.lu/rtd2002/era-developments/benchmarking.htm#results

methodology[8] for a pilot exercise of mapping scientific excellence in Europe, initially in three areas: life sciences, nanotechnologies and economics. The exercise was extended to countries associated with the Framework Programme. The objective of the pilot exercise is to evaluate the methodological advantages and disadvantages and incorporate the learning effects into a consolidated and generalised methodology, which can then be used to continue the mapping from 2003 on. Of course, a limited number of maps will also be produced in a first stage leading to usable and interesting results.

First results for economics are already available and were discussed with stakeholders in November 2001. For the mapping of life sciences and nanotechnologies, preparatory studies have been conducted with the help of expert groups by exploring various alternatives, and these provide a sound basis for the implementation of the pilot methodology. A stakeholder panel was appointed in March 2002 to assist the Commission in steering the remainder of the pilot exercise and make recommendations for the possible generalisation of the methodology. Contractors selected on the basis of an open call for tenders[9] are carrying out the bibliometric and patent analyses in life sciences and nanotechnologies and developing tools to present the results in a format that can be fit for purpose for various categories of users. Final results for the mapping of excellence pilot exercise are expected for the end of 2002. The generalisation of the methodology and the strategy for implementing the next cycle of the mapping of excellence will be addressed in the fourth quarter of 2002 in close cooperation with the Member States, in the light of user needs and the outcome of the pilot exercise.

1.1.3. Networking of national research programmes

The networking of research activities undertaken at national and regional levels and the mutual opening-up of programmes are one of the objectives pursued by the European Research Area. As a first step, the Commission has launched a study of the feasibility of setting up an integrated information system on research in Europe, which should facilitate implementation of the coordination activities. Moreover, a communication on the application of Article 169 and the networking of national programmes was published on 30 May 2001[10]. The Commission has stepped up the dialogue with the national and international authorities in order to agree procedures for applying the coordination support activities provided for in the Sixth Framework Programme and to define pilot programmes for which the use of Article 169 would be appropriate in accordance with the conclusions of the Council of 30 October 2001.

Concrete proposals for starting the mutual opening-up of national RTD programmes were discussed at an informal seminar of research and industry ministers held in Gerona on 1 and 2 February 2002. The first themes selected were marine sciences; plant genomes; complexity and complex systems; and chemistry. Their progressive implementation has since been the subject of complementary work within CREST.

1.2. Mobility of researchers

Further to the report[11] of a high-level group of representatives of Research Ministers, in June 2001 the Commission adopted a Communication on *"a mobility strategy for the ERA"*[12], i.e. a strategy to create a favourable environment for the mobility of researchers in the ERA.

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8 SEC(2001)434

9 2001/S165

10 COM(2001)282

11 "High Level Expert Group on Improving Mobility of Researchers" http://europa.eu.int/comm/research/fp5/pdf/finalreportmobilityhleg.pdf - http://europa.eu.int/comm/research/fp5/

12 COM(2001)331

The communication proposes a first group of actions in order to improve information on vacancies and on administrative and legislative conditions in each country (e.g. web portal), provide assistance to mobile researchers and their families (e.g. network of mobility centres) and improve the situation of researchers and their families in matters which concern them directly (conditions of entry, social security, taxation, etc.). To this end, a Steering Group was set up with the Member States and Candidate Countries in order to have a regular exchange of views on the implementation of the initiatives announced in the Communication. It met for the first time in March 2002.

A major conference on *"an enlarged Europe for researchers"* and a round table on researchers' mobility were held in Brussels in 2001. The Commission also supported the conference "for a European research opened on the world" organised by the Belgian Presidency.

1.3. The link between research and innovation

Discussions of ways of strengthening the link between research and innovation continued in 2001, with a view to establishing favourable conditions in the Union for a more dynamic private research sector and improved economic application of the knowledge produced.

1.3.1. The European Innovation Scoreboard

At the request of the European Council, in September 2001 the Commission published the first fully-fledged version of the annual "European Innovation Scoreboard"[13], one of the three building blocks of the European Trend Chart on Innovation that implements the "open coordination approach" in the area of innovation.

It assesses the innovating capacity of Member States individually and of the Union as a whole, covering four main themes: human resources for innovation; knowledge creation; the transmission and application of knowledge; and innovation finance, outputs and markets.

The 17 Scoreboard indicators were selected to capture some of the most important measures of innovation: the fundamental prerequisites, such as the supply of trained scientists and venture capital; intermediate outputs, such as high technology patents; final outputs, such as the sales share for innovative products, and markets for high technology products such as information and communication technology (ICT) equipment and Internet access[14].

The second edition of the scoreboard was published in October 2001[15], and is also available as an interactive tool on the Trend Chart website[16]. The compilation of figures is accompanied by in-depth analysis covering achievements and trends, highlighting strengths and weaknesses of the performance of individual countries, and evaluating the convergence or divergence of each indicator across Europe.

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13 A pilot scoreboard was annexed to COM(2000)567 in September 2000

14 Some of these indicators are identical to the European Commission's "structural" or main indicators, while other scoreboard indicators apply more restricted definitions to the structural indicators in order to focus on innovation.

15 SEC(2001)1414

16 http://trendchart.cordis.lu/

– For many of the 17 innovation indicators, the leading countries of the European Union exhibit significant advances over the US and Japan[17], demonstrating great potential for the exchange of good policy practice and learning within the European Union. Variations between Member States are particularly high for four indicators: life-long learning; business R&D; high technology patents; and the share of SMEs involved in innovation cooperation. Interestingly, the differences are greater in areas affected by private decision-making, with less variability between countries for indicators that are strongly influenced by public policy, such as tertiary education or public R&D investment. This creates a much more difficult challenge for policy: how to encourage private investment and business strategies to focus on innovation.

– In addition to identifying problems at national level, the Innovation Scoreboard highlights two key areas where the European Union as a whole does relatively poorly compared to the United States and Japan: business R&D and high technology patenting. In response, the documentation accompanying the Innovation Scoreboard suggests two policy actions. Firstly, EU Member States need to initiate or increase incentives for business R&D. Secondly, research into the causes of the poor European performance in high technology patenting is needed to determine if this poor performance is due to a lack of basic capabilities in high technology sectors or to the appropriation strategies of European firms. One possible cause of the weakness in high technology patenting could be inadequate rates of patenting and technology commercialisation by European universities and public research institutes.

1.3.2. Stimulating investment in research

Following up the impetus given by the Lisbon European Council, work aimed at stimulating private investment in research progressed in 2001 along two different strands:

– Building on the existing work on the benchmarking of public and private investment in research, an exercise was initiated to identify the means of improving the effectiveness of public financing mechanisms for supporting private investment in research.

  Public authorities have a number of instruments at their disposal which, when applied effectively and in an appropriate mix, can help to stimulate increased private investment. These instruments include direct measures such as subsidies; fiscal measures; guarantees for both loans and equity; and support for venture capital. The objective of the exercise being undertaken is to identify good practices in using these instruments, both individually and in combination.

  On the basis of the preliminary work on this exercise, the Commission proposed in its Communication to the Barcelona European Council that a target of 3% of GDP be set for the overall level of public and private spending on research and development by the end of the decade. Within that total, the amount funded by business should rise to around two thirds, as against 55% today. This work also provided input for the note prepared to stimulate discussion at the Informal Seminar of Research and Industry Ministers held in Gerona on 1-2 February 2002. This note set out the means

[17] The UK, France, and Ireland, for example, are world leaders in the supply of science and engineering graduates; Finland, the Netherlands and Sweden in public R&D spending; Sweden in business R&D spending; and the Netherlands, Sweden and Denmark in home internet access.

by which the goal of increasing R&D spending to 3% of GDP by 2010 could be achieved.

– Based on the key role of the European Investment Bank (EIB) and the European Investment Fund (EIF) in providing investment for the research and innovation process, discussions have taken place to identify possible synergies to further this process, leading to a cooperation agreement between the Commission and the EIB.

  Structured cooperation between the Commission and the EIB should make it easier for the Commission, the EIB, and the EIF to combine their funding, to maximise the impact of their actions at Community level, and to attract private investment in research. The Commission and the EIB Group are working to give themselves the means to do so.

  On 7 June 2001, Research Commissioner Philippe Busquin and European Investment Bank (EIB) President Philippe Maystadt signed a joint memorandum in the field of research[18]. The joint memorandum establishes a framework for cooperation aimed at improving the complementarity of the financing sources between the Community research framework program (FP) and the "Innovation 2000 Initiative" (i2i) of the European Investment Bank (EIB) and the European Investment Fund (EIF).

  The EIB has taken part in targeted seminars, for example on biotechnology, and is participating in the preparation of the Sixth Framework Programme. Regarding new research and innovation financing schemes, progress has been made in identifying existing financial products suited to the financing of research and innovation and in developing ways to combine them.

1.3.3. Intellectual property

The objective of improving the transformation of knowledge into economic value through improved protection, management and transfer of intellectual property rights (IPR) such as patents and copyright was actively pursued in 2001.

– Legislative proposals were prepared on IPR on biotechnology and on computer-implemented inventions protection, and negotiations on a Community patent[19] made some progress, although key issues such as the choice of a jurisdiction for settling disputes, the linguistic regime and the role of National Patent Offices were left open.

– The identification, promotion and dissemination of best practices for the use of IPR in the research & innovation process progressed by means of workshops and expert groups. Consultations were held, leading to three reports prepared by experts. These reports provided input to EU policy formulation (e.g. to communications and action plans for life sciences and biotechnology) and guidance to researchers. New activities (studies and expert groups) were initiated on the coherence of national IPR rules for publicly funded research; the optimum use of IPR in university-industry research cooperation; and the role of IPR in ICT-based research. As part of this process, cooperation was stepped up with both the European Patent Office and the World Intellectual Property Organisation.

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18 http://europa.eu.int/comm/research/press/2001/memorandum-eib-fr.pdf

19 COM(2000)412

– Work started on the preparation of explanatory guidelines for knowledge management on the basis of the results of expert groups and workshops, to support the definition of IPR provisions in the Sixth Framework Programme.

1.4. Research infrastructure

1.4.1. Developing a European approach to research infrastructure

Pursuant to the conclusions of the Lisbon European Council and further support from the Research Council, the Commission staff working paper *"A European research area for infrastructures"*[20] proposed guidelines for a European policy on research infrastructure based on an analysis of past achievements and current shortcomings. It recommended establishing new mechanisms for Europe-wide scientific advice and infrastructure policy decisions and combining resources for the development of new key infrastructures, and examined how to better exploit existing infrastructure.

In June 2001, the Council, recognising the benefits of a European approach to research infrastructure in the context of the European Research Area, invited the Commission, in close collaboration with the Member States, to explore the need for new arrangements to support policies related to research infrastructure. Responding to this invitation, the Commission convened a group of experts designated by all Member States.

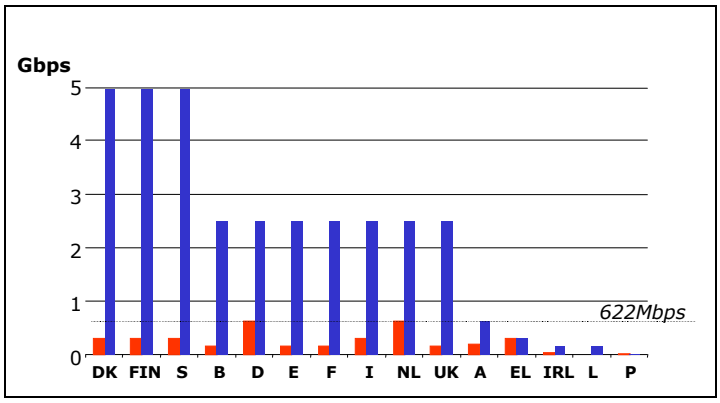
The expert group concluded that policy-making on research infrastructure of European significance had steadily become more complex and less effective and that a more collective approach was now needed to guide policy-making in the Member States. The expert group met several times in 2001. In its final report published early 2002, it recommended that Member States set up a *European Strategy Forum on Research Infrastructures* in order to support a coherent and strategy-led approach to policy making on research infrastructure in Europe and to facilitate multilateral initiatives leading to better use and development of research infrastructure.

1.4.2. Developing high-speed electronic networks for scientific communications

The Commission, in cooperation with the Member States, actively pursued the objective stated by the European Council in Lisbon. Europe has now reached a world leading position in terms of networks for research.

Since 1 November 2001 Europe has had a fully operational trans-European network (GEANT) running at 10 Gbps and interconnecting thirty-two National Research and Education Networks (NRENs). This corresponds to an increase by a factor of sixteen since 2000. The NRENs have also been upgraded, leading to a significant increase in the access capacities of all European research institutes and universities. The improvement in the access of the various NRENs to the trans-European networks from June to December 2001 is depicted in Graph 1.

[20] SEC(2001)356



Graph 1 : NRENs Access Capacity to the GEANT Backbone
(June and December 2001)

GEANT and other projects are also promoting the widespread introduction of the new Internet Protocol IPv6 in Europe, by deploying large-scale test beds involving academia and industry in a collaborative effort that actively supports European policies in this area.

For highly demanding research communities (e.g. high energy physics, astronomy, molecular biology, environment, etc.), complementary experimental GRIDS infrastructure is also being deployed. The GRIDS concept concerns a middle-ware technology layer aimed at effectively harnessing computing and data resources available world-wide and making them seamlessly accessible as a single resource for any user on the web. GEANT and GRIDS are seen as major building blocks for the Next Generation Internet.

1.5. Science and society

Following the publication of the Commission staff working paper *"Science, Society and the Citizen in Europe"* in November 2000, a wide consultation on the relations between science and society was launched through an on-line forum[21]. It addressed in particular the link between research policies and society's aims; risk management and the precautionary principle; ethics in science and research; the dialogue between researchers and citizens; public understanding of science; and the place and role of women in science. By the closing date of the public debate (20 June 2001), 182 people had registered and 69 messages had been submitted, many covering more than one subject.

1.5.1. Science and Society Action Plan

In response to a Council resolution[22], the *Science and Society* Action Plan was approved by the Commission on 4 December 2001 and presented to the Research Council on 10 December 2001. It consists of 38 actions aimed at promoting scientific education and culture in Europe, bringing science policy closer to the citizens, and placing responsible science at the heart of policy making.

The plan constitutes a management tool with all activities relating to science and society being presented in a coherent framework, with a general implementation schedule and tools

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21 http://www.cordis.lu/science-society

22 9980/01 RECH 76 of June 2001

for monitoring implementation, assessing the impact and adapting the actions in response to emerging needs.

1.5.2. The ethical framework in research

The ethical framework of research was further elaborated in cooperation with the European Group on Ethics in Science and New Technologies (EGE) with a view to embodying it in the Sixth Framework Programme.

Further exchanges with the EGE, the Council of Europe and representatives of the Member States led to the identification of 6 actions on ethics to be part of the *Science and Society* Action Plan:

– setting up an information and documentation observatory for ethical issues;

– establishing public dialogue on ethics in science;

– raising scientific researchers' awareness of ethical issues;

– fostering local and national networks of ethical committees;

– developing international dialogue on ethical principles;

– protecting animals used in research.

The following actions were defined in the communication on Life Sciences and Biotechnology, a Strategy for Europe, adopted by the Commission on 27 January 2002:

– strengthen and focus Community support for research into ethical issues and dissemination of results, including criteria for assessing the benefits of using biotechnology in agri-food production, to facilitate future reporting and to provide a good basis for societal decisions on the application of biotechnology and life sciences;

– steer research support to a more systematic mapping of benefits and disadvantages/risks which should include a strong component for dissemination of information and debate;

– ensure that ethical, legal and social implications are taken into account at the earliest possible stages of Community-supported research;

– develop, jointly with the European Parliament, measures to inform about the analysis of ethical issues at the EU level;

– work with public and private partners to identify areas where it is possible to establish consensus on ethical guidelines/standards or best practice such as stem cell research, biobanks, xenotransplantation, genetic testing and use of animals in research.

The Commission has monitored and, where relevant, participated in the activities of the relevant international organisations, such as the Council of Europe (Working group on biomedical research, which is drafting a protocol on biomedical research; Working group on

biotechnology; Working group on human genetics, which is drafting a protocol on human genetics; and Steering Committee on Bioethics), UNESCO and the UN.

1.5.3. Developing a common S/T reference system

Following the Science and Governance Conference of October 2000, a workshop was held in March 2001 in the framework of the Working Group on *"Democratising expertise and establishing scientific reference systems"* contributing to the development of the White Paper on European Governance. The related online questionnaire, posted on Internet between March and May 2001, resulted in over 200 responses.

A governance network of civil servants from Member States was established to provide a forum for discussion and exchange of good practices with regard to the interaction of knowledge producers (the scientific community), policy-makers and civil society. It also aims at developing scientific reference systems.

Work was also initiated in 2001 to develop a set of guidelines for the Commission's own practices in selecting and using expertise for policy-making, with a view to a subsequent proposal for a common approach by other institutions and Member States, to establish a blueprint for European Scientific Reference Systems (ECSRS), and to exchange experience between research and regulatory bodies concerned with risk issues. This was followed by the publication of guidelines and proposals related to risk governance, the application of the precautionary principle, and risk communication.

1.6. International and regional dimensions

1.6.1. The international dimension of the European Research Area

In its communication of 25 June 2001 on the international dimension of the European Research Area[23], the Commission outlined the broad guidelines for a new policy of international scientific and technological cooperation fulfilling the strategic objectives of opening the European Research Area up to the world. The Member States and the Community will jointly implement this policy, taking into account the objectives of the EU's scientific and technological policy and foreign policy.

Opening up the ERA to the world should enable EU countries to benefit from international cooperation on science and technology, which will in turn pave the way for closer political and economic relations, in particular with the candidate countries and the countries of the European Economic Area. The new strategy of international cooperation will also make it possible to further develop relations between the European Union and third countries[24], help improve dialogue between certain countries[25] and raise the profile of science and technology in Europe.

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23 COM(2001)346

24 The partner countries of the Mediterranean, the Balkans, Russia and the new independent States, developing countries, industrialised countries and emerging economies.

25 By way of example, science and technology cooperation projects brought Israeli, Palestinian and Jordanian research institutions together on the integrated management of water and public health.

1.6.2. The regional dimension of the European Research Area

On the initiative of Commissioners Busquin and Barnier, in October 2001 the Commission adopted a communication on the regional dimension of the European Research Area[26] which analysed the role which regions can play in research and innovation in Europe and presented a strategy aimed at integrating research policy and regional policy and building research capacity in the regions. Implementation of this strategy is based on a wide range of Community instruments:

– The Sixth Framework Programme, by means of transregional cooperation opportunities (e.g. networking research and innovation programmes and initiatives at regional level), more coherent development of policies at regional level (e.g. territorial foresight), specific measures for SMEs (cooperative and collective research), grants specially tailored to the needs of researchers in the less developed regions or in candidate countries, and networks of excellence and integrated projects. For participants in Objective 1 regions, it is also possible to combine funding from the framework programme with funding from the structural funds (European Regional Development Fund)[27].

– Innovation activities undertaken at regional level under the Fifth Framework Programme, in conjunction with innovatory actions under the structural funds intended to support the networking of players and initiatives at regional level, promote strategies for the creation of a knowledge-based society and facilitate exchanges. Interactions between advanced regions and regions which are lagging behind, including Candidate Countries' regions, are promoted by the "Innovating Regions of Europe" (IRE) network[28].

– Longer-term structuring activities which will be implemented at the instigation of the Commission, such as the supply of specific services to the regions (technology audits, benchmarking and the exchange of good practices, etc.), measures to improve the links between scientific experts and political decision-makers and the creation of a regional dimension for the future information systems on research and innovation in Europe.

A study on "involving the regions in the European Research Area" was completed in January 2002 and has been published by the Commission. A second study was launched at the end of 2001 into research and development capacities in the outermost regions[29]. The Commission has started a major information and awareness-raising campaign concerning the messages set out in the communication involving missions in the field and the dissemination of documents on paper and on line.

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26 COM(2001)549

27 Subject to the limits imposed by Community legislation on state aids.

28 http://www.innovating-regions.org

29 http://www.erup.net

2. PREPARATION OF THE SIXTH FRAMEWORK PROGRAMME

The Stockholm European Council of 23 and 24 March 2001 invited the Council to adopt the Sixth Research Framework Programme under the codecision procedure with the European Parliament by June 2002, stressing the need to take full advantage of the new instruments (networks of excellence, integrated projects and participation in research programmes undertaken by several Member States), while taking account of the need to strengthen cohesion and support small and medium-sized enterprises.

During 2001 the Commission adopted the proposals for the Sixth Framework Programme, followed by proposals for the implementation of the Framework Programme, the specific programmes and the rules for participation. These proposals are innovative in that while they are intended to make the Sixth Framework Programme the leading instrument for building the European Research Area and to enhance the impact and the structuring effect of Community research, they also define simplified and more transparent implementation procedures and streamlined and simplified management procedures.

2.1 Interinstitutional negotiation

The year was largely devoted to the first reading of the proposals for the Sixth Framework Programme (EC and Euratom). The negotiations progressed quickly, and were marked by the convergence of the positions of the various institutions, which in particular accepted the overall budget proposed by the Commission.

2.1.1. The Framework Programme

The Commission adopted the proposals for decisions relating to the Sixth Research and Technological Development Framework Programme (EC and Euratom) on 21 February 2001[30]. With a proposed budget of €17.5 billion, these proposals reflect the priority themes for building the European Research Area.

Research Ministers had a first exchange of views on the proposals for a Framework Programme on 3 March, and this was followed by a policy debate at the Council meeting of 26 June 2001.

On 30 October 2001 the Council agreed on a joint approach to the Sixth Framework Programme, including the structure of the specific programmes and the procedure for managing them. The main changes made to the Commission's proposals concerned the content of the "genomics and biotechnology for health" priority; the organisation of the "sustainable development, global change and ecosystems" priority; the scale of financial support available for new research infrastructure; and the budget and implementation arrangements for "anticipating the EU's scientific and technological needs".

On 14 November 2001 the European Parliament adopted its opinion on first reading, amending the Commission's proposals by introducing a "stairway of excellence" (an instrument intended to complement integrated projects and networks of excellence); strengthening the ethical principles to be complied with by European research; and

30 COM(2001)94

substantially reducing the share of the budget allocated to "anticipating the EU's scientific and technological needs".

The Commission amended its proposals for a Framework Programme on 22 November 2001[31], incorporating many of Parliament's amendments. Thus the amended proposals reflect the opinion of the European Parliament, particularly as regards the ethical principles to be complied with and the need to ensure a transition towards the new instruments in the spirit of the "stairway of excellence", while preserving the general balance of the initial budgetary breakdown.

The Council finished its first reading of the proposals for a Framework Programme (EC and Euratom) and reached political agreement on a compromise text on 10 December 2001, confirming the priority given to the new instruments, leaving the ethical principles to be determined in the texts relating to the specific programmes, and adjusting the breakdown of the budget between the various priorities and activities.

The Council adopted a common position formalising this political agreement on 28 January 2002, and this was endorsed by the Commission on 30 January 2002[32].

Thus at the end of the first reading of the proposals for a Framework Programme, the European Parliament and the Council reached a broad consensus on the general budget and its breakdown, the structure of the programme, the scientific and technological priorities, and the means of implementation. The only major point on which they have still not reached agreement is how to deal with the question of ethical principles: the European Parliament would like to see a list of excluded research subjects.

2.1.2. Specific Programmes

On 30 May 2001 the Commission adopted the proposals for decisions on the specific programmes implementing the Framework Programme (EC and Euratom)[33]. On 17 October 2001 the Commission amended the proposal for the specific programme on "integrating and strengthening the European Research Area"[34] in order to specify the contents of and methods of implementing the chapter on "anticipating the EU's scientific and technological needs".

On the basis of the broad convergence between the opinion of the European Parliament and the common position of the Council on the proposals for decisions on the Sixth Framework Programme, on 30 January 2002 the Commission amended its proposals on the specific programmes[35] to take account of the changes made to the Framework Programme on first reading as regards the research activities to be conducted, the breakdown of the overall budget and the corresponding resources.

On 11 March the Council on research held a policy debate on the specific programmes, focusing on the number of programmes and on three aspects of the committee procedure: the type, powers and operation of the committees, particularly as regards the implementation of two EC specific programmes.

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31 COM(2001)709
32 SEC(2002)105
33 COM(2001)279
34 COM(2001)594
35 COM(2002)43

2.1.3. Rules on participation

The Commission adopted the proposal for a decision concerning the rules for participation and for the dissemination of results[36] on 10 September 2001 and amended it on 10 January 2002 to reflect the political agreement reached at the Council meeting of 10 December 2001 on the proposals for decisions on the Sixth Framework Programme.

On 11 March the Council on research held a policy debate on the rules for participation and for the dissemination of results, focusing on the minimum number of participants for research actions; the evaluation and selection of proposals; the joint and several liability of participants; complementary financing for EC specific programmes; and the financial contribution to thermonuclear fusion (Euratom).

2.2. Instruments

2001 has essentially been dedicated to defining the methods of implementing integrated projects, networks of excellence and the Community contribution to programmes undertaken by several Member States (Article 169), and then identifying suitable domains for the latter.

2.2.1. Integrated projects and networks of excellence

Numerous communication actions have been undertaken, aimed at both internal and external audiences: a first seminar on the instruments on 20 April, regular meetings to inform the operational directorates, numerous actions aimed at external audiences (essentially research operators all over Europe). A specific Task Force on Instruments was set up, made up of representatives of various directorates of the Directorate-General for Research and representatives of other Directorates-General involved in the implementation of the Framework Programme (Information Society, Enterprise, Energy and Transport, Fisheries), to discuss issues related to the instruments.

Working documents describing the provisions for implementing integrated projects and networks of excellence were prepared and posted on the DG Research website, in order to inform the scientific community of the latest reflections within the Commission. A major communication action aimed at the research community was started, resulting in the organisation of 7 seminars in early 2002 to present the new instruments to "information multipliers" in each of the thematic priority areas.

2.2.2. Article 169

In its communication of 30 May 2001[37], the Commission explored the possibility of using a general legislative framework to implement Community participation in research programmes undertaken by several Member States. During the subsequent discussions, a preference emerged for a case-by-case approach based on individual decisions each time Article 169 is applied. On 30 October the Council therefore invited the Member States, in close cooperation with the Commission, to identify specific areas of research in which a limited number of pilot programmes could be developed and to examine with the Commission the methods for implementing proposals for joint programmes, and invited the Commission to present proposals for Community participation in pilot programmes.

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[36] COM(2001)500

[37] COM(2001)282

In January 2002 the Commission drew up a list of specific areas likely to be of interest to the Member States and asked a task force of Commission staff to analyse them. Only the proposal for a "clinical trials platform" for the three poverty-related diseases, which is one of the objectives of the Framework Programme, was deemed sufficiently mature, leading to further work with a view to preparing a proposal for a decision of the European Parliament and of the Council.

3. IMPLEMENTATION AND IMPACT OF THE FIFTH FRAMEWORK PROGRAMME IN 2001

3.1. Implementation of the Framework Programme

Nearly 5 000 contracts were signed in 2001, with over 23 000 participants sharing financial support totalling around €3.7 billion from the Community. Statistical analysis of these contracts points to the conclusion that the Fifth Framework Programme was highly successful in 2001, with the rates of participation and funding by type of action and programme comparable to 2000.

The more detailed lessons to be learnt from this year are as follows:

– **Shared-cost action, particularly research and technological development projects, remains the predominant means of promoting scientific cooperation and knowledge generation in the Community;** in 2001 this type of action accounted for more than 82% of the budget committed and more than 70% of participations in the Framework Programme. Research and technological development projects received 87% of the funding and accounted for more than 78% of participations in shared-cost action, which is less than in 2000. The rest was shared between demonstration projects, combined RTD/demonstration projects, support for access to research infrastructure and specific measures in favour of SMEs.

– **The average financial contribution per contract signed (shared-cost action) in 2001 was €1.17 million**, slightly down on 2000 (€1.29 million), while the average number of participants per project fell from 6.5 in 2000 to 6.26. Overall, the average financial contribution per participant continues to decline.

– **The average project selection rate was over 48%, considerably higher than the 2000 figure of 28%.** However, the contracts for many of the projects selected in 2001 were not signed until 2002.

– **The financial support from the Community continued to be shared fairly equally between research centres, institutes of higher education and industry**: the same balance can be seen in the number of contracts signed with these three categories of participants in the Framework Programme.

– **The levels of participation of the Member States and of the associated countries remained stable**: nearly 86% of participants in the Framework Programme are from the EU. Participation by the associated states as a whole held steady at a little over 10% of the total, of which the share taken by the candidate countries rose from 46% in 2000 to a little over 50% in 2001.

– **The contracts signed in 2001 produced more cooperation links than in 2000**: bodies from the Member States created nearly 85 000 links with bodies from other Member States, and more than 20 000 links with bodies from the associated countries. Bodies from the associated countries created nearly 2 600 cooperation links among themselves.

– **The importance of support for the training and mobility of researchers in Europe was confirmed**: the Marie Curie scheme awarded 1 116 fellowships,

representing a Community contribution of nearly €150 million. Nearly 200 high-level scientific conferences providing an opportunity for established scientists and young European researchers to meet also received financial support.

3.2 Impact of Community research

3.2.1. Socio-economic impact

The socio-economic impact of Community research activities in 2001 was evaluated by means of national impact studies and Community level studies of specific programmes.

Studies were completed by Austria, Ireland, Germany and the Flanders region. Points to emerge from these studies included the finding in the German case that the Framework Programme had developed to become a core part of publicly funded research, covering more than 40% of firms in the manufacturing sector and with German participants in around half of all research consortiums. The Framework Programme was regarded as being of critical importance for stimulating networking within the European research community. Other findings to emerge from some of the other studies included the observation that for Ireland the existence of EU funding and the ability of Irish researchers to qualify for such funding had been crucial for the growth of a number of extremely successful companies now recognised as star research performers. The Austrian study concluded that the Framework Programme attracted the elite of the Austrian business sector.

From the Community-level impact studies[38], the main points to emerge included a good impact at the scientific and technical level and in terms of furthering some specific EU policies such as environmental policy. Impact was more difficult to judge in terms of broader policies such as employment and regional development. The studies also showed that the achievement of significant social and economic impact depended on projects having from the outset the appropriate scientific, technical and managerial competence and putting in place the necessary planning for exploitation.

A major study of the socio-economic impact, requested by the Commission, was concluded during the year[39]. The work brought together leading academics from European research centres and was intended to improve understanding of how the impacts of Framework Programmes could be designated, defined and measured. The study had four parts: an examination of the rationale for publicly funded RTD; a review of evaluation practice in the context of the Framework Programmes; case studies; and observations about future evaluation strategy. The study constitutes a reference document for the future development of policy.

The results of the study were presented on 4 March 2002 at a workshop attended by around 40 experts from the Member States, and a dialogue on the development of future evaluation policy in the Community context was initiated. The aim of the dialogue is to review the state of the evaluation system in the light of major forthcoming changes to the research system, including ERA, the Sixth Framework Programme, and the new instruments.

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[38] Specific programme studies were undertaken for the fields of life sciences, manufacture and industrial technologies, materials and transport, non-nuclear energy and international cooperation (INCO). A further study was launched in the field of the environment.

[39] PREST et.al., *Assessing the Economic Impacts of the Framework Programme,* May 2002 http://www.cordis.lu/fp5/monitoring/studies.htm

3.2.2. SME access to research

The "single entry point" for SMEs processed over 3 000 proposals in 2001. The quality of the service provided was further improved[40], largely thanks to the introduction at the end of 2001 of the "SME TechWeb" on-line service[41]. The network of "SME national contact points" met four times in 2001 to exchange good practices encouraging the participation of SMEs in the Framework Programme. Support activities were launched to further improve the network's performance.

The number of proposals for specific measures for SMEs (exploratory awards and CRAFT cooperative research projects) increased in 2001 compared with the previous year: nearly 900 proposals for exploratory awards and around 850 CRAFT proposals were received. Around 37% of projects were approved. Some 77% of projects concern businesses with fewer than 50 employees, and 42% concern businesses with fewer than 10 employees. The awards enabled more than 1 200 SMEs to submit proposals at the start of 2002, and proved particularly attractive for SMEs from associated states. Applicants were informed of the results of the evaluation within six weeks.

The 53 contracts relating to economic and technological intelligence activities signed in 2000 led to some 1 000 research projects involving SMEs in 2001.

More than 4 600 SMEs signed a contract in 2001, covering all the research activities under the Framework Programme. SMEs accounted for more than 23% of participations in the four thematic programmes and received more than 15% of the financial support allocated by these programmes.

A call for expressions of interest in the field of collective research attracted more than 100 proposals involving some 340 industrial associations or industry groupings. This confirmed the potential of this new measure introduced in the Sixth Framework Programme to meet the research needs of large groupings of SMEs.

In the context of the Cooperation Agreement between the Commission and the European Space Agency, a network of regional and national space incubators was established, aimed at generating new start-ups, encouraging technology transfer, and promoting cooperation projects. At the initiative of the Belgian Presidency, a conference on "SMEs in the European Research Area" was held on 19 November 2001 in Liège, bringing together SMEs, policy-makers and intermediaries to exchange views on the Sixth Framework Programme.

Fifty new examples of successful research projects involving SMEs were published in 2001, as well as two issues of the "SME Update" newsletter. The aim was to raise awareness among SMEs of the potential of the Framework Programme to benefit European SMEs. Some 100 articles published in the scientific, regional or sectoral press and an active media campaign increased their impact.

3.2.3. Women in Community research

In a staff working paper published on 15 May 2001[42], the Commission presented the recommendations emerging from the various activities implemented since the communication

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40 More than 95% of proposals were processed within 24 hours.

41 See: http://sme.cordis.lu/home/index.cfm

42 SEC(2001)771

"Women and science: mobilising women to enrich European research"[43], namely to reinforce the policy forum, enrich the gender watch system and launch complementary research to obtain a better understanding of the "gender and science" issue. The Commission contracted a study of the "design and collection of statistical indicators on women in science". The resulting data were released through several publications and will be available on the Internet[44].

The so-called Helsinki Group has produced the gendered indicators needed to monitor the progress of women in science and to assess horizontal and vertical segregation and is finalising a European report on the various national approaches taken to promote women in science. It will for the first time provide national statistical profiles for all 30 countries of the Helsinki Group.

In 2001 the Commission continued to actively implement the Gender Watch System, which will be further stepped up in the Sixth Framework Programme in order to improve the integration of the gender dimension within research policy in general:

– When implementing and managing research programmes, the Commission pursued its aim of achieving 40% female participation at all levels. In 2001 women accounted for 30% of the members of monitoring panels for programmes, 28% of the members of external advisory groups, 22% of the members of programme committees and 27% of the evaluators for projects in the specific programmes. These figures show progress from the previous years towards the Commission's target. The proportion of women amongst the scientific officers for the contracts signed in 2001 is estimated at roughly 16%, based on the very incomplete data available.

– Gender impact studies were conducted throughout the Framework Programme. The conclusions of these studies were published as a series of final reports and one overall synthesis report[45].

The "Gender & Research" conference held in Brussels on 8 and 9 November 2001 brought together political decision-makers and representatives of the scientific community with the aim of giving new momentum to the integration of the gender dimension in European research, particularly in setting up the European Research Area. It attracted some 600 participants and confirmed the strong political commitment in Europe to improving the role of women in science. It provided an opportunity for the Commission to present the results of the actions implemented since 1999, including the gender impact assessment studies, and the achievements of the Helsinki Group.

3.2.4. Ethical aspects of Community research

Ethical reviews of research projects, initially only applying to the specific programme on "quality of life and management of living resources", were extended to three other specific programmes: "competitive and sustainable growth", "confirming the international role of Community research" and "improving human research potential and the socio-economic knowledge base". An internal contact group was established to inform representatives of the various programmes and discuss with them their understanding of ethics and explain the

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43 COM(1999)76

44 http://www.cordis.lu/rtd2002/science-society/women.htm

45 http://europa.eu.int/comm/research/science-society/women/wssi/index_en.html

ethical review process. Altogether, about 60 projects were evaluated between March and December 2001.

Eleven ethics research projects and two accompanying measures received total funding of €6.3 million following a call launched in 2001 under the specific programme on quality of life of the Fifth Framework Programme. The projects selected correspond to the priorities established under the generic "bioethics" activity of the specific programme on quality of life:

– Ethical aspects of scientific and technological developments;

– Ethical framework for life sciences;

– Public policies, law, human rights and bioethics;

– Bioethic infrastructures and methodologies.

Major efforts were made to raise awareness in candidate countries of the importance of ethics in research. Workshops were organised at the meeting of the Council of Europe's Steering Committee on Bioethics in November 2001, and at the Bled Forum in December 2001 where the IPTS[46] "enlargement futures project" was presented to ministers. A major conference on "Ethics in Research and Science: Situation and Perspectives of the Candidate Countries to the European Union" was organised in February 2002 in Bratislava, addressing their particular needs and future initiatives.

3.2.5. Impact on European economic cohesion

The activities of the specific programme on "innovation and SMEs" helped the Commission's regional policy departments to define regional strategies on innovation, technology transfer and networking of the regions concerned.

In 2001 the "cohesion countries" (Greece, Spain, Ireland and Portugal) continued to benefit from strong support from the Community for research. These countries accounted for a little over 16% of participations by the Member States in contracts signed in 2001 (14.5% in 1999 and 16.5% in 2000). In financial terms, the cohesion countries received 12.2% of the contributions from the Community (13.3% in 2000). Lastly, almost 29% of the cooperation links established between bodies from the Member States included participants from the cohesion countries, which is about the same proportion as in 2000.

3.3. International cooperation

International cooperation on RTD takes two complementary forms in the Fifth Framework Programme:

– activities to promote scientific and technological cooperation in the various programmes, including the regional and bilateral dialogues and, in particular, the science and technology (S&T) cooperation agreements;

– the specific action in the programme on "confirming the international role of Community research (INCO)".

[46] Institute for Prospective Technological Studies of the Joint Research Centre.

In addition, international cooperation also manages the European effort in the International Science and Technology Centre (ISTC) in Moscow and the Science and Technology Centre in Ukraine (STCU).

3.3.1. Participation by the associated candidate countries

The Commission took a series of steps to improve candidate countries' participation in the Fifth Framework Programme. A special budget was allocated and several special calls for proposals launched:

– Specific calls of thematic programmes: these calls were addressed to coordinators of on-going contracts, encouraging them to consider the possibility of adding extra partners from pre-accession states. This measure concerned four programmes: INFSO, Quality of Life, Growth and EESD (Environment/Energy). Budget: €45 million.

– Joint call Quality of Life/Growth/Energy, Environment/IST: Integration of candidate countries in the ERA — an accompanying measure "centres of excellence". Budget: €35 million

– New INCO call: strategic action on training and excellence — mobility scheme. Grant for training period(s) in EU institution plus return grant. Budget: €2 million

– Modified INCO call: supports participation of researchers from candidate countries in conferences organised in Western Europe and organisation of conferences in candidate countries (with possibility to fund information days). Budget: €0.9 million.

– RIS-NAC call: 16 regions in 9 candidate countries started to develop Regional Innovation Strategy projects in the beginning of 2002 with the aim of establishing consensus-built innovation policies at regional level. Budget : 5.25 M€.

A series of meetings was held with representatives from the Member States and the candidate countries on "integration of candidate countries in the ERA". Several meetings were organised with personal representatives of Research Ministers from candidate countries, as well as an informal ministerial meeting with Research Ministers from the Member States and the candidate countries.

The procedure for preparing the association agreements of candidate countries to the Sixth Framework Programme started in 2001. It follows a simpler and faster path whereby, for each country, "Individual" Association Council decisions or Agreements are replaced by:

– a "framework" instrument covering the participation of the country in all possible programmes; and,

– a series of memoranda of understanding establishing the details of its participation per programme.

3.3.2. Other countries associated with the Framework Programme

The three countries associated with the Framework Programme under the Treaty on the European Economic Area (Norway, Iceland and Liechtenstein) plus Israel registered some 700 participations in the Framework Programme in 2001. Switzerland had close to 500

participations in the thematic programmes, which they co-financed on a project by project basis.

3.3.3. Third countries

Non-candidate Central European countries: relations were established with Albania, Bosnia and Herzegovina, the Federal Republic of Yugoslavia and the Former Yugoslav Republic of Macedonia (FYROM). By the end of 2000 the changing situation in this region had made it possible to propose a specific action on "Balkan reintegration". A call for proposals with a Community contribution of €4 million was successfully launched in 2001. Eight contracts involving partners from all these countries on environmental and health related topics were funded. Moreover, the first informal S&T policy dialogue with high-level representatives of the five Western Balkan countries took place in Brussels on 23 October 2001 where the regional cooperation priorities were agreed.

New Independent States (NIS): the meetings on the application of the partnership and cooperation agreements provided an opportunity to discuss the themes covered by cooperation in the field of science and technology. The S&T agreement with Russia entered into force on 10 May 2001. An S&T agreement with Ukraine was initialled in November 2001.

The Partnership and Cooperation Agreement summit meeting between the EU and Russia in October 2001 established the S&T dialogue with Russia, resulting in agreement on an action plan to foster participation of Russian scientists in the Framework Programme.

ISTC and STCU contributed to the non-proliferation of weapons of mass destruction through the redeployment of NIS military scientists to civilian activities. Through projects financed by the Community, fruitful cooperation was stimulated that could become profitable to research organisations and enterprises from Member States considering the high degree of skill and expertise that NIS scientists have gained in many fields.

Emerging economies and industrialised countries: an EC-India S&T Cooperation Agreement was signed in November 2001[47] and an EC-Chile S&T Cooperation Agreement was initialled in November 2001[48], whilst negotiations continued in 2002 on the EC-Brazil S&T Cooperation Agreement. Cooperation was increased with the US through, inter alia, administrative arrangements between the Commission and relevant US agencies in the fields of non-nuclear energy and environment. Cooperation with China continued its healthy progress with the joint decision to focus on some S&T priority domains. With Japan, the adoption by the EU-Japan Summit of an ambitious action plan paves the way for enhanced S&T cooperation including the possibility of negotiating an S&T Cooperation Agreement.

Mediterranean countries: in June 2001 the Monitoring Committee for Euro-Mediterranean S&T cooperation (MoCo) held its 8th meeting in Stockholm. MoCo set up an ad hoc committee to implement its recommendations in close cooperation with the Commission. A series of workshops on risk management & prevention in connection with issues related to the

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47 Underpinning economic development and striving towards the knowledge based economy through actions covering in particular environemernt , biotechnologies , nanotechnologies , information and communication technologies.

48 Covering the different aspects of sustainable development (in particular safety and quality of food, health applications of genomics, sustainable management of ecosystems) and reinforcing industrial competitiveness.

environment, water, cultural heritage, and coastal zones took place between October and December 2001 and provided recommendations for future regional S&T cooperation. Moreover, it was agreed that a further four S&T workshops on the integrated management of limited water resources, health, the protection and restoration of cultural heritage, and renewable energies would take place in 2002 in order to define common research agendas for the priority areas agreed by MoCo.

Developing countries: the Commission was involved in the reorganisation of agricultural research at world level, particularly in sub-Saharan Africa. The Framework Programme also generated initiatives on subjects of strategic importance to the developing countries, such as the development of aquaculture, measures to combat desertification and the conservation of tropical forests. An initiative to step up research into three poverty-related diseases (malaria, tuberculosis and AIDS) was launched in 2001.

3.3.4. Bilateral regional dialogues and international commitments

In the context of its inter-regional relations, the Community continued its bilateral and regional dialogues on RTD with Asia (ASEM), Africa, Mediterranean (MoCo and follow-up to the Cairo Summit) and the Latin American and Caribbean countries (REALC). In particular, EU-Latin American/Caribbean S&T cooperation progressed decisively with the adoption in March 2002 of the Brasilia S&T Declaration. These dialogues focus on issues of regional importance and fit in with the EU's external relations policy to forge closer partnerships with these regions in the context of the emerging knowledge-based society and support for regional integration.

3.4. Assessment of the Framework Programme

Work began in 2001 on the cycle for the next five-year assessment of Community research programmes, with the definition of the overall timetable for the activity as well as the supporting studies. In planning the exercise, careful note was taken of the lessons learnt from the implementation of previous exercises, the conclusions of the 1999 report of the ETAN Expert Working Group on the assessment of socio-economic impact[49], and discussions in CREST.

In 2001 the monitoring exercise on research and technological development was expanded to include separate monitoring of the implementation of the European Research Area. The monitoring process was further strengthened through new approaches to improve synergy between the monitoring of the Framework Programme and the specific programmes[50]. These changes were implemented to reflect both the changed policy context introduced with the Lisbon strategy and the reform process of the Commission striving towards increased effectiveness and transparency.

Some of the findings and recommendations of the overall monitoring exercise concerned the request for a detailed strategy and action plan for ERA; the importance of candidate countries' participation and international cooperation in the context of ERA; the need to better understand how SMEs are working within the Framework Programme; the importance of giving further emphasis to the gender issue in the Framework Programme and to promote women in science; the need for better intelligence to support planning and operational

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[49] ETAN Working paper, *Options and Limits for Assessing the Socio-Economic Impact of European RTD Programmes*, 1999.

[50] Reports are available at: http://www.cordis.lu/fp5/monitoring

activities, especially in the context of new instruments; and the urgent requirement to install a central management information system. Specifically, the Framework Programme Monitoring Panel paid particular attention to the need for more effective data collection from the outset of the Sixth Framework Programme and for a consistent strategy for evaluation and monitoring across the Framework Programme.

Based on a thorough analysis of these recommendations, the Commission will provide responses and a follow-up on each of the points raised.

4. CONSULTATION AND MONITORING PROCEDURES

4.1. Scientific and Technical Research Committee (CREST)

In 2001 CREST produced a report on science and society[51] and two opinions on the scientific and technical content of the Commission's proposals for the Sixth Framework Programme[52]. The opinions were drawn up at the request of the Council in order to inform the debate within Council bodies with a view to the rapid adoption of the Framework Programme.

CREST was consulted regularly on actions contributing to the European Research Area, including "women and science" and the work of the high-level groups on the coordination and benchmarking of research activities and on the mobility of researchers. It was also informed of progress in implementing the Fifth Framework Programme.

At the instigation of the ministerial seminar held in Gerona on 1 February 2002, in March 2002 CREST undertook to define the priority thematic areas and the implementing procedures for the mutual opening-up of national research programmes.

The national RTD policies in Sweden and Belgium were also presented to the Committee. CREST invited the associated candidate countries to send observers to its meetings as from May 2001.

4.2. External Advisory Groups

The seventeen groups of experts assisting the Commission with regard to the content and thrust of the various key actions of the Fifth Framework Programme continued their work in line with their remit. They suggested changes in the focus of the work programmes of the various specific programmes for 2002. They had fruitful discussions with the relevant Commission departments concerning future objectives for research in Europe.

On 21 March 2001 the Commission appointed new members of the groups of experts for the remaining period of the Framework Programme, taking account of the Association Agreements with the Central and Eastern European countries and Cyprus. Three-quarters of the outgoing members were reappointed for a second term. New members had to be appointed following the entry into force of the Association Agreement between the Community and the Republic of Malta and the resignation of a number of existing members.

4.3. Programme Committees

The nine programme committees and the committee on the rules for participation and dissemination of results met more than 30 times in 2001. They were consulted approximately 300 times, at the behest of the Commission, principally on the draft decisions on the selection of proposals. All the opinions given were favourable. The Commission also consulted the committees informally for exchanges of views or for information. In all, these consultations led to the adoption, by the Commission, of over 200 acts to implement the specific programmes.

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51 CREST 1206/01

52 CREST 1207/01 and CREST 1214/01

The committees were informed of the progress of the specific programmes and were consulted before their work programmes were updated. The Commission also presented its proposals for the Sixth Framework Programme to the committees and informed them of the progress of the interinstitutional negotiations.

4.4. High-Level Groups

The high-level group on the benchmarking of national research policies, the mapping of scientific excellence in Europe and the networking of national research programmes continued its work in 2001 and examined the analyses carried out by the Commission and by the various expert groups. It provides information on the national policies and needs of the Member States and validates the Commission's analyses and proposals for future stages. Since 14 February 2002 it has invited observers from all the countries associated with the Framework Programme to its meetings.

The high-level group responsible for evaluating the level of mobility amongst researchers in Europe and identifying obstacles to mobility and ways round them completed its work in April 2001 with the publication of a report on improving mobility amongst researchers. The report formed the basis for the communication on "a mobility strategy for the European Research Area" adopted by the Commission on 20 June 2001[53]. Following the Council Resolution of 10 December 2001 inviting the Commission to continue with the implementation of this strategy, a steering group made up of representatives of the Member States and of the candidate countries was set up in January 2002 to monitor and to help implement actions to promote the mobility of researchers. It met for the first time in March 2002.

4.5. The Scientific Council

4.5.1. Establishment of EURAB

2001 saw the establishment of the European Research Advisory Board (EURAB), a high-level, independent, advisory committee set up by the Commission to provide advice on the design and implementation of Community research policy. It is made up of 45 top experts from EU countries and beyond. Its members are appointed in a personal capacity and come from a wide range of academic and industrial backgrounds, as well as representing other societal interests. The appointments were based on proposals from the Union of Industrial and Employers' Confederations of Europe (UNICE), the European Science Foundation (ESF) and Commission departments. It will focus its attention on the creation of the European Research Area and the use of policy instruments such as the Framework Programmes, delivering advice and opinions on specific issues either at the request of the Commission or on its own initiative.

EURAB held two plenary meetings in 2001. In September it elected its Chairperson (Helga Nowotny, ETH Zürich) and two vice-chairs (Horst Soboll, DaimlerChrysler and Ian Halliday, Particle Physics and Astronomy Research Council, UK) and discussed its priorities. In December, it approved its rules of procedure and established six working groups to produce reports on specific areas. All working groups are expected to report in 2002.

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53 COM(2001) 331.

A study was launched to identify and typify the structures (academies, research councils etc.) involved in the production of scientific advice requested by European, national and where relevant regional public authorities in support of decision making. This analysis will cover EU countries, countries associated with the Framework Programme, and transnational institutions (European Science Advisory Council, European Science Foundation etc.). A comparison with the main features of similar scientific advisory structures in the USA, Canada and Japan will be provided. It is expected to constitute one of the background references for EURAB and provide assistance to the Commission in its actions aimed at structuring the European Research Area.

4.5.2. Establishment of the European Scientific Advice Support network

In June 2001 the Commission set up a network of European experts in the provision of scientific advice. It should whenever appropriate provide a forum for the discussion of methodologies for scientific advice impact assessment and the exchange of good practice. The network held two meetings in 2001.

4.5.3 SINAPSE e-network (Scientific INformAtion for Policy Support in Europe)

Preparatory work was undertaken with a view to developing the SINAPSE e-network. It is open to all scientists and scientific organisations; its primary aims are to improve the dissemination and use of scientific advice, to enable informal consultation of the scientific community by the Commission, and to provide an early warning system and a set of communication tools to its members.

4.5.4. Contacts with National Research Councils and Academies.

Visit were paid to the secretariats of national advisory councils with the aim of establishing closer contacts and exchanging good practices on providing support to advisory bodies composed of high-level experts.

5. OUTLOOK

The period between March and December 2002 was marked by the end of the procedure for the adoption of the Sixth Framework Programme and of the specific programmes and by the definition of their respective work programmes. The framework and the means of implementing the Sixth Framework Programme were defined with a view to launching the first calls for proposals.

At the same time a summary was drawn up of the activities undertaken with a view to giving a new impetus to the creation of the European Research Area. The steps which need to be taken to create the conditions for effective coordination of research policies, make better use of the legal instruments available, optimise the impact of European cooperation initiatives and fully involve the candidate countries were identified.

Finally, following the conclusions of the Barcelona European Council, the Commission contributed to the debate on the means to achieve the objectives set for investment in R&D by identifying the policies and the main goals to pursue in a consistent manner.

ANNEX I

Notes

- In the group called “Candidate and associated countries”, Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia are both candidate and associated. Turkey is a candidate country but not associated. Iceland, Liechtenstein and Norway are associated in the framework of the European Economic Area, and Switzerland and Israel are associated in the framework of an association agreement.

- It is not possible to calculate States’ “success rates” from the number of proposals received, selected and funded since a proposal selected in year n might have been received in year n-1 or might not receive funding until year n+1.

- The figures on fellowship contracts show the number of proposals received, selected and funded. Depending on the type of grant, a single proposal could allow funding of one or more fellows. The number of fellows cannot be seen from the number of participants in the contract.

- The representation of a given State is the number of proposals received in which at least one body from that State is participating. By contrast, participation by a given State in the contracts signed is the total number of bodies from that State involved in the contracts. Participation is therefore higher than representation.

- A cooperation link is considered to have been established between two bodies if they are participating in the same project. This cooperation link is counted once if the two bodies are from the same country (diagonally on the cooperation links matrix) and twice if the bodies are from different countries - once as a link from country A to country B and once as a link from country B to country A. The net number of cooperation links is, therefore, the sum of the number of links between bodies from the same country plus half the number of links between bodies from different countries.

TABLE 1A: PROPOSALS RECEIVED IN 2001

	PROPOSALS RECEIVED IN 2001				
	A	B	C=B/A	D	E=D/A
	Number of proposals	Number of participations	Average number of participations per proposal	Requested financial contribution (€ million)	Average requested financial contribution per proposal (€ million)
Shared cost actions	8 961	64 843	7.24	14 241.33	1.59
R&D projects	*6 657*	*52 173*	*7.84*	*11 848.96*	*1.78*
Demonstration projects	*276*	*2 074*	*7.51*	*972.91*	*3.53*
Combined projects	*242*	*1 873*	*7.74*	*749.93*	*3.1*
Support for infrastructure	*114*	*114*	*1.00*	*123.67*	*1.08*
Cooperative research	*858*	*6 868*	*8.00*	*527.93*	*0.62*
Exploratory awards	*814*	*1 741*	*2.14*	*17.94*	*0.02*
Fellowships	3 729	8 021	2.15	1 249.95	0.34
Support for networks	721	10 022	13.90	1 011.34	1.4
Concerted actions	19	183	9.63	12.73	0.67
Accompanying measures	2129	8 477	3.98	1 208.39	0.57
Total	**15 559**	**91 546**	**5.88**	**17 723.74**	**1.14**

TABLE 1B: PROPOSALS SELECTED FOR FUNDING IN 2001

	PROPOSALS SELECTED FOR FUNDING IN 2001				
	A	B	C=B/A	D	E=D/A
	Number of proposals	Number of participations	Average number of participations per proposal	Requested financial contribution (€ million)	Average requested financial contribution per proposal (€ million)
Shared cost actions	4 679	34 087	7.29	6 381.42	1.36
R&D projects	*2 854*	*24 769*	*8.68*	*5 424.87*	*1.9*
Demonstration projects	*51*	*455*	*8.92*	*211.49*	*4.15*
Combined projects	*35*	*313*	*8.94*	*99.3*	*2.84*
Support for infrastructure	*114*	*114*	*1.00*	*123.67*	*1.08*
Cooperative research	*817*	*6 709*	*8.21*	*504.29*	*0.62*
Exploratory awards	*808*	*1 727*	*2.14*	*17.81*	*0.02*
Fellowships	1 416	2 807	1.98	450.59	0.32
Support for networks	393	6 261	15.93	732.33	1.86
Concerted actions	9	116	12.89	6.54	0.73
Accompanying measures	1037	3 065	2.96	480.56	0.46
Total	**7 534**	**46 336**	**6.15**	**8 051.45**	**1.07**

TABLE 1C: CONTRACTS SIGNED IN 2001

	CONTRACTS SIGNED IN 2001				
	A	B	C=B/A	D	E=D/A
	Number of contracts signed	Number of participations	Average number of participations per contract	Requested financial contribution (€ million)	Average requested financial contribution per contract (€ million)
Shared cost actions	2 628	16 457	6.26	3 082.59	1.17
R&D projects	*1 854*	*12 947*	*6.98*	*2 686.94*	*1.45*
Demonstration projects	*55*	*431*	*7.84*	*149.3*	*2.71*
Combined projects	*80*	*777*	*9.71*	*119.84*	*1.5*
Support for infrastructure	*59*	*59*	*1.00*	*29.62*	*0.5*
Cooperative research	*178*	*1 435*	*8.06*	*88.01*	*0.49*
Exploratory awards	*402*	*808*	*2.01*	*8.88*	*0.02*
Fellowships	1 116	1 122	1.01	149.29	0.13
Support for networks	199	2 585	12.99	151.93	0.76
Concerted actions	71	855	12.04	44.86	0.63
Accompanying measures	965	2 414	2.50	306.97	0.32
Total	**4 979**	**23 433**	**4.71**	**3 735.63**	**0.75**

TABLE 2A: CONTRACTS SIGNED IN 2001 BY TYPE OF ACTION (IN € MILLION)

	ALL CONTRACTS SIGNED					SHARED COST ACTIONS		FELLOWSHIPS		SUPPORT FOR NETWORKS		CONCERTED ACTIONS		ACCOMPANYING MEASURES	
	A	B	C=B/A	D	E=D/A	F	G	H	I	J	K	L	M	N	O
	Number of contracts signed	Number of partici-pations	Average number of partici-pations per contract	Community financial contribution (€ million)	Average financial contribu-tion per contract (€ million)	Number of contracts signed	Community financial contribution (€ million)	Number of contracts signed	Community financial contribution (€ million)	Number of contracts signed	Community financial contribution (€ million)	Number of contracts signed	Community financial contribution (€ million)	Number of contracts signed	Community financial contribution (€ million)
QUALITY OF LIFE	**892**	**4 531**	**5.08**	**750.15**	**0.84**	**564**	**674.38**	**213**	**29.33**	**13**	**11.58**	**42**	**25.31**	**60**	**9.55**
Food, nutrition and health	133	637	4.79	94.85	0.71	106	90.03	20	2.87	1	0.75	1	0.74	5	0.46
Control of infectious diseases	94	560	5.96	79.37	0.84	58	70.44	24	3.43	0	0.0	8	5.31	4	0.19
The “cell factory”	128	599	4.68	130.0	1.02	90	124.17	36	5.55	0	0.0	0	0.0	2	0.27
Environment and health	41	230	5.61	38.74	0.94	33	35.28	3	0.37	1	1.94	3	1.03	1	0.12
Sustainable agriculture, fisheries and forestry	203	1038	5.11	159.61	0.79	146	147.32	28	3.55	1	1.15	8	5.61	20	1.99
The ageing population and disabilities	60	327	5.45	62.73	1.05	37	55.35	8	0.88	2	1.57	7	3.62	6	1.31
RTD activities of a generic nature	214	946	4.42	137.48	0.64	82	112.37	94	12.68	4	2.17	13	7.47	21	2.79
Support for infrastructure	19	194	10.21	47.36	2.49	12	39.43	0	0.0	4	3.99	2	1.53	1	2.42
INFORMATION SOCIETY	**755**	**4076**	**5.40**	**867.65**	**1.15**	**467**	**714.93**	**4**	**0.87**	**42**	**24.46**	**0**	**0.0**	**242**	**127.38**
Systems and services for the citizen	116	765	6.59	140.19	1.21	90	123.13	0	0.0	7	7.71	0	0.0	19	9.36
New methods of work and electronic commerce	128	682	5.33	103.49	0.81	55	55.94	4	0.87	15	8.62	0	0.0	54	38.06
Multimedia content and tools	155	738	4.76	129.13	0.83	78	105.77	0	0.0	10	4.62	0	0.0	67	18.73
Essential technologies and infrastructure	201	1071	5.33	299.58	1.49	134	255.93	0	0.0	2	1.37	0	0.0	65	42.28
Cross-programme themes	60	409	6.82	96.93	1.62	40	77.68	0	0.0	3	1.15	0	0.0	17	18.1
RTD activities of a generic nature	92	351	3.82	78.58	0.85	67	76.75	0	0.0	5	0.98	0	0.0	20	0.86
Support for infrastructure	3	60	20.00	19.74	6.58	3	19.74	0	0.0	0	0.0	0	0.0	0	0.0
SUSTAINABLE GROWTH	**765**	**6489**	**8.48**	**1035.16**	**1.35**	**649**	**877.6**	**25**	**3.38**	**60**	**74.73**	**2**	**1.95**	**29**	**77.5**
Innovative products, processes and organisation	300	2452	8.17	274.39	0.91	260	240.37	11	1.68	21	28.98	0	0.0	8	3.35
Sustainable mobility and intermodality	41	496	12.10	147.51	3.6	22	68.06	0	0.0	5	5.77	1	1.1	13	72.58
Land transport and marine technologies	78	730	9.36	103.35	1.32	71	97.57	0	0.0	5	5.37	0	0.0	2	0.41
New perspectives for aeronautics	63	735	11.67	263.76	4.19	57	260.19	0	0.0	3	2.81	0	0.0	3	0.75
RTD activities of a generic nature	267	1849	6.93	222.9	0.83	239	211.41	14	1.7	10	8.54	1	0.85	3	0.41
Support for infrastructure	16	227	14.19	23.25	1.45	0	0.0	0	0.0	16	23.25	0	0.0	0	0.0

	ALL CONTRACTS SIGNED					SHARED COST ACTIONS		FELLOWSHIPS		SUPPORT FOR NETWORKS		CONCERTED ACTIONS		ACCOMPANYING MEASURES	
	A	B	C=B/A	D	E=D/A	F	G	H	I	J	K	L	M	N	O
	Number of contracts signed	Number of particip-ations	Average number of particip-ations per contract	Community financial contribution (€ million)	Average financial contribu-tion per contract (€ million)	Number of contracts signed	Community financial contribution (€ million)	Number of contracts signed	Community financial contribution (€ million)	Number of contracts signed	Community financial contribution (€ million)	Number of contracts signed	Community financial contribution (€ million)	Number of contracts signed	Community financial contribution (€ million)
ENERGY & ENVIRONMENT	**436**	**3332**	**7.64**	**500.18**	**1.15**	**317**	**462.82**	**0**	**0.0**	**12**	**11.74**	**10**	**9.34**	**97**	**16.29**
ENVIRONMENT	*285*	*2530*	*8.88*	*333.85*	*1.17*	*238*	*312.17*	*0*	*0.0*	*7*	*8.78*	*9*	*8.89*	*31*	*4.01*
Sustainable management and quality of water	86	642	7.47	88.49	1.03	80	85.93	0	0.0	1	1.29	0	0.0	5	1.26
Global change, climate and biodiversity	71	563	7.93	85.93	1.21	52	81.42	0	0.0	2	1.34	3	1.38	14	1.78
Sustainable marine ecosystems	38	315	8.29	49.77	1.31	32	48.11	0	0.0	0	0.0	1	1.42	5	0.23
The city of tomorrow and cultural heritage	41	481	11.73	49.75	1.21	37	45.29	0	0.0	1	2.39	1	1.72	2	0.35
RTD activities of a generic nature	33	298	9.03	34.97	1.06	27	34.2	0	0.0	1	0.4	0	0.0	5	0.38
Support for research infrastructures	16	231	14.44	24.95	1.56	10	17.22	0	0.0	2	3.36	4	4.37	0	0.0
ENERGY	**151**	**802**	**5.31**	**166.33**	**1.1**	**79**	**150.65**	**0**	**0.0**	**5**	**2.96**	**1**	**0.45**	**66**	**12.28**
Cleaner energy systems, incl. renewables	54	345	6.39	69.54	1.29	41	64.92	0	0.0	1	0.6	1	0.45	11	3.57
Economic and efficient energy	52	341	6.56	91.29	1.76	37	85.35	0	0.0	4	2.36	0	0.0	11	3.59
RTD activities of a generic nature	3	15	5.00	0.77	0.26	1	0.37	0	0.0	0	0.0	0	0.0	2	0.4
OPET[54]	42	101	2.40	4.73	0.11	0	0.0	0	0.0	0	0.0	0	0.0	42	4.73
NUCLEAR ENERGY	**414**	**1195**	**2.89**	**152.43**	**0.37**	**367**	**141.02**	**0**	**0.0**	**19**	**6.77**	**9**	**3.13**	**19**	**1.52**
Controlled thermonuclear fusion	317	323	1.02	100.4	0.32	317	100.4	0	0.0	0	0.0	0	0.0	0	0.0
Nuclear fission	75	643	8.57	44.43	0.59	45	37.9	0	0.0	11	3.67	7	2.1	12	0.75
RTD activities of a generic nature	11	57	5.18	3.43	0.31	3	1.85	0	0.0	2	1.01	0	0.0	6	0.57
Support for infrastructure	11	172	15.64	4.18	0.38	2	0.87	0	0.0	6	2.09	2	1.02	1	0.2

[54] Organisations for the Promotion of Energy Technologies.

	ALL CONTRACTS SIGNED					SHARED COST ACTIONS		FELLOWSHIPS		SUPPORT FOR NETWORKS		CONCERTED ACTIONS		ACCOMPANYING MEASURES	
	A	B	C=B/A	D	E=D/A	F	G	H	I	J	K	L	M	N	O
	Number of contracts signed	Number of particip-ations	Average number of particip-ations per contract	Community financial contribution (€ million)	Average financial contribu-tion per contract (€ million)	Number of contracts signed	Community financial contribution (€ million)	Number of contracts signed	Community financial contribution (€ million)	Number of contracts signed	Community financial contribution (€ million)	Number of contracts signed	Community financial contribution (€ million)	Number of contracts signed	Community financial contribution (€ million)
INTERNATIONAL ROLE	**320**	**1186**	**3.71**	**120.57**	**0.38**	**100**	**77.9**	**8**	**0.18**	**11**	**4.97**	**8**	**5.13**	**193**	**32.38**
Countries in the pre-accession phase	29	47	1.62	4.99	0.17	0	0.0	0	0.0	0	0.0	0	0.0	29	4.99
NIS and CEEC not in the pre-accession phase	25	107	4.28	30.56	1.22	13	6.62	0	0.0	0	0.0	1	0.78	11	23.17
Mediterranean partner countries	19	109	5.74	6.88	0.36	8	5.42	0	0.0	2	0.65	1	0.39	8	0.42
Developing countries	116	771	6.65	75.64	0.65	79	65.86	0	0.0	9	4.32	6	3.96	22	1.49
Emerging economies and industrialised countries	11	26	2.36	1.37	0.12	0	0.0	0	0.0	0	0.0	0	0.0	11	1.37
Fellowships for developing countries	8	14	1.75	0.18	0.02	0	0.0	8	0.18	0	0.0	0	0.0	0	0.0
Fellowships for Community researchers	0	0	0.0	0.0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Coordination	112	112	1.00	0.94	0.01	0	0.0	0	0.0	0	0.0	0	0.0	112	0.94
INNOVATION AND SMEs	**59**	**310**	**5.25**	**51.42**	**0.87**	**29**	**33.53**	**0**	**0.0**	**13**	**4.79**	**0**	**0.0**	**17**	**13.1**
Promotion of innovation	29	211	7.28	33.53	1.16	29	33.53	0	0.0	0	0.0	0	0.0	0	0.0
Joint innovation/SME activities	30	99	3.30	17.89	0.6	0	0.0	0	0.0	13	4.79	0	0.0	17	13.1
Economic and technological intelligence	0	0	0.0	0.0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
HUMAN POTENTIAL	**1338**	**2314**	**1.73**	**258.07**	**0.19**	**135**	**100.42**	**866**	**115.52**	**29**	**12.89**	**0**	**0.0**	**308**	**29.25**
Research training networks	0	0	0.0	0.0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Marie Curie fellowships	866	866	1.00	115.52	0.13	0	0.0	866	115.52	0	0.0	0	0.0	0	0.0
Access to research infrastructure	81	236	2.91	54.38	0.67	75	51.79	0	0.0	6	2.6	0	0.0	0	0.0
Socio-economic research	104	665	6.39	56.83	0.55	57	47.54	0	0.0	12	5.66	0	0.0	35	3.63
Public perception	24	108	4.50	7.31	0.3	0	0.0	0	0.0	4	1.24	0	0.0	20	6.06
Support for S&T policies	20	115	5.75	7.63	0.38	3	1.09	0	0.0	7	3.39	0	0.0	10	3.15
Promoting S&T excellence	207	249	1.20	12.45	0.06	0	0.0	0	0.0	0	0.0	0	0.0	207	12.45
RTD activities of a generic nature	0	0	0	0.0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Accompanying measures	36	75	2.08	3.95	0.11	0	0.0	0	0.0	0	0.0	0	0.0	36	3.95
TOTAL FP5 IN 2001	**4979**	**23433**	**4.71**	**3735.63**	**0.75**	**2628**	**3082.59**	**1116**	**149.29**	**199**	**151.93**	**71**	**44.86**	**965**	**306.97**

TABLE 2B: CONTRACTS SIGNED IN 2001 BY TYPE OF ACTION (IN %)

	ALL CONTRACTS SIGNED					SHARED COST ACTIONS		FELLOWSHIPS		SUPPORT FOR NETWORKS		CONCERTED ACTIONS		ACCOMPANYING MEASURES	
	A	B	C=B/A	D	E=D/A	F	G	H	I	J	K	L	M	N	O
	Number of contracts signed	Number of partici-pations	Average number of partici-pations per contract	Community financial contribution (€ million)	Average financial contribu-tion per contract (€ million)	Number of contracts signed	Community financial contribution (€ million)	Number of contracts signed	Community financial contribution (€ million)	Number of contracts signed	Community financial contribution (€ million)	Number of contracts signed	Community financial contribution (€ million)	Number of contracts signed	Community financial contribution (€ million)
QUALITY OF LIFE	**892**	**4531**	**5.08**	**750.15**	**0.84**	**63.23%**	**89.90%**	**23.88%**	**3.91%**	**1.46%**	**1.54%**	**4.71%**	**3.37%**	**6.73%**	**1.27%**
Food, nutrition and health	133	637	4.79	94.85	0.71	79.70%	94.92%	15.04%	3.03%	0.75%	0.79%	0.75%	0.78%	3.76%	0.48%
Control of infectious diseases	94	560	5.96	79.37	0.84	61.70%	88.75%	25.53%	4.32%	0.00%	0.00%	8.51%	6.69%	4.26%	0.24%
The “cell factory”	128	599	4.68	130.0	1.02	70.31%	95.52%	28.13%	4.27%	0.00%	0.00%	0.00%	0.00%	1.56%	0.21%
Environment and health	41	230	5.61	38.74	0.94	80.49%	91.05%	7.32%	0.96%	2.44%	5.02%	7.32%	2.67%	2.44%	0.31%
Sustainable agriculture, fisheries and forestry	203	1038	5.11	159.61	0.79	71.92%	92.30%	13.79%	2.22%	0.49%	0.72%	3.94%	3.51%	9.85%	1.25%
The ageing population and disabilities	60	327	5.45	62.73	1.05	61.67%	88.23%	13.33%	1.40%	3.33%	2.51%	11.67%	5.77%	10.00%	2.09%
RTD activities of a generic nature	214	946	4.42	137.48	0.64	38.32%	81.73%	43.93%	9.22%	1.87%	1.58%	6.07%	5.44%	9.81%	2.03%
Support for infrastructure	19	194	10.21	47.36	2.49	63.16%	83.25%	0.00%	0.00%	21.05%	8.42%	10.53%	3.23%	5.26%	5.10%
INFORMATION SOCIETY	**755**	**4076**	**5.40**	**867.65**	**1.15**	**61.85%**	**82.40%**	**0.53%**	**0.10%**	**5.56%**	**2.82%**	**0.00%**	**0.00%**	**32.05%**	**14.68%**
Systems and services for the citizen	116	765	6.59	140.19	1.21	77.59%	87.83%	0.00%	0.00%	6.03%	5.50%	0.00%	0.00%	16.38%	6.67%
New methods of work and electronic commerce	128	682	5.33	103.49	0.81	42.97%	54.05%	3.13%	0.84%	11.72%	8.33%	0.00%	0.00%	42.19%	36.77%
Multimedia content and tools	155	738	4.76	129.13	0.83	50.32%	81.92%	0.00%	0.00%	6.45%	3.58%	0.00%	0.00%	43.23%	14.50%
Essential technologies and infrastructure	201	1071	5.33	299.58	1.49	66.67%	85.43%	0.00%	0.00%	1.00%	0.46%	0.00%	0.00%	32.34%	14.11%
Cross-programme themes	60	409	6.82	96.93	1.62	66.67%	80.14%	0.00%	0.00%	5.00%	1.19%	0.00%	0.00%	28.33%	18.67%
RTD activities of a generic nature	92	351	3.82	78.58	0.85	72.83%	97.66%	0.00%	0.00%	5.43%	1.25%	0.00%	0.00%	21.74%	1.09%
Support for infrastructure	3	60	20.00	19.74	6.58	100.00 %	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
SUSTAINABLE GROWTH	**765**	**6489**	**8.48**	**1035.16**	**1.35**	**84.84%**	**84.78%**	**3.27%**	**0.33%**	**7.84%**	**7.22%**	**0.26%**	**0.19%**	**3.79%**	**7.49%**
Innovative products, processes and organisation	300	2452	8.17	274.39	0.91	86.67%	87.60%	3.67%	0.61%	7.00%	10.56%	0.00%	0.00%	2.67%	1.22%
Sustainable mobility and intermodality	41	496	12.10	147.51	3.6	53.66%	46.14%	0.00%	0.00%	12.20%	3.91%	2.44%	0.75%	31.71%	49.20%
Land transport and marine technologies	78	730	9.36	103.35	1.32	91.03%	94.41%	0.00%	0.00%	6.41%	5.19%	0.00%	0.00%	2.56%	0.39%
New perspectives for aeronautics	63	735	11.67	263.76	4.19	90.48%	98.65%	0.00%	0.00%	4.76%	1.07%	0.00%	0.00%	4.76%	0.29%
RTD activities of a generic nature	267	1849	6.93	222.9	0.83	89.51%	94.84%	5.24%	0.76%	3.75%	3.83%	0.37%	0.38%	1.12%	0.18%
Support for infrastructure	16	227	14.19	23.25	1.45	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%

	ALL CONTRACTS SIGNED					SHARED COST ACTIONS		FELLOWSHIPS		SUPPORT FOR NETWORKS		CONCERTED ACTIONS		ACCOMPANYING MEASURES	
	A	B	C=B/A	D	E=D/A	F	G	H	I	J	K	L	M	N	O
	Number of contracts signed	Number of particip-ations	Average number of particip-ations per contract	Community financial contribution (€ million)	Average financial contribu-tion per contract (€ million)	Number of contracts signed	Commu-nity financial contrib. (%)	Number of contracts signed	Commu-nity financial contrib. (%)	Number of contracts signed	Commu-nity financial contrib. (%)	Number of contracts signed	Commu-nity financial contrib. (%)	Number of contracts signed	Commu-nity financial contrib. (%)
ENERGY & ENVIRONMENT	**436**	**3332**	**7.64**	**500.18**	**1.15**	**72.71%**	**92.53%**	**0.00%**	**0.00%**	**2.75%**	**2.35%**	**2.29%**	**1.87%**	**22.25%**	**3.26%**
ENVIRONMENT	**285**	**2530**	**8.88**	**333.85**	**1.17**	**83.51%**	**93.51%**	**0.00%**	**0.00%**	**2.46%**	**2.63%**	**3.16%**	**2.66%**	**10.88%**	**1.20%**
Sustainable management and quality of water	86	642	7.47	88.49	1.03	93.02%	97.12%	0.00%	0.00%	1.16%	1.46%	0.00%	0.00%	5.81%	1.43%
Global change, climate and biodiversity	71	563	7.93	85.93	1.21	73.24%	94.76%	0.00%	0.00%	2.82%	1.56%	4.23%	1.60%	19.72%	2.07%
Sustainable marine ecosystems	38	315	8.29	49.77	1.31	84.21%	96.67%	0.00%	0.00%	0.00%	0.00%	2.63%	2.86%	13.16%	0.47%
The city of tomorrow and cultural heritage	41	481	11.73	49.75	1.21	90.24%	91.03%	0.00%	0.00%	2.44%	4.80%	2.44%	3.47%	4.88%	0.70%
RTD activities of a generic nature	33	298	9.03	34.97	1.06	81.82%	97.77%	0.00%	0.00%	3.03%	1.14%	0.00%	0.00%	15.15%	1.08%
Support for research infrastructure	16	231	14.44	24.95	1.56	62.50%	69.01%	0.00%	0.00%	12.50%	13.48%	25.00%	17.51%	0.00%	0.00%
ENERGY	**151**	**802**	**5.31**	**166.33**	**1.1**	**52.32%**	**90.57%**	**0.00%**	**0.00%**	**3.31%**	**1.78%**	**0.66%**	**0.27%**	**43.71%**	**7.38%**
Cleaner energy systems, incl. renewables	54	345	6.39	69.54	1.29	75.93%	93.37%	0.00%	0.00%	1.85%	0.86%	1.85%	0.64%	20.37%	5.13%
Economic and efficient energy	52	341	6.56	91.29	1.76	71.15%	93.49%	0.00%	0.00%	7.69%	2.58%	0.00%	0.00%	21.15%	3.93%
RTD activities of a generic nature	3	15	5.00	0.77	0.26	33.33%	48.04%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	66.67%	51.96%
OPET	42	101	2.40	4.73	0.11	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
NUCLEAR ENERGY	**414**	**1195**	**2.89**	**152.43**	**0.38**	**88.65%**	**92.51%**	**0.00%**	**0.00%**	**4.59%**	**4.44%**	**2.17%**	**2.05%**	**4.59%**	**1.00%**
Controlled thermonuclear fusion	317	323	1.02	100.4	0.32	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Nuclear fission	75	643	8.57	44.43	0.59	60.00%	85.31%	0.00%	0.00%	14.67%	8.27%	9.33%	4.73%	16.00%	1.69%
RTD activities of a generic nature	11	57	5.18	3.43	0.31	27.27%	53.86%	0.00%	0.00%	18.18%	29.43%	0.00%	0.00%	54.55%	16.71%
Support for infrastructure	11	172	15.64	4.18	0.38	18.18%	20.80%	0.00%	0.00%	54.55%	50.01%	18.18%	24.46%	9.09%	4.73%

	ALL CONTRACTS SIGNED					SHARED COST ACTIONS		FELLOWSHIPS		SUPPORT FOR NETWORKS		CONCERTED ACTIONS		ACCOMPANYING MEASURES	
	A	B	C=B/A	D	E=D/A	F	G	H	I	J	K	L	M	N	O
	Number of contracts signed	Number of particip-ations	Average number of particip-ations per contract	Commu-nity financial contrib. (%)	Average financial contribu-tion per contract (%)	Number of contracts signed	Commu-nity financial contrib. (%)	Number of contracts signed	Commu-nity financial contrib. (%)	Number of contracts signed	Commu-nity financial contrib. (%)	Number of contracts signed	Commu-nity financial contrib. (%)	Number of contracts signed	Commu-nity financial contrib. (%)
INTERNATIONAL ROLE	**320**	**1 186**	**3.71**	**120.57**	**0.38**	**31.25%**	**64.61%**	**2.50%**	**0.15%**	**3.44%**	**4.12%**	**2.50%**	**4.25%**	**60.31%**	**26.86%**
Countries in the pre-accession phase	29	47	1.62	4.99	0.17	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
NIS and CEEC not in the pre-accession phase	25	107	4.28	30.56	1.22	52.00%	21.66%	0.00%	0.00%	0.00%	0.00%	4.00%	2.54%	44.00%	75.80%
Mediterranean partner countries	19	109	5.74	6.88	0.36	42.11%	78.69%	0.00%	0.00%	10.53%	9.51%	5.26%	5.66%	42.11%	6.14%
Developing countries	116	771	6.65	75.64	0.65	68.10%	87.08%	0.00%	0.00%	7.76%	5.71%	5.17%	5.24%	18.97%	1.98%
Emerging economies and industrialised countries	11	26	2.36	1.37	0.12	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
Fellowships for developing countries	8	14	1.75	0.18	0.02	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Fellowships for Community researchers	0	0	0.0	0.0	0.0	0.0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Coordination	112	112	1.00	0.94	0.01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
INNOVATION AND SMEs	**59**	**310**	**5.25**	**51.42**	**0.87**	**49.15%**	**65.20%**	**0.00%**	**0.00%**	**22.03%**	**9.32%**	**0.00%**	**0.00%**	**28.81%**	**25.48%**
Promotion of innovation	29	211	7.28	33.53	1.16	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Joint innovation/SME activities	30	99	3.30	17.89	0.6	0.00%	0.00%	0.00%	0.00%	43.33%	26.78%	0.00%	0.00%	56.67%	73.22%
Economic and technological intelligence	0	0	0.0	0.0	0.0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
HUMAN POTENTIAL	**1 338**	**2 314**	**1.73**	**258.07**	**0.19**	**10.09%**	**38.91%**	**64.72%**	**44.76%**	**2.17%**	**4.99%**	**0.00%**	**0.00%**	**23.02%**	**11.33%**
Research training networks	0	0	0.0	0.0	0.0	0.0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Marie Curie fellowships	866	866	1.00	115.52	0.13	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Access to research infrastructure	81	236	2.91	54.38	0.67	92.59%	95.23%	0.00%	0.00%	7.41%	4.77%	0.00%	0.00%	0.00%	0.00%
Socio-economic research	104	665	6.39	56.83	0.55	54.81%	83.65%	0.00%	0.00%	11.54%	9.96%	0.00%	0.00%	33.65%	6.39%
Public perception	24	108	4.50	7.31	0.3	0.00%	0.00%	0.00%	0.00%	16.67%	17.02%	0.00%	0.00%	83.33%	82.98%
Support for S&T policies	20	115	5.75	7.63	0.38	15.00%	14.29%	0.00%	0.00%	35.00%	44.43%	0.00%	0.00%	50.00%	41.27%
Promoting S&T excellence	207	249	1.20	12.45	0.06	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
RTD activities of a generic nature	0	0	0.0	0.0	0.0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Accompanying measures	36	75	2.08	3.95	0.11	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
TOTAL FP5 IN 2001	**4 979**	**23 433**	**4.71**	**3 735.63**	**0.75**	**52.78%**	**82.52%**	**22.41%**	**4.00%**	**4.00%**	**4.07%**	**1.43%**	**1.20%**	**19.38%**	**8.22%**

TABLE 3A: CONTRACTS SIGNED IN 2001 BY TYPE OF BENEFICIARY (IN € MILLION)

	TYPE OF BENEFICIARY										of which SMEs	
	Higher education		Research centres (including JRC)		Enterprise sector		Other[55]		TOTAL			
	Contri-bution	Partici-pations	Contri-bution	Partici-pations	Contri-bution	Partici-pations	Contri-bution	Partici-pations	Contri-bution	Partici-pations	Contri-bution	Partici-pations
QUALITY OF LIFE	**355.84**	**1 792**	**294.25**	**1 574**	**58.86**	**819**	**41.2**	**346**	**750.15**	**4 531**	**55.98**	**760**
Food, nutrition and health	44.93	196	34.46	190	11.48	223	3.98	28	94.85	637	7.96	190
Control of infectious diseases	35.8	231	30.61	203	6.75	68	6.2	58	79.37	560	3.04	44
The "cell factory"	69.73	260	43.14	196	14.38	130	2.75	13	130.0	599	15.62	136
Environment and health	18.71	88	17.42	95	1.45	30	1.17	17	38.74	230	2.23	36
Sustainable agriculture, fisheries and forestry	65.61	329	65.41	346	12.5	259	16.09	104	159.61	1038	11.64	243
The ageing population and disabilities	38.08	159	16.53	104	4.22	33	3.9	31	62.73	327	3.32	30
RTD activities of a generic nature	71.69	466	54.38	335	6.16	58	5.24	87	137.48	946	9.35	68
Support for infrastructure	11.29	63	32.29	105	1.92	18	1.86	8	47.36	194	2.82	13
INFORMATION SOCIETY	**236.47**	**1 075**	**167.32**	**685**	**382.0**	**1 641**	**81.86**	**675**	**867.65**	**4 076**	**171.67**	**904**
Systems and services for the citizen	22.02	124	23.3	111	74.97	344	19.9	186	140.19	765	40.49	206
New methods of work and electronic commerce	21.79	142	15.7	88	48.22	306	17.77	146	103.49	682	30.58	209
Multimedia content and tools	39.41	207	21.79	107	48.82	244	19.11	180	129.13	738	31.9	180
Essential technologies and infrastructure	74.16	269	64.8	209	151.45	518	9.18	75	299.58	1071	38.38	171
Cross-programme themes	20.25	82	21.11	70	44.28	180	11.3	77	96.93	409	24.89	111
RTD activities of a generic nature	53.88	235	17.93	85	4.69	25	2.09	6	78.58	351	1.91	12
Support for infrastructure	4.97	16	2.68	15	9.57	24	2.52	5	19.74	60	3.52	15
SUSTAINABLE GROWTH	**192.22**	**1 095**	**265.92**	**1 620**	**521.85**	**3 426**	**55.16**	**348**	**1 035.16**	**6 489**	**193.94**	**2 055**
Innovative products, processes and organisation	55.41	348	82.32	545	128.62	1 471	8.04	88	274.39	2452	71.2	934
Sustainable mobility and intermodality	12.45	74	26.89	122	76.98	214	31.19	86	147.52	496	35.08	144
Land transport and marine technologies	21.48	100	29.1	148	48.06	429	4.71	53	103.35	730	16.77	235
New perspectives for aeronautics	28.98	131	41.07	171	189.79	413	3.92	20	263.76	735	21.8	128
RTD activities of a generic nature	69.78	395	75.02	546	73.64	841	4.47	67	222.9	1849	45.89	586
Support for infrastructure	4.13	47	11.53	88	4.76	58	2.84	34	23.25	227	3.2	28

55 "Other" covers all participations which could not be allocated to any of the first three categories.

	TYPE OF BENEFICIARY										of which SMEs	
	Higher education		Research centres (including JRC)		Enterprise sector		Other		TOTAL			
	Contri-bution	Partici-pations	Contri-bution	Partici-pations	Contri-bution	Partici-pations	Contri-bution	Partici-pations	Contri-bution	Partici-pations	Contri-bution	Partici-pations
ENERGY & ENVIRONMENT	**147.61**	**889**	**157.97**	**1 139**	**125.76**	**737**	**68.84**	**567**	**500.18**	**3 332**	**69.43**	**572**
ENVIRONMENT	***136.07***	***804***	***144.03***	***1 012***	***34.62***	***451***	***19.13***	***263***	***333.85***	***2 530***	***31.82***	***399***
Sustainable management and quality of water	36.19	185	35.71	202	12.31	192	4.27	63	88.49	642	12.32	180
Global change, climate and biodiversity	38.05	227	43.56	292	1.42	25	2.9	19	85.93	563	1.85	22
Sustainable marine ecosystems	23.5	128	20.52	125	4.84	50	0.91	12	49.77	315	3.88	45
The city of tomorrow and cultural heritage	16.35	99	17.17	139	9.36	115	6.86	128	49.75	481	9.42	101
RTD activities of a generic nature	13.91	100	13.42	117	5.26	58	2.38	23	34.97	298	3.22	42
Support for infrastructure	8.07	65	13.65	137	1.44	11	1.8	18	24.95	231	1.13	9
ENERGY	***11.54***	***85***	***13.94***	***127***	***91.14***	***286***	***49.7***	***304***	***166.32***	***802***	***37.61***	***173***
Cleaner energy systems, incl. renewables	3.89	32	5.7	44	36.36	137	23.59	132	69.54	345	20.75	87
Economic and efficient energy	7.48	48	6.57	56	53.82	129	23.42	108	91.29	341	15.99	65
RTD activities of a generic nature	0.04	1	0.29	5	0.17	5	0.27	4	0.77	15	0.21	6
OPET	0.13	4	1.38	22	0.79	15	2.42	60	4.72	101	0.66	15
NUCLEAR ENERGY	**8.81**	**102**	**105.73**	**432**	**3.11**	**186**	**34.8**	**475**	**152.44**	**1 195**	**40.30**	**40**
Controlled thermonuclear fusion	2.56	36	80.98	205	0.49	52	16.37	30	100.4	323	0.86	3
Nuclear fission	4.95	61	22.5	211	2.62	130	14.36	241	44.43	643	39.44	37
RTD activities of a generic nature	0.64	4	1.21	12	0.0	4	1.58	37	3.43	57	0.0	0
Support for infrastructure	0.66	1	1.04	4	0.0	0	2.49	167	4.18	172	0.0	0
INTERNATIONAL ROLE	**42.75**	**505**	**45.61**	**475**	**3.43**	**75**	**28.78**	**131**	**120.57**	**1 186**	**4.16**	**60**
Countries in the pre-accession phase	1.31	13	3.42	16	0.03	2	0.23	16	4.99	47	0.03	2
NIS and CEEC not in the pre-accession phase	2.77	38	3.64	50	0.57	10	23.58	9	30.56	107	0.63	15
Mediterranean partner countries	3.22	36	2.23	38	0.72	16	0.7	19	6.88	109	0.58	12
Developing countries	34.63	338	35.57	319	1.71	37	3.72	77	75.64	771	2.61	23
Emerging economies and industrialised countries	0.13	5	0.37	10	0.36	7	0.51	4	1.37	26	0.28	5
Fellowships for developing countries	0.13	8	0.05	5	0.0	1	0.0	0	0.18	14	0.0	1
Fellowships for Community researchers	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Coordination	0.56	67	0.32	37	0.02	2	0.04	6	0.94	112	0.02	2

	TYPE OF BENEFICIARY										of which SMEs	
	Higher education		Research centres (including JRC)		Enterprise sector		Other		TOTAL			
	Contri-bution	Partici-pations	Contri-bution	Partici-pations	Contri-bution	Partici-pations	Contri-bution	Partici-pations	Contri-bution	Partici-pations	Contri-bution	Partici-pations
INNOVATION AND SMEs	**8.22**	**23**	**9.97**	**56**	**17.39**	**119**	**15.84**	**112**	**51.42**	**310**	**21.02**	**141**
Promotion of innovation	3.58	16	8.68	49	11.89	88	9.38	58	33.53	211	14.53	109
Joint innovation/SME activities	4.64	7	1.29	7	5.51	31	6.46	54	17.89	99	6.49	32
Economic and technological intelligence	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
HUMAN POTENTIAL	**136.92**	**1 257**	**100.6**	**829**	**12.0**	**108**	**8.55**	**120**	**258.07**	**2 314**	**11.93**	**126**
Research training networks	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Marie Curie fellowships	68.9	545	37.6	272	8.61	45	0.41	4	115.52	866	5.64	34
Access to research infrastructure	19.01	88	34.55	135	0.66	9	0.16	4	54.38	236	0.74	8
Socio-economic research	35.55	392	17.95	227	0.39	9	2.94	37	56.83	665	1.94	21
Public perception	1.7	21	2.06	37	1.32	22	2.23	28	7.31	108	1.27	21
Support for S&T policies	3.09	50	3.19	40	0.6	13	0.75	12	7.63	115	0.98	9
Promoting S&T excellence	6.89	131	4.2	96	0.02	1	1.34	21	12.45	249	1.14	28
RTD activities of a generic nature	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Accompanying measures	1.78	30	1.05	22	0.39	9	0.73	14	3.95	75	0.21	5
TOTAL	**1 128.83**	**6 738**	**1 147.36**	**6 810**	**1 124.41**	**7 111**	**335.03**	**2 774**	**3 735.64**	**23 433**	**528.13**	**4 658**

TABLE 3B: CONTRACTS SIGNED IN 2001 BY TYPE OF BENEFICIARY (IN %)

	TYPE OF BENEFICIARY										of which SMEs	
	Higher education		Research centres (including JRC)		Enterprise sector		Other[56]		TOTAL			
	Contri-bution	Partici-pations	Contri-bution	Partici-pations	Contri-bution	Partici-pations	Contri-bution	Partici-pations	Contri-bution	Partici-pations	Contri-bution	Partici-pations
QUALITY OF LIFE	**47.44%**	**39.55%**	**39.23%**	**34.74%**	**7.85%**	**18.08%**	**5.49%**	**7.64%**	**100.00%**	**100.00%**	**7.46%**	**16.77%**
Food, nutrition and health	47.37%	30.77%	36.33%	29.83%	12.10%	35.01%	4.20%	4.40%	100.00%	100.00%	8.40%	29.83%
Control of infectious diseases	45.11%	41.25%	38.57%	36.25%	8.50%	12.14%	7.82%	10.36%	100.00%	100.00%	3.83%	7.86%
The “cell factory”	53.64%	43.41%	33.19%	32.72%	11.06%	21.70%	2.11%	2.17%	100.00%	100.00%	12.01%	22.70%
Environment and health	48.28%	38.26%	44.96%	41.30%	3.74%	13.04%	3.02%	7.39%	100.00%	100.00%	5.75%	15.65%
Sustainable agriculture, fisheries and forestry	41.11%	31.70%	40.98%	33.33%	7.83%	24.95%	10.08%	10.02%	100.00%	100.00%	7.29%	23.41%
The ageing population and disabilities	60.70%	48.62%	26.35%	31.80%	6.73%	10.09%	6.22%	9.48%	100.00%	100.00%	5.30%	9.17%
RTD activities of a generic nature	52.15%	49.26%	39.56%	35.41%	4.48%	6.13%	3.81%	9.20%	100.00%	100.00%	6.80%	7.19%
Support for infrastructure	23.84%	32.47%	68.17%	54.12%	4.06%	9.28%	3.93%	4.12%	100.00%	100.00%	5.94%	6.70%
INFORMATION SOCIETY	**27.25%**	**26.37%**	**19.28%**	**16.81%**	**44.03%**	**40.26%**	**9.43%**	**16.56%**	**100.00%**	**100.00%**	**19.79%**	**22.18%**
Systems and services for the citizen	15.71%	16.21%	16.62%	14.51%	53.48%	44.97%	14.19%	24.31%	100.00%	100.00%	28.88%	26.93%
New methods of work and electronic commerce	21.06%	20.82%	15.17%	12.90%	46.60%	44.87%	17.17%	21.41%	100.00%	100.00%	29.55%	30.65%
Multimedia content and tools	30.52%	28.05%	16.88%	14.50%	37.81%	33.06%	14.80%	24.39%	100.00%	100.00%	24.70%	24.39%
Essential technologies and infrastructure	24.75%	25.12%	21.63%	19.51%	50.55%	48.37%	3.06%	7.00%	100.00%	100.00%	12.81%	15.97%
Cross-programme themes	20.89%	20.05%	21.78%	17.11%	45.68%	44.01%	11.65%	18.83%	100.00%	100.00%	25.68%	27.14%
RTD activities of a generic nature	68.56%	66.95%	22.82%	24.22%	5.97%	7.12%	2.66%	1.71%	100.00%	100.00%	2.43%	3.42%
Support for infrastructure	25.15%	26.67%	13.58%	25.00%	48.49%	40.00%	12.78%	8.33%	100.00%	100.00%	17.85%	25.00%
SUSTAINABLE GROWTH	**18.57%**	**16.87%**	**25.69%**	**24.97%**	**50.41%**	**52.80%**	**5.33%**	**5.36%**	**100.00%**	**100.00%**	**18.74%**	**31.67%**
Innovative products, processes and organisation	20.19%	14.19%	30.00%	22.23%	46.87%	59.99%	2.93%	3.59%	100.00%	100.00%	25.95%	38.09%
Sustainable mobility and intermodality	8.44%	14.92%	18.23%	24.60%	52.18%	43.15%	21.15%	17.34%	100.00%	100.00%	23.78%	29.03%
Land transport and marine technologies	20.78%	13.70%	28.16%	20.27%	46.50%	58.77%	4.55%	7.26%	100.00%	100.00%	16.22%	32.19%
New perspectives for aeronautics	10.99%	17.82%	15.57%	23.27%	71.96%	56.19%	1.48%	2.72%	100.00%	100.00%	8.26%	17.41%
RTD activities of a generic nature	31.30%	21.36%	33.65%	29.53%	33.04%	45.48%	2.00%	3.62%	100.00%	100.00%	20.59%	31.69%
Support for infrastructure	17.74%	20.70%	49.58%	38.77%	20.48%	25.55%	12.19%	14.98%	100.00%	100.00%	13.76%	12.33%

56 “Other” covers all participations which could not be allocated to any of the first three categories.

	TYPE OF BENEFICIARY										of which SMEs	
	Higher education		Research centres (including JRC)		Enterprise sector		Other		TOTAL			
	Contri-bution	Partici-pations	Contri-bution	Partici-pations	Contri-bution	Partici-pations	Contri-bution	Partici-pations	Contri-bution	Partici-pations	Contri-bution	Partici-pations
ENERGY & ENVIRONMENT	**29.51%**	**26.68%**	**31.58%**	**34.18%**	**25.14%**	**22.12%**	**13.76%**	**17.02%**	**100.00%**	**100.00%**	**13.88%**	**17.17%**
ENVIRONMENT	***40.76%***	***31.78%***	***43.14%***	***40.00%***	***10.37%***	***17.83%***	***5.73%***	***10.40%***	***100.00%***	***100.00%***	***9.53%***	***15.77%***
Sustainable management and quality of water	40.90%	28.82%	40.36%	31.46%	13.91%	29.91%	4.83%	9.81%	100.00%	100.00%	13.92%	28.04%
Global change, climate and biodiversity	44.28%	40.32%	50.69%	51.87%	1.65%	4.44%	3.38%	3.37%	100.00%	100.00%	2.15%	3.91%
Sustainable marine ecosystems	47.22%	40.63%	41.23%	39.68%	9.72%	15.87%	1.83%	3.81%	100.00%	100.00%	7.80%	14.29%
The city of tomorrow and cultural heritage	32.87%	20.58%	34.51%	28.90%	18.82%	23.91%	13.80%	26.61%	100.00%	100.00%	18.94%	21.00%
RTD activities of a generic nature	39.77%	33.56%	38.38%	39.26%	15.04%	19.46%	6.82%	7.72%	100.00%	100.00%	9.21%	14.09%
Support for infrastructure	32.33%	28.14%	54.71%	59.31%	5.76%	4.76%	7.20%	7.79%	100.00%	100.00%	4.53%	3.90%
ENERGY	***6.94%***	***10.60%***	***8.38%***	***15.84%***	***54.80%***	***35.66%***	***29.88%***	***37.91%***	***100.00%***	***100.00%***	***22.61%***	***21.57%***
Cleaner energy systems, incl. renewables	5.59%	9.28%	8.19%	12.75%	52.29%	39.71%	33.93%	38.26%	100.00%	100.00%	29.84%	25.22%
Economic and efficient energy	8.20%	14.08%	7.20%	16.42%	58.95%	37.83%	25.65%	31.67%	100.00%	100.00%	17.52%	19.06%
RTD activities of a generic nature	5.19%	6.67%	37.65%	33.33%	22.44%	33.33%	34.72%	26.67%	100.00%	100.00%	27.50%	40.00%
OPET	2.69%	3.96%	29.19%	21.78%	16.82%	14.85%	51.30%	59.41%	100.00%	100.00%	13.94%	14.85%
NUCLEAR ENERGY	**5.78%**	**8.54%**	**69.36%**	**36.15%**	**2.04%**	**15.56%**	**22.83%**	**39.75%**	**100.00%**	**100.00%**	**26.43%**	**3.35%**
Controlled thermonuclear fusion	2.55%	11.15%	80.66%	63.47%	0.49%	16.10%	16.30%	9.29%	100.00%	100.00%	0.86%	0.93%
Nuclear fission	11.14%	9.49%	50.64%	32.81%	5.90%	20.22%	32.32%	37.48%	100.00%	100.00%	88.77%	5.75%
RTD activities of a generic nature	18.66%	7.02%	35.28%	21.05%	0.00%	7.02%	46.06%	64.91%	100.00%	100.00%	0.00%	0.00%
Support for infrastructure	15.74%	0.58%	24.77%	2.33%	0.00%	0.00%	59.49%	97.09%	100.00%	100.00%	0.00%	0.00%
INTERNATIONAL ROLE	**35.46%**	**42.58%**	**37.83%**	**40.05%**	**2.84%**	**6.32%**	**23.87%**	**11.05%**	**100.00%**	**100.00%**	**3.45%**	**5.06%**
Countries in the pre-accession phase	26.19%	27.66%	68.55%	34.04%	0.67%	4.26%	4.60%	34.04%	100.00%	100.00%	0.67%	4.26%
NIS and CEEC not in the pre-accession phase	9.07%	35.51%	11.90%	46.73%	1.88%	9.35%	77.15%	8.41%	100.00%	100.00%	2.08%	14.02%
Mediterranean partner countries	46.84%	33.03%	32.44%	34.86%	10.48%	14.68%	10.24%	17.43%	100.00%	100.00%	8.49%	11.01%
Developing countries	45.79%	43.84%	47.03%	41.37%	2.27%	4.80%	4.92%	9.99%	100.00%	100.00%	3.46%	2.98%
Emerging economies and industrialised countries	9.36%	19.23%	27.17%	38.46%	26.54%	26.92%	36.94%	15.38%	100.00%	100.00%	20.18%	19.23%
Fellowships for developing countries	73.00%	57.14%	27.00%	35.71%	0.00%	7.14%	0.00%	0.00%	100.00%	100.00%	0.00%	7.14%
Fellowships for Community researchers	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Coordination	59.03%	59.82%	34.21%	33.04%	2.15%	1.79%	4.61%	5.36%	100.00%	100.00%	2.15%	1.79%

	TYPE OF BENEFICIARY										of which SMEs	
	Higher education		Research centres (including JRC)		Enterprise sector		Other		TOTAL			
	Contri-bution	Partici-pations	Contri-bution	Partici-pations	Contri-bution	Partici-pations	Contri-bution	Partici-pations	Contri-bution	Partici-pations	Contri-bution	Partici-pations
INNOVATION AND SMEs	**15.98%**	**7.42%**	**19.39%**	**18.06%**	**33.83%**	**38.39%**	**30.81%**	**36.13%**	**100.00%**	**100.00%**	**40.87%**	**45.48%**
Promotion of innovation	10.67%	7.58%	25.89%	23.22%	35.45%	41.71%	27.98%	27.49%	100.00%	100.00%	43.32%	51.66%
Joint innovation/SME activities	25.93%	7.07%	7.20%	7.07%	30.78%	31.31%	36.09%	54.55%	100.00%	100.00%	36.27%	32.32%
Economic and technological intelligence	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
HUMAN POTENTIAL	**53.05%**	**54.32%**	**38.98%**	**35.83%**	**4.65%**	**4.67%**	**3.31%**	**5.19%**	**100.00%**	**100.00%**	**4.62%**	**5.45%**
Research training networks	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Marie Curie fellowships	59.64%	62.93%	32.55%	31.41%	7.46%	5.20%	0.35%	0.46%	100.00%	100.00%	4.88%	3.93%
Access to research infrastructure	34.96%	37.29%	63.53%	57.20%	1.22%	3.81%	0.29%	1.69%	100.00%	100.00%	1.37%	3.39%
Socio-economic research	62.55%	58.95%	31.59%	34.14%	0.69%	1.35%	5.17%	5.56%	100.00%	100.00%	3.42%	3.16%
Public perception	23.26%	19.44%	28.18%	34.26%	18.05%	20.37%	30.52%	25.93%	100.00%	100.00%	17.42%	19.44%
Support for S&T policies	40.46%	43.48%	41.84%	34.78%	7.89%	11.30%	9.81%	10.43%	100.00%	100.00%	12.83%	7.83%
Promoting S&T excellence	55.36%	52.61%	33.71%	38.55%	0.17%	0.40%	10.76%	8.43%	100.00%	100.00%	9.15%	11.24%
RTD activities of a generic nature	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Accompanying measures	45.03%	40.00%	26.51%	29.33%	9.84%	12.00%	18.61%	18.67%	100.00%	100.00%	5.24%	6.67%
TOTAL	**30.22%**	**28.75%**	**30.71%**	**29.06%**	**30.10%**	**30.35%**	**8.97%**	**11.84%**	**100.00%**	**100.00%**	**14.14%**	**19.88%**

TABLE 4 : PROPOSALS RECEIVED IN 2001 BY COUNTRY - PARTICIPATIONS BY SPECIFIC PROGRAMME

	EUROPEAN UNION															
	BE	**DK**	**DE**	**EL**	**ES**	**FR**	**IE**	**IT**	**LU**	**NL**	**AT**	**PT**	**FI**	**SV**	**UK**	**Total.**
Quality of life	787	663	2 564	697	1 558	2189	279	2 199	18	1 299	567	465	502	886	2 755	17 428
Information society	505	190	1 859	1 238	1 294	1292	218	1 768	46	513	396	268	335	402	1 444	11 768
Sustainable growth	658	287	2 609	619	1 439	1837	139	1 786	23	1 068	400	472	366	628	1 934	14 265
Energy and environment	737	862	3 143	1 215	1 843	2174	246	2 162	30	1 473	767	655	529	858	2 709	19 403
Environment	*422*	*431*	*1 735*	*722*	*1 069*	*1330*	*143*	*1 452*	*22*	*861*	*398*	*407*	*334*	*478*	*1 670*	*11 474*
Energy	*315*	*431*	*1 408*	*493*	*774*	*844*	*103*	*710*	*8*	*612*	*369*	*248*	*195*	*380*	*1 039*	*7 929*
Nuclear energy	74	12	193	13	87	159	5	48	0	71	13	2	62	72	132	943
Fission	*74*	*12*	*190*	*12*	*87*	*158*	*5*	*48*	*0*	*70*	*13*	*2*	*60*	*72*	*132*	*935*
Fusion	*0*	*0*	*3*	*1*	*0*	*1*	*0*	*0*	*0*	*1*	*0*	*0*	*2*	*0*	*0*	*8*
International role	102	49	166	79	145	234	14	192	1	127	86	74	18	55	214	1 556
Innovation and SMEs	71	87	412	123	304	213	51	327	15	98	85	119	49	52	275	2 281
Human potential	339	203	1 281	274	575	1280	111	903	5	610	246	165	128	296	1 528	7 944
TOTAL	**3 273**	**2 353**	**12 227**	**4 258**	**7 245**	**9378**	**1 063**	**9 385**	**138**	**5 259**	**2560**	**2220**	**1989**	**3 249**	**10 991**	**75 588**

	CANDIDATE AND ASSOCIATED COUNTRIES																		
	BG	**CY**	**CZ**	**EE**	**HU**	**LV**	**LT**	**MT**	**PL**	**RO**	**SK**	**SI**	**TR**	**IS**	**LI**	**NO**	**CH**	**IL**	**Total.**
Quality of life	80	47	304	84	291	56	57	16	373	78	123	130	24	68	2	387	451	274	2 845
Information society	98	112	223	37	148	29	34	4	252	125	70	82	5	20	3	157	272	191	1 862
Sustainable growth	79	21	286	20	146	30	27	7	398	130	71	135	7	10	3	265	231	132	1 998
Energy and environment	159	77	350	114	296	56	69	57	586	189	133	216	41	42	6	639	453	177	3 660
Environment	*107*	*52*	*211*	*83*	*218*	*40*	*46*	*41*	*381*	*136*	*93*	*121*	*30*	*39*	*2*	*409*	*252*	*117*	*2 378*
Energy	*52*	*25*	*139*	*31*	*78*	*16*	*23*	*16*	*205*	*53*	*40*	*95*	*11*	*3*	*4*	*230*	*201*	*60*	*1 282*
Nuclear energy	7	0	55	1	38	1	0	0	8	11	31	7	0	0	0	8	45	0	211
Fission	*7*	*0*	*55*	*1*	*38*	*0*	*0*	*0*	*8*	*11*	*31*	*7*	*0*	*0*	*0*	*8*	*43*	*0*	*209*
Fusion	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*0*	*2*
International role	23	5	14	2	30	3	3	7	23	14	5	27	27	0	0	26	26	9	244
Innovation and SMEs	17	12	57	27	58	16	19	5	62	16	30	33	0	7	0	38	14	46	457
Human potential	50	14	101	18	96	15	17	6	158	41	29	39	6	10	0	103	257	100	1060
TOTAL	**513**	**288**	**1 390**	**303**	**1 103**	**206**	**226**	**102**	**1 860**	**604**	**492**	**669**	**110**	**157**	**14**	**1 623**	**1 749**	**929**	**12 337**

TABLE 5A : CONTRACTS SIGNED IN 2001 BY COUNTRY - PARTICIPATIONS BY SPECIFIC PROGRAMME

	EUROPEAN UNION															
	BE	**DK**	**DE**	**EL**	**ES**	**FR**	**IE**	**IT**	**LU**	**NL**	**AT**	**PT**	**FI**	**SV**	**UK**	**Total**
Quality of life	149	186	559	137	295	589	83	403	5	322	114	80	128	203	724	3 977
Information society	177	60	586	296	273	516	52	520	12	194	108	79	97	124	494	3 588
Sustainable growth	281	144	1013	192	494	850	76	680	7	431	157	157	171	243	1 019	5 915
Energy and environment	120	149	417	157	237	372	32	286	6	255	109	74	91	141	391	2 837
Environment	90	99	322	112	169	298	25	245	3	189	65	57	64	94	315	2 147
Energy	30	50	95	45	68	74	7	41	3	66	44	17	27	47	76	690
Nuclear energy	97	14	200	7	92	184	4	82	0	49	20	10	49	65	127	1 000
Fission	64	4	97	0	57	111	0	29	0	19	3	2	27	13	74	500
Fusion	16	5	82	4	16	37	1	44	0	15	12	7	15	42	28	324
International role	47	15	67	17	44	70	11	64	0	61	14	27	21	21	96	575
Innovation and SMEs	13	5	42	12	33	25	5	44	1	5	9	8	2	15	36	255
Human potential	92	53	315	63	140	354	30	205	3	151	58	44	33	81	450	2 072
TOTAL	**976**	**626**	**3 199**	**881**	**1 608**	**2 960**	**293**	**2 284**	**34**	**1 468**	**589**	**479**	**592**	**893**	**3 337**	**20 219**

	CANDIDATE AND ASSOCIATED COUNTRIES																		
	BG	**CY**	**CZ**	**EE**	**HU**	**LV**	**LT**	**MT**	**PL**	**RO**	**SK**	**SI**	**TR**	**IS**	**LI**	**NO**	**CH**	**IL**	**Total**
Quality of life	8	5	33	13	31	11	8	1	33	8	15	8	1	29	0	111	113	72	500
Information society	15	24	26	6	28	14	10	0	48	16	3	19	5	3	2	46	117	48	430
Sustainable growth	16	1	37	5	35	4	3	2	81	27	22	28	1	4	3	125	105	52	551
Energy and environment	15	10	39	16	32	10	10	2	39	17	15	19	3	11	1	105	59	22	425
Environment	10	7	32	11	26	7	9	2	30	11	13	14	2	11	0	81	44	22	332
Energy	5	3	7	5	6	3	1	0	9	6	2	5	1	0	1	24	15	0	93
Nuclear energy	5	1	35	0	31	5	0	0	7	9	24	5	0	0	0	2	55	0	179
Fission	5	1	22	0	20	2	0	0	3	0	21	2	0	0	0	0	34	0	110
Fusion	0	0	2	0	6	3	0	0	0	3	0	0	0	0	0	0	15	0	29
International role	3	2	4	3	10	1	1	3	11	7	7	5	6	2	0	14	8	7	94
Innovation and SMEs	4	2	8	2	6	3	1	0	10	2	3	7	0	2	0	3	0	2	55
Human potential	13	2	17	13	37	6	4	1	26	9	8	14	1	1	0	29	36	18	235
TOTAL	**79**	**47**	**199**	**58**	**210**	**54**	**37**	**9**	**255**	**95**	**97**	**105**	**17**	**52**	**6**	**435**	**493**	**221**	**2 469**

TABLE 5B: CONTRACTS SIGNED IN 2001 BY COUNTRY - PARTICIPATIONS BY TYPE OF ACTION AND BY TYPE OF BENEFICIARY

Number of participations by type of action	EUROPEAN UNION															
	BE	**DK**	**DE**	**EL**	**ES**	**FR**	**IE**	**IT**	**LU**	**NL**	**AT**	**PT**	**FI**	**SV**	**UK**	**Total**
Shared cost actions	637	455	2 390	662	1 199	2 147	201	1 635	26	1 022	411	341	424	642	2 185	14 377
R&D projects	*525*	*345*	*1 879*	*551*	*832*	*1820*	*148*	*1 260*	*18*	*734*	*287*	*231*	*350*	*516*	*1 684*	*11 180*
Demonstration projects	*10*	*30*	*64*	*5*	*43*	*53*	*6*	*28*	*2*	*42*	*18*	*7*	*3*	*26*	*52*	*389*
Combined projects	*28*	*16*	*112*	*31*	*57*	*87*	*9*	*73*	*2*	*75*	*43*	*12*	*20*	*35*	*93*	*693*
Support for infrastructure	*2*	*3*	*9*	*1*	*4*	*10*	*1*	*3*	*1*	*5*	*0*	*0*	*1*	*5*	*9*	*54*
Cooperative research	*43*	*39*	*196*	*35*	*179*	*126*	*26*	*171*	*2*	*101*	*40*	*54*	*35*	*47*	*229*	*1 323*
Exploratory awards	*29*	*22*	*130*	*39*	*84*	*51*	*11*	*100*	*1*	*65*	*23*	*37*	*15*	*13*	*118*	*738*
Fellowships	32	24	146	23	67	194	13	78	0	100	23	6	7	41	326	1 080
Support for networks	142	84	301	76	142	241	31	242	0	165	48	65	74	107	425	2 143
Concerted actions	37	27	66	25	63	80	11	70	1	53	20	14	31	49	104	651
Accompanying measures	128	36	296	95	137	298	37	259	7	128	87	53	56	54	297	1 968
Total	**976**	**626**	**3 199**	**881**	**1 608**	**2 960**	**293**	**2 284**	**34**	**1 468**	**589**	**479**	**592**	**893**	**3 337**	**20 219**

Number of participations by type of beneficiary	**BE**	**DK**	**DE**	**EL**	**ES**	**FR**	**IE**	**IT**	**LU**	**NL**	**AT**	**PT**	**FI**	**SV**	**UK**	**Total**
Higher education	289	153	772	263	418	504	134	557	1	410	163	135	168	338	1 437	5 667
Research centres (incl. JRC)	266	201	980	238	418	1 186	44	703	8	478	146	116	218	185	586	5 773
Enterprise sector	256	192	1 175	304	551	957	76	767	20	426	174	159	146	241	980	6 424
Other[57]	165	80	272	76	221	313	39	257	5	154	106	69	60	129	334	2280
Total	**976**	**626**	**3 199**	**881**	**1 608**	**2 960**	**293**	**2 284**	**34**	**1 468**	**589**	**479**	**592**	**893**	**3 337**	**20 219**
of which SMEs	**174**	**132**	**663**	**212**	**406**	**499**	**65**	**553**	**16**	**313**	**134**	**123**	**84**	**150**	**635**	**4 159**

57 "Other" covers all participations which could not be allocated to any of the first three categories.

Number of participations by type of action	CANDIDATE AND ASSOCIATED COUNTRIES																		
	BG	**CY**	**CZ**	**EE**	**HU**	**LV**	**LT**	**MT**	**PL**	**RO**	**SK**	**SI**	**TR**	**IS**	**LI**	**NO**	**CH**	**IL**	**Tot.**
Shared cost actions	42	32	122	41	123	27	18	1	166	54	52	55	7	40	5	295	372	178	1 630
R&D projects	*34*	*27*	*104*	*35*	*96*	*15*	*15*	*1*	*127*	*46*	*47*	*43*	*6*	*24*	*4*	*226*	*337*	*139*	*1 326*
Demonstration projects	*1*	*0*	*1*	*0*	*3*	*2*	*1*	*0*	*2*	*1*	*0*	*4*	*0*	*1*	*0*	*12*	*9*	*1*	*38*
Combined projects	*1*	*0*	*5*	*3*	*6*	*2*	*0*	*0*	*9*	*1*	*2*	*4*	*1*	*5*	*0*	*23*	*13*	*5*	*80*
Support for infrastructure	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*3*	*0*	*2*	*5*
Cooperative research	*3*	*3*	*4*	*1*	*11*	*5*	*0*	*0*	*17*	*0*	*2*	*0*	*0*	*7*	*0*	*25*	*13*	*20*	*111*
Exploratory awards	*3*	*2*	*8*	*2*	*7*	*3*	*2*	*0*	*11*	*6*	*1*	*4*	*0*	*3*	*1*	*6*	*0*	*11*	*70*
Fellowships	1	1	1	0	1	1	0	0	2	0	0	2	0	0	0	12	6	9	36
Support for networks	12	4	35	2	33	4	5	3	21	13	18	20	4	7	0	72	57	14	324
Concerted actions	2	0	11	1	10	2	3	1	9	5	10	2	1	3	0	23	25	5	113
Accompanying measures	22	10	30	14	43	21	11	4	57	23	17	26	5	2	1	33	33	15	367
Total	**79**	**47**	**199**	**58**	**210**	**55**	**37**	**9**	**255**	**95**	**97**	**105**	**17**	**52**	**6**	**435**	**493**	**221**	**2 470**

Number of participations by type of beneficiary	**BG**	**CY**	**CZ**	**EE**	**HU**	**LV**	**LT**	**MT**	**PL**	**RO**	**SK**	**SI**	**TR**	**IS**	**LI**	**NO**	**CH**	**IL**	**Total**
Higher education	20	11	44	28	42	13	10	0	86	22	18	35	8	14	0	98	196	85	730
Research centres (incl. JRC)	26	4	68	9	89	11	13	1	80	34	44	30	5	18	0	149	123	42	746
Enterprise sector	20	15	40	9	47	15	5	2	42	18	16	19	2	13	4	148	135	81	631
Other	13	17	47	12	32	16	9	6	47	21	19	21	2	7	2	40	39	13	363
Total	**79**	**47**	**199**	**58**	**210**	**55**	**37**	**9**	**255**	**95**	**97**	**105**	**17**	**52**	**6**	**435**	**493**	**221**	**2 470**
of which SMEs	**17**	**15**	**33**	**9**	**42**	**14**	**4**	**2**	**33**	**18**	**10**	**24**	**1**	**11**	**0**	**83**	**90**	**55**	**461**

TABLE 6: COOPERATION LINKS BETWEEN COUNTRIES IN THE CONTRACTS SIGNED IN 2001

		European Union																Candidate and associated countries																Total		
		BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SV	UK	**Tot**	BG	CY	CZ	EE	HU	LV	LT	MT	PL	RO	SK	SI	TR	IS	LI	NO	CH	IL			
European Union	BE	305	236	1 267	321	657	1 306	123	805	20	668	189	194	226	309	1 295	**7 921**	22	8	96	12	97	7	19	6	88	41	57	48	8	13	1	150	191	59	**8 844**	BE	European Union
	DK	236	203	741	206	360	610	102	500	9	504	135	120	214	314	959	**5 213**	11	6	51	14	55	15	16	4	69	25	18	30	3	18	0	232	142	33	**5 955**	DK	
	DE	1 267	741	2 562	899	1 739	3 713	328	2 639	39	1 827	880	550	693	1 143	4 555	**23 575**	88	30	309	33	267	87	48	7	332	101	170	136	20	45	9	535	790	238	**26 820**	DE	
	EL	321	206	899	442	604	825	99	1 012	11	436	180	228	269	237	1 047	**6 816**	69	55	64	18	65	11	14	6	64	67	39	31	17	13	1	184	137	109	**7 780**	EL	
	ES	657	360	1 739	604	1 032	1 993	208	1 859	12	751	262	399	324	526	2 102	**12 828**	44	38	134	17	106	18	17	7	121	51	57	74	11	35	2	262	290	95	**14 207**	ES	
	FR	1 306	610	3 713	825	1 993	2 828	282	2 540	36	1 529	464	513	554	785	3 538	**21 516**	52	28	227	19	165	28	53	9	262	108	72	85	17	32	4	589	668	199	**24 133**	FR	
	IE	123	102	328	99	208	282	51	262	5	189	61	57	79	106	529	**2 481**	3	1	24	7	41	6	4	2	27	13	15	21	3	10	1	74	41	20	**2 794**	IE	
	IT	805	500	2 639	1 012	1 859	2 540	262	1819	28	1 128	352	526	452	726	2 967	**17 615**	84	40	164	20	141	24	16	13	199	61	71	125	12	21	2	421	444	191	**19 664**	IT	
	LU	20	9	39	11	12	36	5	28	2	16	12	9	7	15	34	**255**	1	1	2	1	2	3	3	1	4	1	1	2	0	1	0	10	6	1	**295**	LU	
	NL	668	504	1 827	436	751	1 529	189	1 128	16	787	324	323	399	575	2 086	**11 542**	38	13	146	24	157	18	19	6	158	63	76	68	8	26	0	351	272	120	**13 105**	NL	
	AT	189	135	880	180	262	464	61	352	12	324	333	93	149	240	547	**4 221**	32	4	68	10	120	17	14	3	58	54	72	44	4	12	3	91	121	22	**4 970**	AT	
	PT	194	120	550	228	399	513	57	526	9	323	93	159	118	134	659	**4 082**	17	7	40	6	45	4	11	1	58	24	18	21	4	13	1	149	99	31	**4 631**	PT	
	FI	226	214	693	269	324	554	79	452	7	399	149	118	227	366	708	**4 785**	24	3	48	30	69	16	13	2	70	22	44	25	2	23	0	238	114	40	**5 568**	FI	
	SV	309	314	1 143	237	526	785	106	726	15	575	240	134	366	331	1 354	**7 161**	21	6	72	31	67	11	21	2	79	20	31	46	3	38	0	287	170	61	**8 127**	SV	
	UK	1 295	959	4 555	1 047	2 102	3 538	529	2 967	34	2 086	547	659	708	1 354	3 110	**25 490**	52	36	303	43	234	45	42	11	307	98	182	177	9	64	3	962	568	199	**28 825**	UK	
	Tot	**7 921**	**5 213**	**23 575**	**6 816**	**12 828**	**21 516**	**2 481**	**17 615**	**255**	**11 542**	**4 221**	**4 082**	**4 785**	**7 161**	**25 490**	**84 846**	**558**	**276**	**1748**	**285**	**1631**	**310**	**310**	**80**	**1896**	**749**	**923**	**933**	**121**	**364**	**27**	**4535**	**4053**	**1418**	**105 063**	**Tot.**	
Candidate and associated countries	BG	22	11	88	69	44	52	3	84	1	38	32	17	24	21	52	**558**	20	5	21	6	22	7	7	2	14	41	17	11	4	1	0	16	14	3	**769**	BG	Candidate and associated countries
	CY	8	6	30	55	38	28	1	40	1	13	4	7	3	6	36	**276**	5	11	7	4	5	2	2	4	12	5	2	5	3	1	0	1	2	25	**372**	CY	
	CZ	96	51	309	64	134	227	24	164	2	146	68	40	48	72	303	**1 748**	21	7	52	11	60	11	8	3	36	27	53	23	2	2	0	38	42	16	**2 160**	CZ	
	EE	12	14	33	18	17	19	7	20	1	24	10	6	30	31	43	**285**	6	4	11	16	10	18	11	3	16	6	6	9	1	5	0	13	4	4	**428**	EE	
	HU	97	55	267	65	106	165	41	141	2	157	120	45	69	67	234	**1 631**	22	5	60	10	47	10	10	3	48	35	49	24	2	2	0	38	42	11	**2 049**	HU	
	LV	7	15	87	11	18	28	6	24	3	18	17	4	16	11	45	**310**	7	2	11	18	10	18	23	2	22	9	6	5	0	4	0	11	4	4	**466**	LV	
	LT	19	16	48	14	17	53	4	16	3	19	14	11	13	21	42	**310**	7	2	8	11	10	23	3	2	23	7	5	5	1	2	0	13	4	3	**439**	LT	
	MT	6	4	7	6	7	9	2	13	1	6	3	1	2	2	11	**80**	2	4	3	3	3	2	2	0	4	3	1	4	2	1	0	1	2	4	**121**	MT	
	PL	88	69	332	64	121	262	27	199	4	158	58	58	70	79	307	**1 896**	14	12	36	16	48	22	23	4	83	30	25	22	3	3	0	56	45	10	**2 348**	PL	
	RO	41	25	101	67	51	108	13	61	1	63	54	24	22	20	98	**749**	41	5	27	6	35	9	7	3	30	18	29	23	4	1	0	15	13	5	**1 020**	RO	
	SK	57	18	170	39	57	72	15	71	1	76	72	18	44	31	182	**923**	17	2	53	6	49	6	5	1	25	29	29	28	2	2	0	18	31	3	**1 229**	SK	
	SI	48	30	136	31	74	85	21	125	2	68	44	21	25	46	177	**933**	11	5	23	9	24	5	5	4	22	23	28	26	2	3	0	23	25	7	**1 178**	SI	
	TR	8	3	20	17	11	17	3	12	0	8	4	4	2	3	9	**121**	4	3	2	1	2	0	1	2	3	4	2	2	0	0	0	1	3	8	**159**	TR	
	IS	13	18	45	13	35	32	10	21	1	26	12	13	23	38	64	**364**	1	1	2	5	2	4	2	1	3	1	2	3	0	18	0	46	5	5	**465**	IS	
	LI	1	0	9	1	2	4	1	2	0	0	3	1	0	0	3	**27**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	**29**	LI	
	NO	150	232	535	184	262	589	74	421	10	351	91	149	238	287	962	**4 535**	16	1	38	13	38	11	13	1	56	15	18	23	1	46	0	241	93	28	**5 187**	NO	
	CH	191	142	790	137	290	668	41	444	6	272	121	99	114	170	568	**4 053**	14	2	42	4	42	4	4	2	45	13	31	25	3	5	2	93	131	36	**4 551**	CH	
	IL	59	33	238	109	95	199	20	191	1	120	22	31	40	61	199	**1 418**	3	25	16	4	11	4	3	4	10	5	3	7	8	5	0	28	36	72	**1 662**	IL	
Total		**8 844**	**5 955**	**26 820**	**7 780**	**14 207**	**24 133**	**2 794**	**19 664**	**295**	**13 105**	**4 970**	**4 631**	**5 568**	**8 127**	**28 825**	**105 063**	**769**	**372**	**2 160**	**428**	**2 049**	**466**	**439**	**121**	**2 348**	**1 020**	**1 229**	**1 178**	**159**	**465**	**29**	**5 187**	**4 551**	**1 662**	**107 663**		
		BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SV	UK	**Tot**	BG	CY	CZ	EE	HU	LV	LT	MT	PL	RO	SK	SI	TR	IS	LI	NO	CH	IL	**Total**		
		European Union																**Candidate and associated countries**																				

TABLE 7: FUNDING OF FIFTH FRAMEWORK PROGRAMME

	Amount 1999-2002 (€ million)	**Commitment 2001 (€ million)**
Quality of life and management of living resources	2 413	635.0
A user-friendly information society	3 600	936.0
Competitive and sustainable growth	2 705	702.6
Energy, environment and sustainable development	2 125	570.2
Environment and sustainable development	*1 083*	*291.6*
Energy	*1 042*	*278.6*
Confirming the international role of Community research	475	135.9
Promotion of innovation and encouragement of SME participation	363	110.0
Improving human research potential and the socio-economic knowledge base	1 280	325.3
Direct action (JRC)	739	181.0
Total for Fifth EC Framework Programme	**13 700**	**3 596.0**
Nuclear research	979	255.3
Controlled thermonuclear fusion	*788*	*199.0*
Nuclear fission	*191*	*56.3*
Direct action (JRC)	281	68.7
Total for Fifth Euratom Framework Programme	**1 260**	**324.0**
TOTAL for Fifth EC + Euratom Framework Programmes	**14 960**	**3 920.0**

TABLE 8A: COMMUNITY RESEARCH COMMITMENTS OVER THE PERIOD 1984-2002 (CURRENT PRICES)

Situation at 12.09.2002

YEARS	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01[58]	02[59]	TOTALS
FP 1984-87	593,0	735,0	874,0	701,8	260,8	101,1	4,9													3270,6
FP 1987-91				188,1	810,6	1241,3	1596,9	1270,7	230,9	14,8	3,9	0,2								5357,4
FP 1990-94								296,0	2160,5	2079,5	2014,7	1,0								6551,7
FP 1994-98[60]												2982,5	3153,5	3485,6	3499,3					13120,9
FP 1998-02																3337,5	3607,4	3870,8	4055,0	14870,7
RTD PROGRAMMES	593,0	735,0	874,0	889,9	1071,4	1342,4	1601,8	1566,7	2391,4	2094,3	2018,6	2983,7	3153,5	3485,6	3499,3	3337,5	3607,4	3870,8	4055,0	43171,3
APAS				49,4	56,6	69,8	113,1	168,8	308,4	440,2	571,8	2,1								1780,2
RTD+APAS	593,0	735,0	874,0	939,3	1128,0	1412,2	1714,9	1735,5	2699,8	2534,5	2590,4	2985,8	3153,5	3485,6	3499,3	3337,5	3607,4	3870,8	4055,0	44951,5
SPRINT							16,0	16,0	17,0											49,0
ECSC							17,5	17,5	17,5	17,5	17,5									87,5
80% of THERMIE							36,0	118,4	128,9	139,2	145,6									568,1
Total Research[61]	593,0	735,0	874,0	939,3	1128,0	1412,2	1784,4	1887,4	2863,2	2691,2	2753,5	2985,8	3153,5	3485,6	3499,3	3337,5	3607,4	3870,8	4055,0	45656,1

4 269, i.e. 2.42% of the Budget

7 151, i.e. 3.18% of the Budget

11 980, i.e. 4.05% of the Budget

15 878, i.e. 4.02% of the Budget

18 370, i.e. 4.16% of the Budget

EC BUDGET (current prices)	28 905	29 925	35 842	38 392	43 080	42 569	45 057	56 111	61 232	67 760	65 929	75 355	82 125	85 028	86 523	91 645	74 907	92 116	96 846
RTD programmes as %	2.1	2.5	2.4	2.3	2.5	3.2	3.6	2.8	3.9	3.1	3.1	4.0	3.8	4.1	4.0	3.6	4.8	4.2	4.2
Total research as % of budget	2.1	2.5	2.4	2.4	2.6	3.3	4.0	3.4	4.7	4.0	4.2	4.0	3.8	4.1	4.0	3.6	4.8	4.2	4.2

58 Provisional figures for 2001

59 Budget for 2002.

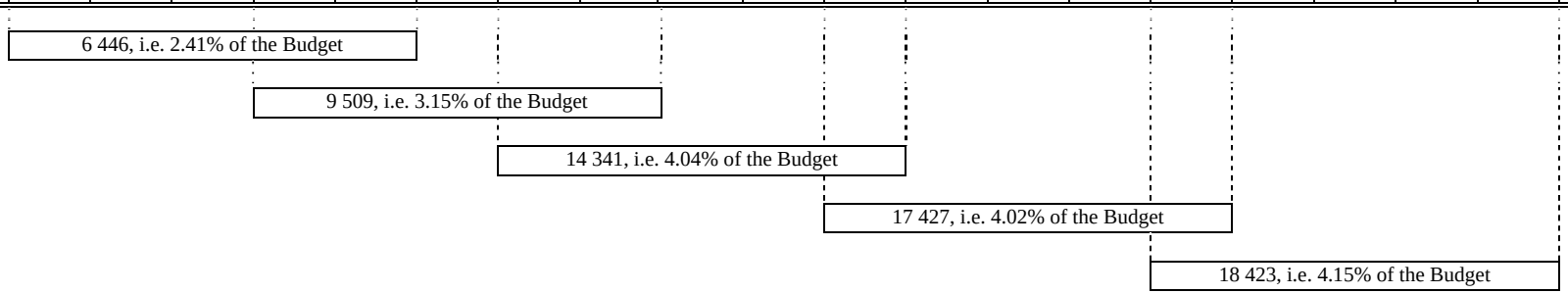
60 The amounts for the 1994-98 FP are those adopted following EU enlargement.

61 RTD + THERMIE + ECSC + SPRINT + APAS

TABLE 8B: COMMUNITY RESEARCH COMMITMENTS OVER THE PERIOD 1984-2002 (CONSTANT 2000 PRICES)

Situation at 12.09.2002

YEARS	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01 [62]	02[63]	TOTALS
FP 1984-87	986,7	1 153,8	1 326,3	1 030,5	369,9	136,4	6,3													5 009,9
FP 1987-91				276,2	1 149,8	1 675,2	2 063,2	1 561,1	274,2	17,3	4,5	0,2								7 021,7
FP 1990-94								363,6	2 565,9	2 435,0	2 315,7	1,1								7 681,3
FP 1994-98[64]												3 385,4	3 465,4	3 727,9	3 679,6					14 258,3
FP 1998-2002																3 426,6	3 607,4	3 802,4	3 906,6	14 743,0
RTD PROGRAMMES	986,7	1 153,8	1 326,3	1 306,7	1 519,7	1 811,6	2 069,5	1 924,7	2 840,1	2 452,3	2 320,2	3 386,7	3 465,4	3 727,9	3 679,6	3 426,6	3 607,4	3 802,4	3 906,6	48 714,2
APAS				72,5	80,3	94,2	146,1	207,4	366,3	515,5	657,2	2,4								2 141,9
RTD+APAS	986,7	1 153,8	1 326,3	1 379,2	1 600,0	1 905,8	2 215,6	2132,1	3206,4	2 967,8	2 977,4	3 389,1	3 465,4	3 727,9	3 679,6	3 426,6	3 607,4	3 802,4	3 906,6	50 856,1
SPRINT							20,7	19,7	20,2											60,6
ECSC							22,6	21,5	20,8	20,5	20,1									105,5
80% of THERMIE							46,5	145,5	153,1	163,0	167,4									675,5
Total Research[65]	986,7	1 153,8	1 326,3	1 379,2	1 600,0	1 905,8	2 305,4	2318,8	3400,5	3 151,3	3 164,9	3 389,1	3 465,4	3 727,9	3 679,6	3 426,6	3 607,4	3 802,4	3 906,6	51 697,7



EC BUDGET (2000 prices)	48 095	46 978	54 388	56 376	61 106	57 448	58 213	68 932	72 722	79 344	75 780	85 533	90 247	90 939	90 981	94 091	74 907	90 487	93 301
RTD programmes as %	2.1	2.5	2.4	2.3	2.5	3.2	3.6	2.8	3.9	3.1	3.1	4.0	3.8	4.1	4.0	3.6	4.8	4.2	4.2
Total research as % of budget	2.1	2.5	2.4	2.4	2.6	3.3	4.0	3.4	4.7	4.0	4.2	4.0	3.8	4.1	4.0	3.6	4.8	4.2	4.2
Deflation factors[66]	0.601	0.637	0.659	0.681	0.705	0.741	0.774	0.814	0.842	0.854	0.87	0.881	0.91	0.935	0.951	0.974	**1.000**	1.018	1.038
Annual inflation (%)		6.0	3.5	3.3	3.6	5.1	4.5	5.2	3.5	1.4	1.9	1.3	3.3	2.7	1.7	2.4	2.7	1.8	2.0

62 Provisional figures for 2001

63 Budget for 2002.

64 The amounts for the 1994-98 FP are those adopted following EU enlargement.

65 RTD + THERMIE + ECSC + SPRINT + APAS

66 The deflation factors used from 1995 take account of the enlargement of the Union from 12 to 15 Member States (COM(96)65). The figures for 2002 are estimates.

TABLE 9: COUNTRY CODES

European Union	
BE	Belgium
DK	Denmark
DE	Germany
EL	Greece
ES	Spain
FR	France
IE	Ireland
IT	Italy
LU	Luxembourg
NL	Netherlands
AT	Austria
PT	Portugal
FI	Finland
SV	Sweden
UK	United Kingdom
Candidate countries and associated countries	
BG	Bulgaria
CY	Cyprus
CZ	Czech Republic
EE	Estonia
HU	Hungary
LV	Latvia
LT	Lithuania
MT	Malta
PL	Poland
RO	Romania
SK	Slovakia
SI	Slovenia
TR	Turkey
IS	Iceland
LI	Liechtenstein
NO	Norway
CH	Switzerland
IL	Israel

ANNEX II

COM(2000) 6 of 18 January 2000:

Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions "*Towards a European research area*"

COM(2000) 612 of 4 October 2000:

Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions "*Making a reality of the European Research Area: Guidelines for EU research activities (2002-2006)"*

COM(2001) 94 of 21 February 2001:

Proposal for a Decision of the European Parliament and of the Council concerning the multiannual framework programme 2002-2006 of the European Community for research, technological development and demonstration activities aimed at contributing towards the creation of the European Research Area

Proposal for a Council Decision concerning the multiannual framework programme 2002-2006 of the European Atomic Energy Community (Euratom) for research and training activities aimed at contributing towards the creation of the European Research Area

SEC(2001) 356 of 27 February 2001:

Commission staff working paper "*A European Research Area for infrastructures"*

SEC(2001) 434 of 12 March 2001:

Commission staff working paper "*How to map excellence in research and technological development in Europe"*

SEC(2001) 771 of 15 May 2001:

Commission staff working paper "*Women and Science: the gender dimension as a leverage for reforming science"*

COM(2001) 282 of 30 May 2001:

Communication from the Commission to the Council and the European Parliament "*The Framework Programme and the European Research Area: application of Article 169 and the networking of national programmes"*

COM(2001) 279 of 30 May 2001:

Proposals for Council Decisions concerning the specific programmes for implementing the Framework Programme 2002-2006 of the European Community for research, technological development and demonstration activities

Proposals for Council Decisions concerning the specific programmes for implementing the Framework Programme 2002-2006 of the European Atomic Energy Community for research and training activities

COM(2001) 331 of 20 June 2001:

Communication from the Commission to the Council and the European Parliament *"A mobility strategy for the European Research Area"*

SEC(2001) 1002 of 20 June 2001:

Commission staff working paper "*Progress report on benchmarking of national research policies"*

COM(2001) 346 of 25 June 2001:

Communication from the Commission "*The international dimension of the European Research Area"*

COM(2001) 500 of 10 September 2001:

Proposal for a Decision of the European Parliament and of the Council concerning the rules for the participation of undertakings, research centres and universities and for the dissemination of research results for the implementation of the European Community framework programme 2002-2006

SEC(2001) 1414 of 14 September 2001:

Commission staff working paper "*2001 Innovation scoreboard*"

COM(2001)549 of 3 October 2001

Communication from the Commission *"The regional dimension of the European Research Area"*

COM(2001) 594 of 17 October 2001:

Amended proposal for a Council Decision concerning the specific programme 2002-2006 for research, technology development and demonstration aimed at integrating and strengthening the European Research Area

SEC(2000) 1973 of 14 November 2000:

Commission staff working paper "*Science, society and the citizen in Europe"*

COM(2001) 709 of 22 November 2001:

Amended proposal for a Decision of the European Parliament and of the Council concerning the sixth multiannual framework programme of the European Community for research, technological development and demonstration activities aimed at contributing towards the creation of the European Research Area (2002-2006)

Amended proposal for a Council Decision concerning the sixth multiannual framework programme of the European Atomic Energy Community (Euratom) for research and training activities aimed at contributing towards the creation of the European Research Area (2002-2006)

COM(2002) 43 of 30 January 2002:

Amended proposal for a Council Decision concerning the specific programmes implementing the Sixth Framework Programme of the European Community for research, technological development and demonstration activities (2002-2006)

Amended proposal for a Council Decision concerning the specific programmes implementing the Sixth Framework Programme of the European Atomic Energy Community for research and training activities (2002-2006)

SEC(2002) 129 of 30 January 2002:

Commission staff working paper *"Benchmarking national RTD policies: First results"*