

Procedure file

Basic information	
COD - Ordinary legislative procedure (ex-codecision procedure) Decision	2001/0053(COD) Procedure completed
European research area: activities within the scope of the EC framework programme 2002-2006	
Amended by 2003/0303(COD)	
Subject 3.50.01 European research area and policy	

Key players			
European Parliament	Committee responsible	Rapporteur	Appointed
	ITRE Industry, External Trade, Research, Energy	PSE CAUDRON Gérard	09/01/2001
	Former committee responsible		
	ITRE Industry, External Trade, Research, Energy	PSE CAUDRON Gérard	09/01/2001
	Former committee for opinion		
	BUDG Budgets	V/ALE RÜHLE Heide	22/03/2001
	LIBE Citizens' Freedoms and Rights, Justice and Home Affairs	PSE VATTIMO Gianni	10/07/2001
	EMPL Employment and Social Affairs	PPE-DE MANTOVANI Mario	04/10/2001
	ENVI Environment, Public Health, Consumer Policy	PPE-DE LIESE Peter	11/04/2001
	AGRI Agriculture and Rural Development	PPE-DE REDONDO JIMÉNEZ Encarnación	10/07/2001
	PECH Fisheries	PSE POIGNANT Bernard	24/04/2001
	RETT Regional Policy, Transport and Tourism	V/ALE JONCKHEER Pierre	25/04/2001
	CULT Culture, Youth, Education, Media and Sport	GUE/NGL FRAISSE Geneviève	22/03/2001
	FEMM Women's Rights and Equal Opportunities	PSE GRÖNER Lissy	10/04/2001

Council of the European Union	Council configuration	Meeting	Date
	Employment, Social Policy, Health and Consumer Affairs	2431	03/06/2002
	General Affairs	2406	28/01/2002
	Research	2398	10/12/2001
	Research	2380	30/10/2001
	Research	2363	26/06/2001
European Commission	Commission DG	Commissioner	
	Research and Innovation		

Key events

21/02/2001	Legislative proposal published	COM(2001)0094	Summary
12/03/2001	Committee referral announced in Parliament, 1st reading		
26/06/2001	Debate in Council	2363	Summary
22/10/2001	Vote in committee, 1st reading		Summary
22/10/2001	Committee report tabled for plenary, 1st reading	A5-0376/2001	
30/10/2001	Debate in Council	2380	
14/11/2001	Debate in Parliament		
14/11/2001	Decision by Parliament, 1st reading	T5-0600/2001	Summary
22/11/2001	Modified legislative proposal published	COM(2001)0709	Summary
28/01/2002	Council position published	15483/3/2001	Summary
06/02/2002	Committee referral announced in Parliament, 2nd reading		
23/04/2002	Vote in committee, 2nd reading		Summary
23/04/2002	Committee recommendation tabled for plenary, 2nd reading	A5-0153/2002	
13/05/2002	Debate in Parliament		
15/05/2002	Decision by Parliament, 2nd reading	T5-0233/2002	Summary
03/06/2002	Act approved by Council, 2nd reading		
27/06/2002	Final act signed		
27/06/2002	End of procedure in Parliament		
29/08/2002	Final act published in Official Journal		

Technical information

Procedure reference	2001/0053(COD)
Procedure type	COD - Ordinary legislative procedure (ex-codecision procedure)

Procedure subtype	Legislation
Legislative instrument	Decision
	Amended by 2003/0303(COD)
Legal basis	EC Treaty (after Amsterdam) EC 166-p1
Stage reached in procedure	Procedure completed
Committee dossier	ITRE/5/15448

Documentation gateway

Legislative proposal	COM(2001)0094	21/02/2001	EC	Summary
Document attached to the procedure	COM(2001)0282	30/05/2001	EC	Summary
Document attached to the procedure	COM(2001)0331	20/06/2001	EC	Summary
Document attached to the procedure	COM(2001)0346	25/06/2001	EC	Summary
Economic and Social Committee: opinion, report	CES0921/2001 OJ C 260 17.09.2001, p. 0003	11/07/2001	ESC	
Committee report tabled for plenary, 1st reading/single reading	A5-0376/2001	22/10/2001	EP	
Text adopted by Parliament, 1st reading/single reading	T5-0600/2001 OJ C 140 13.06.2002, p. 0169-0370 E	14/11/2001	EP	Summary
Committee of the Regions: opinion	CDR0283/2001 OJ C 107 03.05.2002, p. 0111	15/11/2001	CofR	
Modified legislative proposal	COM(2001)0709	22/11/2001	EC	Summary
Council position	15483/3/2001 OJ C 113 14.05.2002, p. 0054 E	28/01/2002	CSL	Summary
Commission communication on Council's position	SEC(2002)0105	30/01/2002	EC	Summary
Committee recommendation tabled for plenary, 2nd reading	A5-0153/2002	23/04/2002	EP	
Text adopted by Parliament, 2nd reading	T5-0233/2002 OJ C 180 31.07.2003, p. 0160-0234 E	15/05/2002	EP	Summary
Commission opinion on Parliament's position at 2nd reading	COM(2002)0284	30/05/2002	EC	Summary
Follow-up document	SEC(2003)0146	04/02/2003	EC	
Follow-up document	SEC(2004)0412	01/04/2004	EC	Summary
Follow-up document	COM(2005)0233	03/06/2005	EC	Summary
Follow-up document	COM(2005)0387	24/08/2005	EC	Summary
Follow-up document	COM(2005)0517	24/10/2005	EC	Summary
Follow-up document	COM(2006)0685	15/11/2006	EC	Summary
Follow-up document	SEC(2006)1450	15/11/2006	EC	
Follow-up document	COM(2007)0519	13/09/2007	EC	Summary
Follow-up document	SEC(2007)1153	13/09/2007	EC	

Additional information

European Commission

[EUR-Lex](#)

Final act

[Decision 2002/1513](#)
[OJ L 232 29.08.2002, p. 0001-0033](#) Summary

European research area: activities within the scope of the EC framework programme 2002-2006

PURPOSE : to present a proposal for a Decision of the European Parliament and of the Council concerning the multiannual framework programme for 2002-2006 of the European Community for research, technological development and demonstration activities aimed at contributing towards the creation of European Research Area. **CONTENT** : in the space of just over a year, the European Research Area (ERA) has become the reference framework for research policy issues in Europe. The EU has a specific role to play through its legal instruments, such as for example, the Community patent and also its financial instrument for promoting research and the European cooperation in this area, namely the framework programme. The *raison d'être* of this new framework programme is to help to make a reality of the European Research Area with a view to stepping up innovation in Europe, in conjunction with all the efforts made to this end at national, regional and European level. The new framework programme will be based on the following main principles: - concentrating on a selected number of research areas in which EU action can add the greatest possible value; - defining the various activities in such a way as to enable them to exert a more structuring effect on the research activities conducted in Europe thanks to a stronger link with national, regional and other European initiatives; - simplifying and streamlining the implementation arrangements, on the basis of the intervention methods defined and the decentralised management procedures envisaged. Two fundamental aspects of this new framework programme are the opportunity for the candidate countries to participate fully in all the activities as countries associated with its implementation, and the fact that to a large extent it opens up EU research activities to the rest of the world. This proposal lays down that the multiannual framework programme for Community research, technological development and demonstration activities (2002-2006) shall have a maximum overall amount of Community financial participation in the entire framework programme for the period 2002-2006 shall be EUR 16.270 billion. The framework programme is open to the participation of: - the EEA countries, in accordance with the conditions established in the EEA agreements; - the central and eastern European candidate countries (CEEC), in accordance with the conditions established in the Europe Agreements, in the additional protocols thereto and in the decisions of the respective Association Councils; - Cyprus, Malta and Turkey, on the basis of bilateral agreements to be concluded with these countries; - Switzerland and Israel, on the basis of bilateral agreements to be concluded with these countries. To enable this new framework programme to be implemented on schedule, the aim is that it should be adopted no later than the first half of 2002.?

European research area: activities within the scope of the EC framework programme 2002-2006

This Communication seeks to identify ways in which to enhance coordination between European level joint research projects and national, publicly funded, research programmes - through the use of Article 169. The Commission hopes to launch a debate within the EU institutions on how to optimise closer EU/national research collaboration. Under specific scrutiny is the yet to be used Article 169. This Article, though limited in scope, nevertheless offers interesting possibilities to enhance European and national research. It specifically allows for the possibility of Community participation in research programmes undertaken by Member States. Where appropriate, application of the Article would make it possible to achieve results unattainable otherwise. It also has the added advantage of being able to draw on a number of diverse resources. The Communication notes that the recently proposed revision of the EU research framework programme (2002-2006), expressly aims to install new elements into the European Research Area, by: - developing more of a structure to European research activities; - developing networks of excellence; - integrating projects; and - allowing for Community participation in national programmes. To this end, the Communication discusses ways in which the networking of national programmes could be optimised. One means would be to provide both open and flexible support for proposals which make an effective contribution to the coordination of research activities. In terms of Community participation under Article 169, the Communication envisages the following options: - joint implementation of research programmes complemented by a joint work programme; - giving structure to the implementation of the programmes; - offering wide coverage of research to generate large-scale activities in each Member State; - participation of at least two Member States, plus one associate state; - Specification of intellectual property rules to apply to the implementation of the programmes. Concerning financial aspects, the Communication notes that financial participation would take the form of a contribution of part of the budget for jointly implemented programmes. The conditions under which this would be granted remain to be decided. Lastly, concerning the "Themes" which could be covered by the application of Article 169, the Communication proposes the following: - clinical trials on vaccines and medicinal products; - global changes and the individual components thereof; - nanotechnologies or certain aspects of genome research; - industrial technology such as aeronautics; - areas linked to Community policies, such as rail transport or the use of water resources. ?

European research area: activities within the scope of the EC framework programme 2002-2006

In January 2000, the Commission adopted a Communication proposing the creation of a European Research Area (ERA). It emphasised, among other things, the need for more abundant and more mobile human resources. Attention was drawn, especially, to making more use of in the future, both at national and at European level, of mobility as an instrument for the transfer of scientific knowledge. This included introducing a European dimension to scientific careers, making Europe more attractive to researchers from the rest of the world. Therefore, this Communication presents a strategy to create a favourable environment for the mobility of researchers in the ERA, in order to develop, attract and retain appropriate human resources in research and to promote innovation. It aims at building up the research competence and excellence within the ERA by launching immediate actions for implementation, creating the dynamics for increased development of the

above-mentioned environment and identifying ways of financial support by the different actors involved. Special attention will be devoted to the encouragement of inter-sectoral mobility, i.e. between business and academia and vice-versa. The same applies to interregional mobility in order to avoid a "brain drain" in less developed regions by actively promoting mobility both to and from these regions. In designing its mobility strategy for researchers in the ERA, the present Communication takes into account the approach towards researchers from candidate countries developed in the Commission decision on the negotiating mandates for enlargement, as well as the approach towards third country nationals developed within the Commission's amended proposal for a "Directive of the European Parliament and of the Council on the posting of workers who are third-country nationals for the provision of cross-border services", and a "Council Directive extending the freedom to provide cross-border services to third-country nationals established within the Community". Lastly, in the framework of the present Communication, the Commission is fully aware of the challenges and opportunities presented in the research area by the forthcoming enlargement of the EU. The candidate countries have undoubtedly an important contribution to make in enhancing excellence and mobility opportunities in Europe, thanks to the quality of their human resources in the field of science and research.?

European research area: activities within the scope of the EC framework programme 2002-2006

In today's rapidly changing world, science, technological process and economic and social development are closely interrelated. In this "globalised" world, research and development are moving forward at an increasingly rapid rate thanks to the ever freer and faster exchange of scientific results, information and research personnel between countries. Therefore, this Communication is intended to outline the broad economic 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. In order to position Europe at the hub of the worldwide knowledge-based society, an ambitious and extensive programme of international scientific and technological cooperation must be developed. To that end, in the interests of all parties concerned: - cooperation must fulfil the Community's scientific, technical and socio-economic objectives and, at the same time; - cooperation must be firmly rooted in the Community's foreign policy and development aid programmes and must fulfil the European Union's overall interests (political and commercial interests, solidarity, etc). The European Research Area has established a new political context in which to develop a new strategy of international scientific and technological cooperation based on the previous achievements of projects undertaken of projects within the European Union. This strategy should focus on following key areas: - making the European Research Area more attractive to the best scientists and making it a world class reference centre; - enabling European researchers and industrialists to access the knowledge and technology produced outside Europe and also the experiment fields needed for European research; - developing scientific and technical activities useful to the implementation of EU foreign policy and development aid; - enlisting the scientific and technological resources of the European Union and of third countries in initiatives that provide a response to significant world problems of concern to the Community such as food safety, environmental safety, etc. Finally, a more proactive approach to implementing agreements on scientific and technical cooperation with third countries will make it possible for such agreements to fully develop the part they can play in developing relations with these third countries. A twofold objective should be targeted in the future: - to step up consistency and coordination between international scientific and technological cooperation activities undertaken in Europe at every level; - to focus on European Union efforts on specific thematic areas and foreign partners of major importance. ?

European research area: activities within the scope of the EC framework programme 2002-2006

The Council had a first orientation debate on the Commission's proposals for Framework Programmes on Research for 2002-2006 (EC and Euratom). On the basis of preparatory work by the Council bodies and the Swedish Presidency, the Ministers had an exchange of views on a broad range of issues relating to the framework programmes, in particular the seven thematic priorities proposed for the EC Programme, the 8th priority on anticipating the EU's scientific and technological needs; proposed instruments for the implementation of the major part of the Framework Programmes and the use of Article 169 allowing the Community to participate in R&D programmes undertaken by several Member States. On the basis of the debate and the conclusions reached by the Swedish Presidency, discussions will continue within the Council with a view to adopting a common position on the EC Framework Programme during the autumn, taking into account the opinion of the European Parliament. The President concluded the debate by stating that : Concerning the scientific and technological priorities, Ministers agreed that the programme should aim at focussing Community research on a limited number of areas. The seven thematic priorities proposed by the Commission to this effect received broad support. Two of these priorities, i.e. sustainable development and global change, and food safety and health risks, need further work to be undertaken on them to underline certain aspects (such as transport, energy, agriculture including fisheries and forestry, marine sciences). Ministers generally agreed on the fact that the eighth priority should include research activities in support of Community policies. Ministers stressed the importance of breaking the eighth priority down into its various components with a budget allocation to each one. On the instruments, Ministers shared the Commission's objective of using integrated projects and networks of excellence to achieve in the most effective manner the overall objectives of the programme, bringing together a critical mass of scientific expertise. However, the operational modalities require further clarification so as to ensure transparency of selection procedures and equitable participation of all research actors, including the smaller players. A substantial number of delegations, moreover, considered that these instruments should be implemented alongside existing instruments so as to ensure a smooth transition between the Fifth and Sixth Framework Programmes. Regarding the use of Article 169 of the Treaty, clear interest was expressed in examining this modality in more depth in relation to all areas of the Framework Programme. Ministers expressed broad support for the horizontal measures proposed under the headings "Structuring the European Research Area" and "Strengthening the foundations of ERA". As regards possible financial support for the creation of new large-scale European research infrastructures, a large majority felt that this should not be allocated via the Framework Programme, but was rather a national responsibility, although financial support for feasibility studies could be envisaged. Lastly, Ministers consider that international collaboration should have a high degree of visibility in the programmes, with particular emphasis being put on the integration of candidate countries.?

European research area: activities within the scope of the EC framework programme 2002-2006

The committee adopted the report by Gérard CAUDRON (PES, F) amending the proposal under the codecision procedure (1st reading). Although it endorsed the total budget for the framework programme proposed by the Commission (EUR 16.27 billion), it modified the overall budgetary structure of the programme and added many details to the different sections ("priority thematic areas"), particularly as regards health research. On health, MEPS wanted the chapter on "Genomics and biotechnology for health" to be renamed "Life sciences for health

and safety" and to be subdivided into two parts: "Genomics and biotechnology for global and health and welfare" and "The major diseases" (i.e. research into the more traditional diseases, such as cancer, cardiovascular diseases, etc., as well as poverty-linked diseases such as malaria, AIDS and tuberculosis). The committee also adopted a large number of amendments on ethical questions. It said that funding should not be provided for such areas as human cloning for reproductive purposes, the creation of embryos for research purposes, and research activity intended to modify the genetic heritage of human beings for eugenic purposes. However, it said that research into the use of human stem cells could be financed depending both on the nature of the scientific proposal and the legal framework of the Member State(s) involved. Funding could also be provided for research on embryo or foetal stem cells deriving from miscarriages or therapeutic abortion and for research on 'supernumerary' human embryos, provided that such research was legally permitted in the Member State in question. In addition, funding should be allowed for research promoting the understanding of legal, ethical and social implications of the new discoveries in the field of human genetics. The committee also wanted to change the structure of the chapter entitled "Sustainable development and global change" and proposed instead that it be divided into three parts: "Energy"; "Sustainable Development and Global Change"; and "Transport". The latter part would concern land and sea transport and was therefore an addition to the Commission proposal which had focused only on air transport, under the chapter "Aeronautics and space". MEPs argued that the situation on Europe's roads - and above all its railways - was in serious need of improvement. In other shifts of emphasis, the committee wanted the chapter on food safety and health risks to include food quality and health improvement and the chapter on "Citizens and governance in the European knowledge-based society" to be renamed "Citizens, democracy, social and political institutions". The committee also adopted an amendment creating a new instrument, to be known as the "stairway to excellence", to improve the practical functioning of the Framework Programme. The idea was to enable potential participants in research fields in their infancy to evolve into more advanced "centres of excellence". Lastly, MEPs felt that the old instruments of the existing 5th framework programme should not be abandoned completely, and wanted a smooth transition between the 5th and the 6th framework programmes. ?

European research area: activities within the scope of the EC framework programme 2002-2006

The European Parliament adopted the report by Gerard CAUDRON (PES, F) and made several amendments to the draft decision on the Sixth Framework Programme on the European Research Area. The most significant amendments include: - a prohibition on certain forms of genome research (see previous document), with exceptions for stem cell research and research on supernumerary early-stage embryos. - the maximum overall amount for Community financial participation in the entire framework programme was kept at EUR 16.270 billion, but Parliament specified that at least 15% of the budget should be assigned to SMEs, and that SMEs must represent at least 15% of the integrated research priorities in the Sixth Framework Programme. - Parliament introduced a new instrument "Stairway to excellence", with the objective of creating a smooth transition from the Fifth to the Sixth Framework Programme. It stated that in the implementation of the Framework Programme, the Commission must aim to allocate 30% of the financial resources assigned to the heading "Integrating Research" to this instrument. It also stated that it should be possible to implement the new participation instruments concurrently with the participation instruments available under previous framework programmes (partnership projects, concerted actions) with the aim of making the implementation of the framework programme more accessible. The instrument must provide for arrangements to accommodate small-scale participants with innovative research projects, and the potential to meet the criteria with regard to critical mass and centres of excellence. These projects must be relevant to the main themes of the framework programme. Funding will be limited to 20% of the total budget of the framework programme. - The integrated programme is made up of eight distinct subsections. The subsection on life sciences for health and safety has been subdivided into: genomics and biotechnology for global health and welfare; and, the major diseases. With regard to the latter, Parliament states that a priority approach will be pursued to combating Aids, malaria and tuberculosis. The subsection on energy, sustainable development and global change has been subdivided, and has an additional subdivision on transport (see previous document). The subsection on energy emphasises research into clean energy and minimising waste. There are also a significant number of details added to the section on Information Society Technologies.?

European research area: activities within the scope of the EC framework programme 2002-2006

The Commission presents an amended proposal, which take up a large proportion of the Parliament's amendments. On the structure of the thematic priority areas, the Commission accepts the changes, namely: - the organisation of priority one into two sections, one centred on genomics and its applications for health, the other on major diseases. - the organisation of priority six into three sections covering sustainable energy systems, sustainable surface transport, and global changes and ecosystems. On the scope and content of the priority areas, the Commission accepts many of the clarifications requested and some additions. On the instruments, the Commission accepts the principle of a smooth transition from "traditional" to "new" instruments and the idea of a fourth instrument in the spirit of a "stairway to excellence", which would be in two forms: "specific targeted projects" and "networking of research activities", which would be applicable to all types of participants. While the framework programme will be implemented mainly through "integrated projects" and "networks of excellence", part of the research actions within the thematic priorities will be carried out through this fourth instrument. A degressive approach will be followed, ensuring a progressive increase in the utilisation of the new instrument. As regards the section of the programme entitled "anticipating the EU's scientific and technological needs", Parliament has proposed changes to the budget and scope of these activities which, in the Commission's view, would make it impossible to achieve important Community goals. Two parts are particularly affected: - Research in support of Community policies and responding to emerging needs where the considerable budget cut envisaged would make it impossible to carry out necessary research in support of Community policies in areas such as agriculture and forestry, fisheries, public health and protection of cultural heritage. - specific international co-operation activities where the proposed transfer to the human resources and mobility part of the programme would make it impossible to fulfil the Community's political commitments in this area. On the budget the Commission maintains the overall amount, but there are some changes in the breakdown in the directions suggested by Parliament.?

European research area: activities within the scope of the EC framework programme 2002-2006

The Council's common position reflects to a considerable extent both the proposal of the Commission and the opinion of the European Parliament as regards the structure, scientific and technological content, means of implementation of the Framework Programme as well as the financial amount and its indicative breakdown. During its examination of the Commission's proposal, the Council sought to incorporate to the largest possible extent the amendments of the European Parliament, to reflect the considerable degree of consensus between the two

legislative bodies, while at the same time respecting the general thrust of the Commission's proposal. To this end, the Council has followed certain guiding principles: 1) recognition of the role of the Framework Programme as an instrument for achieving major Community objectives, bearing in mind that the bulk of European research and technological development efforts are funded by the Member States at national level; 2) the need for a focussed Community research effort bringing about a critical mass of expertise and European added value, while ensuring sufficient in-depth coverage of relevant topics under the themes chosen for Community research; 3) the need to complement the focussed effort on key thematic research areas by providing flexible support to Community policies and by enabling a response to emerging scientific and technological needs in the rapidly evolving research environment, while setting appropriate parameters for such flexibility so as to ensure legal clarity; 4) the need to implement the Framework Programme using instruments which are apt to achieve the critical mass of expertise and European added value in the research activities, while ensuring a smooth transition from the Fifth Framework Programme and safeguarding the possibility for all interested parties/entities to participate in Community research, provided the criterion of scientific excellence is fulfilled; 5) the need for clarity, in particular by providing the necessary level of detail, both in terms of S/T content and funding, bearing in mind that the Framework Programme must be implemented through specific programmes which will, by their very nature, provide for more detailed implementing modalities. As regards the budget, the Council has endorsed the overall amount of EUR 16,270 million which the Commission proposed, this having been agreed by Parliament on first reading. As regards the structure of the programme, the Common Position maintains the various components of the programme proposed by the Commission, including the focus on seven thematic priorities areas and the flexible element of the programme, on "Anticipating the EU's scientific and technological needs". Moreover, it closely follows the Parliament's opinion, which was taken up in the Commission's modified proposal, as regards the internal reorganisation of the first and sixth thematic priorities. Thematic priority 1 on "Genomics and biotechnology for health" has been subdivided into two sections, on advanced genomics and its applications for health, and on combating major diseases, the latter focusing research efforts on certain diseases, in particular cancer. Thematic priority 6, on "Sustainable development, global change and ecosystems" has been structured around three sections: sustainable energy systems; sustainable surface transport, and global change and ecosystems. In terms of the research content, a large proportion of the amendments proposed by Parliament and accepted by the Commission in its modified proposal, are carried through into the common position. However, these amendments have been accompanied in some areas, notably in thematic priority 6, by some dilution of the original focus. Some revisions have also been made to the content of the section of the programme on "anticipating the EU's scientific and technological needs". The Common Position recognises the importance of the new instruments (Integrated Projects and Networks of Excellence) as an overall priority means to attain the objectives of critical mass, management simplification and European added value, and the integration of research capacities. They will be used from the start of the framework programme, in each thematic priority and, where deemed appropriate, as a priority means, while maintaining the use of specific targeted projects and co-ordination actions. This is consistent with the spirit of the "Stairway of Excellence" concept put forward by Parliament, in order to effect a smooth transition to the new instruments. An independent evaluation will be carried out in 2004 on the efficiency of the new instruments in the execution of the sixth framework programme. Given the importance attached to the question of the instruments during the discussions, the Council considered it appropriate to include in the Framework Programme text a list of all instruments and the modalities of their application. On the budget breakdown, the Common Position is broadly consistent with the Commission modified proposal and Parliament opinion, with the following adjustments: - Under the first heading, "Focusing and integrating Community Research", as compared with the Commission's modified proposal: - Increased amounts for four thematic priorities: "Genomics and biotechnology for health", "Aeronautics and space", "Food quality and safety", "Sustainable development, global change and ecosystems"; in particular for the renewable energies and the environment. - A significant reduction in the section on "Anticipating the EU's scientific and technological needs" dealing with Research in support of community policies and responding to emerging needs. - Reductions are made under the 2nd heading, on "Structuring the European Research Area", in particular in the area of Research infrastructures. Funds for high speed electronic networks (building on the Géant and GRID activities) are foreseen both here and in priority 2. - Under the 3rd heading on "Strengthening the foundations of the European Research Area", a cut is made to the budget for the co-ordination of activities. On ethics, which is a major concern for the European Parliament, the Common Position asserts, in line with the Parliament and Commission, that fundamental ethical principles are to be respected in the conduct of research under the 6th framework programme. However, it does not go as far as defining activities that will be excluded from funding. At the time of the 10 December Research Council when Ministers arrived at political agreement, this led the Commission to make a specific declaration to the Minutes. This declaration, in accordance with Parliament's amendment, clearly sets out a number of areas of research that should not be financed under the Framework programme: research activities aimed at human cloning for reproductive purposes, research activities intended to modify the genetic heritage of human beings which could make such changes inheritable, research activities intended to create human embryos solely for the purpose of research or for the purpose of stem cell procurement, including by means of somatic cell nuclear transfer. Animal experiments should also be replaced by alternatives wherever possible, and suffering by animals avoided or kept to a minimum.?

European research area: activities within the scope of the EC framework programme 2002-2006

The Common Position indicates a strong convergence of the position of Council with respect to both the European Parliament and the Commission. It takes into account a large proportion of the amendments made by the European Parliament and adopted by the Commission in its modified proposal. The Commission therefore endorses the Common Position, within the limits indicated above on the ethical issue, and considers that it represents a good basis on which to commence the second reading, and that any remaining issues can be quickly resolved. The Commission thus hopes that it will be possible to make rapid progress in the decision-making process, both of the Framework programme and for the specific programmes, with the aim of ensuring an adoption of the Framework programmes by mid-2002, as agreed at the European Council in Stockholm. This would allow for effective implementation of the programmes on time.?

European research area: activities within the scope of the EC framework programme 2002-2006

The committee adopted the report by Gérard CAUDRON (PES, F) tabling a large number of amendments to the Council's common position under the second reading of the codecision procedure. Many of these were amendments that had been adopted by Parliament at first reading but had not been taken up by the Council, including calls for: - endorsement of the "stairway to excellence" concept; - health research to be extended beyond the field of genomics; - an explicit reference to Article 6 of the Treaty of Amsterdam and to the conclusions of the Göteborg European Council; - the integration of sustainable development and the reduction of external environmental costs; - the promotion of basic research and space research; - in the food sector, the inclusion of research into health risks and health improvements; - increased participation of SMEs in all areas of the framework programme; - research into the preservation of the cultural heritage. The committee also decided to

retable first reading amendments on ethical issues, which said that research activity into human cloning for reproductive purposes, the creation of embryos for research purposes including somatic cell nuclear transfer, and research activity which would lead to the modification of the genetic heritage of human beings should not be financed under the 6th framework programme. ?

European research area: activities within the scope of the EC framework programme 2002-2006

The European Parliament adopted a resolution drafted by Gérard CAUDRON (PES, France) on the European Research Area. (Please refer to the document dated 23/04/02.) Parliament added that, in the medical field, the objective is to develop improved patient-oriented strategies for the prevention and management of disease and for living and ageing healthily. There is also a particular priority for Europe to mobilise its efforts in a coordinated way towards combating cancer and confronting the major communicable diseases linked to poverty. The research will concentrate on translating the new knowledge being created, which is not limited to genomics and other fields of basic research, into applications that improve clinical practice and public health. Parliament also went on to add that Specific Support Actions will also be implemented to encourage the participation of SMEs, small research teams, newly developed and remote research centres in the activities of the priority thematic areas, in particular via the Networks of Excellence and the Integrated Projects. The implementation of these actions will rely on the specific information and assistance structures, including the network of national contact points established by the Member States, and will aim at the smooth transition from the Fifth to the Sixth Framework Programme.?

European research area: activities within the scope of the EC framework programme 2002-2006

The Commission accepts, in their entirety, the 34 amendments to the Council's common position adopted by Parliament. The Commission notes the convergence of views between the three institutions. It also notes with satisfaction that Parliament supports the Commission's proposal that the overall budget for the framework programme be EUR 17.5 billion. On the matter of Parliamentary amendments made to "Health", the Commission considers the proposed changes useful in that they reinforce the text and ensure a higher profile for certain diseases - for example, that cancer. On the question of greater SME participation, again the Commission considers that the proposed amendments constitute a step in the right direction. In terms of devoting more of the funds to health research, scientific international cooperation actions and the theme "Science and Society", the Commission is of the opinion that the amendments made represent a compromise which correctly reflects the importance assigned to these matters by Parliament. In view of the above, the Commission has amended its original proposal accordingly.?

European research area: activities within the scope of the EC framework programme 2002-2006

CONTENT : the adoption of the sixth framework programme. COMMUNITY MEASURE : Decision 1513/2002/EC of the European Parliament and of the council concerning the sixth framework programme of the European community for research, technological development and demonstration activities, contributing to the creation of the European research Area (ERA) and to innovation (2002-2006). CONTENT : the sixth framework programme comprises all Community activities envisaged in article 164 of the Treaty. It will contribute to the creation of the ERA. Annex I sets out the scientific and technological objectives and the related priorities and indicates the broad lines of the activities envisaged. The maximum overall amount for Community financial participation is EUR 16270 million. The proportion assigned to each of these activities is as follows: 1) Focusing and integrating Community research (13 345) a) Thematic priorities (11 285) - life sciences, genomics and biotechnology for health (2255) - advanced genomics and its applications for health (1100) - combating major diseases (1155) - information society technologies (3625) - nanotechnologies and nanosciences (1300) - aeronautics and space (1075) - food quality and safety (685) - sustainable development, global change and - ecosystems (2120) - sustainable energy systems (810) - sustainable surface transport (610) - global change and ecosystems (700) - citizens and governance in a knowledge-based society (225) b) Specific activities covering a wider field of research (1300) - policy support and anticipating scientific and technological achievements (555) - horizontal research activities involving SMEs (430) - specific measures in support of international cooperation (315) c) Non-nuclear activities of the Joint Research Centre (760) 2) Structuring the European Research Area (2605) - research and innovation (290) - human resources (1580) - research infrastructures (655) - science and society (80) 3) Strengthening the foundations of the European Research Area (320) - support for the coordination of activities (270) - support for the coherent development of policies (50)?

European research area: activities within the scope of the EC framework programme 2002-2006

This is the second Commission report concerning the implementation of "A Mobility Strategy for the European Research Area". Whilst the first report, published in 2003, focused on the Strategy's implementation this second Report seeks to examine and assess the achievements of the Strategy both at a national, as well as, a Community level. Thus, much of the Report focuses on those policy initiatives, which encourage researcher mobility, including taxation, social security, statistics and the inter-change between academia and industry. In terms of removing legal and administrative obstacles to the mobility of researchers, the Commission observes that significant progress has been made. Member States have strived to create a package of legal instruments which aid third country researcher admission as well as providing for fast track procedures to obtain special residence permits. As far as Community initiatives are concerned the Report notes the creation of the "Pan-European Researcher's Mobility Web Portal", which provides access to a wide range of web resources covering information about research fellowships and grants, job opportunities as well as practical information relevant for settling in a European country. A related initiative includes the creation of the "European Network of Mobility Centres" or ERA-MORE. These mobility centres have been established in thirty European countries and offer help and assistance to researchers and their families relating to practical issues covering both their professional and daily lives. In addition to these initiatives the Report cites legislative progress in the form of one Directive and two Recommendations, which are set to be adopted in 2004. The Directive provides for a fast track procedure for the admission of researchers by offering them a specific residence permit. The Recommendations, on the other hand, allow Member States to accelerate, on a voluntary basis, the implementation of the Directive and to tackle supplementary issues, such as family reunification, short-term visas and co-operation between Member States. The Commission Report suggests that similar actions ought to be undertaken in the field of social security. Lastly, the Commission is committed, during the course of 2004, to implementing the different initiative proposed in its Career Communication.

European research area: activities within the scope of the EC framework programme 2002-2006

This Annual Report on research and technological development activities covers developments and activities during the period from January 2003 to March 2004.

The Commission states that a major step towards the creation of a European Research Area was taken in 2003 with the first full year of the 6th Framework Programme. The Programme is one of the largest international R&D programmes in the world, with a budget of EUR 17.5 billion for the period 2002-06 (increased to 19.2 billion euro with the enlargement of the Union).

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

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

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

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

Regarding the dissemination of results, the Research and Innovation actions in the 6th Framework Programme, including the network of Innovation Relay Centres, supported the use of research results for the purpose of innovation while the horizontal research activities involving SMEs allowed smaller companies to access research which meets their needs.

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

The report lists other actions toward the creation of a European Research Area and moves on to describe developments on Member States and the application of the open method of coordination. 2003 was an important year in this regard, through the application of the Open Method of Coordination to the objective of raising research investments towards 3% of GDP in the EU. Groups of experts from Member States were established in six areas under the Scientific and Technical Research Committee (CREST) as a first cycle in the application of the Open Method of Coordination for the 3% objective.

In line with the 3% objective, nearly all Member States have set national targets for increasing R&D investment. Latest data suggests that a majority of Member States have increased their level of public funding of R&D since 2002, although substantial further progress is needed to reach the 1% of GDP. Trends in private sector investments in research are less clear, and the situation varies considerable across Member States.

The implementation of the Sixth Framework programme is well on track. The continued high level of response from the research community shows its important role in the promotion of the European research efforts. At the same time the Commission is making improvements to the implementation of the Programme in order to address concerns of the research community and the recommendations of monitoring and evaluation exercises, including the report of the high level panel on the effectiveness of the Instruments of the 6th Framework Programme. The Commission has set out these measures in its response to the panel's recommendations and has established an action plan to rationalise and accelerate procedures.

European research area: activities within the scope of the EC framework programme 2002-2006

PURPOSE: presentation of the five-year assessment of Community research activities (1999-2003) carried out by high-level independent experts.

CONTENT: In the second half of 2004, a strategic Panel of thirteen high level experts¹ carried out the Five-Year Assessment covering Community research activities 1999-2003 and as foreseen in the Decisions concerning the 6th Framework Programme. In response, the Panel provided a clear and authoritative overview and assessment, at a horizontal level, of Community research activities, through a thorough evidence-based analysis of the implementation and achievements of past and current activities.

The Commission warmly welcomes the Five-Year Assessment report and its analysis, conclusions and recommendations.

First, the Commission agrees with the Panel on the four main challenges identified: attract and reward the best talent; create a high-potential environment for business and industrial RTD; mobilise resources for innovation and sustainable growth; build trust in science and technology.

Second, it notes the positive assessment of the implementation, results and added value of the Framework Programmes, notably in terms of contribution to the European knowledge base, networking among researchers and structuring of the research system in Europe.

Lastly, it broadly agrees with the recommendations put forward in order to improve the relevance and quality of research initiatives and programmes at present and in the future. The Commission's proposals for the 7th Framework Programme, adopted on 6 April 2005, take full

account of these recommendations. They also will be kept in mind in the preparation of the entire legal framework for Community research, notably the specific programmes and the rules for participation and dissemination of results.

The evaluation report has been disseminated widely, including through Europa and presented to and welcomed by the main stakeholders, notably the relevant committee and Working party of the European Parliament and Council, CREST and programme committees.

A more detailed analysis and comments for each specific recommendation are provided in the Commission staff Working Paper SEC(2005) 1054.

European research area: activities within the scope of the EC framework programme 2002-2006

This Annual Report covers developments and activities during 2004. It is accompanied by a Commission Staff Working Document, which provides a more detailed overview of statistics. The Report notes that the implementation of the 6th Framework Programme has been a success. Launched in 2002 with a budget of EUR 17 500 million (later increased to EUR 19 200 million following enlargement) it sought to integrate the new Member States as much as possible. In 2004 almost 16 000 proposals were received with more than 84 000 participants, of which 2 000 were given Community funding. In total 2 100 contracts were signed with a total EU contribution amounting to more than EUR 4 200 million.

In addition to the Framework Programme, the EU took a number of important steps towards the creation of a European Research Area. Actions included the 'Investing in research' action plan, preparing a Communication on nano-technology, establishing an independent European satellite observation and remote sensing capacity under the Global Monitoring for Environment and Security (GMES) initiative and supporting the GALILEO initiative. Further, the EU worked to secure a consensus between the parties on the geographical location of the ITER project in France. The EU has encouraged the use of the Open Method of Coordination (OMC) to help policy learning and integration through the mutual exchange of knowledge and best practice.

Regarding overall trends in research investment, the Commission notes that R&D intensity in the period 2000-2003 is close to stagnation. This can be attributed to the low growth rate of R&D spending in Germany, France and the UK, which represent around two thirds of the total R&D expenditure in the EU-25. The annual growth rate in R&D intensity of 0,7% (average annual growth between 2000 and 2003) is far from sufficient to reach the 3% objective by 2010. If this trend remains unchanged (*i.e.* assuming a linear forecast applied on the 2000-2003 trend), the EU's R&D intensity will be some 2,20% in 2010. The EU's R&D intensity, however, grew at a higher rate than that of the US, where private spending on R&D has been significantly decreasing since 2000. As a result, the EU-25 as a whole is slowly catching up with the US. The growth of R&D intensity is higher in Japan than in both the EU and the US, although this seemingly good performance can be partially explained by the low growth rate of Japan's GDP (denominator) over recent years. At an EU level, the share of R&D private sector funding is considerably lower than that of Japan and the US.

It has been estimated that to fulfill the Lisbon target, an extra 1.2 million researchers are needed: 500 000 for renewal of the research labour force and 700 000 net new entries. At the same time, the Report notes that the number of researchers has been growing by 22.5% between 1997 and 2002, equivalent to 105 000 full-time researchers.

In terms of trends in research funding, the Report finds that there is a growing awareness amongst the Member States of the need for improved coherence and an integration of policies. A first trend identified is the convergence of conceptual approaches to R&D policy toward the so-called 'system' framework. This policy framework is explicitly adopted in countries such as Finland, Germany, Sweden and the Netherlands. It focuses on the overall system of institutions and organisation that foster research and innovation. An increasing complexity of policy mixes has been identified as the second trend. The range of long standing policies for funding such as subsidies and technology transfers has been expanded with additional financial instruments such as venture capital operations. Other initiatives relate to education and researcher training, clustering policies, company formation etc.

Lastly, in terms of the future outlook, the Commission reports that the future of European R&D has been secured by a proposed doubling of the budget under the financial perspective, 2007-2013. The preparation of the 7th framework programme is well under way and is to be based around six major objectives namely, creating centres of excellence through collaborative research, launching major European technological initiatives, stimulating basic research and creating a European Research Council, making Europe attractive to the most talented researchers, developing research infrastructures and improving the co-ordination of national research programmes. These proposals are complemented by the proposed next generation Structural Funds, which also emphasise investment in research and innovation as a source of economic growth.

European research area: activities within the scope of the EC framework programme 2002-2006

The Commission has presented its Annual Report on research and technological development activities of the European Union in 2005.

At the Spring European Council 2005, the heads of State and government reinforced the **Lisbon Strategy** with a new partnership for growth and employment, re-boosting the Barcelona objective of **dedicating 3% of its Gross Domestic Product (GDP) to research in 2010** compared with 1.9% today. In its Communication 'Building the ERA of knowledge for growth' of 6 April 2005 which sets out the European Research policy objectives for 2007-2013, the Commission reiterated how crucial it is to provide **new impetus to knowledge for sustainable growth** to achieve the Lisbon goals. Major steps towards the Seventh Framework Programmes (FP7) were made in 2005 with the presentation by the Commission of its proposals for the entire legal framework.

Alongside the preparation of the future research funding framework, the Commission enhanced in 2005 major policy initiatives towards the European Research Area (ERA).

- substantial progress has again been made to **reduce mobility obstacles** and to enhance skills and competences for career development across sectors and disciplines. In addition, the enhancement of the researchers' status, profession and career development was boosted in 2005 with the Recommendations to Member States on the European Charter for Researchers and on the Code of Conduct for the recruitment of Researchers, of which the concrete uptake started immediately after its adoption;
- **28 European Technology Platforms** are now in progress. They focus on strategic issues where achieving Europe's future growth, competitiveness and sustainability depends upon major technological advances, ranging from steel to air, rail and maritime transport, hydrogen and photovoltaics,

water and chemicals, and from nanoelectronics to innovative medicines, plant genomics or sustainable chemistry (including industrial biotechnology), manufacturing, mutual learning and foresight knowledge;

- **68 ERA-NET** projects were selected; these aim at the coordination of national and regional research programmes in fields such as bilateral cooperation with third countries, metrology, agriculture and fisheries, plant and human health, energy, transport or environment;
- an action plan for 2005-2009 for the implementation of a safe, integrated and responsible European strategy for the development of **Nanosciences and Nanotechnologies** was adopted in June;
- the Commission reported on the successful implementation of the Environmental Technologies Action Plan as well as the Environment and Health Action Plan, which continued in 2005;
- the **10 Year Implementation Plan** for the Global Earth Observation initiative has been adopted at the Brussels Summit organised by the Commission in February 2005.

Implementation of sixth Framework Programme continues: in 2005, the budget was fully committed. Efforts were pursued for the FP6 to continue to attract the best research groups and the most innovative companies, organisations and institutions and significant scientific and technological progress was achieved in all thematic priorities. Furthermore, research is being carried out to support policies in areas such as agriculture, fishing, health and consumer protection, education, youth, employment and social policies, justice and home affairs, the environment, the single market, energy and transport. Concerning the regulatory and administrative environment, further improvement and progress continued where appropriate, notably concerning simplification.

Progress towards the 3% objective: the report confirms that all Member States have now set generally quite ambitious R&D expenditure targets either in the context of their NRP or soon after.

Assuming that all the R&D expenditure targets were met, R&D expenditure in the EU would increase significantly to around 2.6% of GDP in 2010. By comparing, both within each Member State and the EU-25 as a whole, the annual rate of growth of the R&D intensity required between 2004 and 2010 to meet the target with the rate of growth experienced over recent years (1997-2004), we can assess the level of the target. Countries such as Denmark, Finland, Sweden, Germany and Austria have experienced a rate of growth which, if they continue on the same trend, is sufficient to reach their target: while these countries have R&D intensities already higher than the EU average, in recent years they have managed to pull even further ahead. For countries such as Belgium, France or the UK and for the EU-25 as a whole, the target will be reached only if there is a substantial acceleration of the growth of R&D expenditure. For countries such as Poland, Slovakia, Malta, Latvia and Greece, the target is extremely ambitious.

European research area: activities within the scope of the EC framework programme 2002-2006

This paper is the Commission's 2006 Annual Report on research and technological development activities in the EU. The report is accompanied by a Commission Staff Working Document, which provides more detailed reporting and statistics.

Political achievements: The report finds that the Community's overall research policy objectives for 2006 have been met namely, completion of the 6th Framework Programme and the launching of the 7th Framework Programme. This is a major achievement for European research. It follows four years of preparation and intense negotiations. Collaborative research remains a core activity and most thematic priorities are solidly founded on the experience gained through previous FPs. The themes identified reflect the key fields of knowledge and technology in which research excellence is particularly important for Europe's to address the social, economic, public health, environmental and industrial challenges of the future, New concepts such as the European Research Council, the Joint Technology Initiatives and large infrastructure investments are of particular interest together with continuous efforts to fight the 'brain drain' and favour the 'brain gain' in Europe. Other new elements include exploiting research excellence in convergence regions and risk sharing finance facilities to increase the availability of EIB loans. CORDIS services were fully migrated to the new EUROPA website and revamped to reflect the launching of the 7th Framework Programme.

Implementation of the 6th Framework Programme: Most calls for proposals have been published as planned. The most successful schemes include the Marie Curie fellowships and the ERA-NET scheme. In the domain of Life science, Genomics and Biotechnology, major actions are continuing in the European & Developing Countries' Clinical Trials Partnership in the fight against AIDS, tuberculosis and malaria. On food quality and safety, most activities relate to the foundations for the implementation of the Knowledge-Based Bio-Economy (KBBE). Following the Communication 'Towards a European Strategy for Nanotechnology', the implementation of the Action Plan towards the responsible development of nanosciences and nanotechnologies has advanced. The platform on European manufacturing based on high added-value research and innovation is expected to speed up the rate of industrial transformation in Europe. The implementation of the Environmental Technologies Action Plan is continuing with the development of policy activities notably on sustainable production and consumption. Research on global change and ecosystems, sustainable energy and transport systems has continued to make a significant contribution to the reinvigoration of the EU Sustainable Development Strategy.

The capacity to respond to emerging challenges has been demonstrated by the emergency Call for Proposals in response to the avian influenza crisis and work on pandemic flu. This policy oriented research is being implemented successfully through direct actions performed by the JRC and through SSP (Scientific support to policies) projects related to a wide range of EU policy areas such as environment, sustainability, health, agriculture and fisheries. The full implementation of New and Emerging Science and Technology (NEST) has generated broad recognition of the quality and innovation of the trans-disciplinary agenda, in fields such as synthetic biology and measuring the impossible.

Research and the revised Lisbon agenda: In 2005 the Lisbon strategy was re-launched and has resulted in renewed commitments to actively pursue a positive economic reform agenda. In 2006 the Member States, for the first time, implemented their National Reform Programmes (NRPs). Although most Member States have shown true commitment to the implementation of NRPs a certain number of Member States require further policy initiatives. The renewed impetus given to the Lisbon strategy offers a real opportunity but to achieve this a stronger commitment and a speedier implementation will be needed.

Progress towards the 3% objective: In 2005, the EU's R&D intensity amounted to 1.84% of GDP, showing no signs of recovery after its stagnation in 2001-2002. The Commission points out, however, that the latest available information still predates the renewed commitments made by Member States in the context of the re-launched Lisbon strategy. In terms of R&D intensity, three distinct groups of countries can be identified. The first includes countries with an R&D intensity above 2.4% (GDP (Sweden, Denmark, Finland, Germany and Austria). These countries have already made important progress towards becoming knowledge based economies. A second group is made up of countries having an intensity close to the EU average with values between 1.5 and 2.1% of GDP (France, Belgium, the Netherlands, UK and Luxembourg) indicating that the economies of these countries are transforming, but that the pace of development should be increased. A third and larger group consists of countries with an R&D intensity below 1.5% of GDP (although differences within this group are large).

The Open Method of Coordination (OMC): The overall view emerging is that Member States have subscribed to a number of similar objectives and challenges. Explicitly or implicitly, therefore, taking guidance from discussion at a European level ? such as the OMC. The Scientific and Technical Research Committee (CREST) affirmed that the OMC can continue to play an important role in strengthening and aligning Member States? policies to meet the challenge of achieving the Lisbon and Barcelona objectives.

Future Outlook: The achievements of 2006 helped pave the way for the implementation of the 7th Framework Programme. A Green Paper on ?The European Research Area: New Perspectives? was adopted in April 2007, which will form the basis for a wide-ranging debate and public consultation. Building on the results of the Green Paper the Commission is expect to present new initiatives in 2008.