

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

(2002/C 51 E/09)

(Text with EEA relevance)

COM(2001) 594 *final* — 2001/0122(CNS)

(Submitted by the Commission on 18 October 2001)

On 30 May 2001 (OJ . . . — COM(2001) 279 — 2001/0122(CNS)) the Commission adopted its proposal for a Decision concerning the specific programme 'Integrating and strengthening the European Research Area', as part of its set of proposals for specific programmes to implement the Framework Programme 2002-2006.

The aforementioned proposal is hereby amended as follows:

1. Annex I, section 1.2 (introductory part) and section 1.2 (i) are replaced with the text presented in Annex I of the present amended proposal.
 2. Annex I, section 1.2, sub-heading '(ii) *Specific research activities for SMEs*' is renumbered:
'1.2.2. Specific research activities for SMEs'
 3. Annex I, section 1.2, sub-heading '(iii) *Specific international co-operation activities*' is renumbered:
'1.2.3. Specific international co-operation activities'
 4. Annex II of the aforementioned proposal is replaced with Annex II of the present amended proposal.
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ANNEX I

1.2. Specific activities covering a wider field of research

Activities under this heading will complement research within the thematic priority areas and comprise the following:

- Anticipating the EU's scientific and technological needs
- Specific research activities for SMEs
- Specific international co-operation activities

1.2.1. Anticipating the EU's scientific and technological needs

These activities have a distinct role within the overall architecture of the Framework Programme 2002-2006. They involve common implementation arrangements, and the necessary critical mass, to assure efficient and flexible conduct of research which is essential to the fundamental objectives of Community research and which covers a wide range of needs that cannot be satisfied within the thematic priorities. They will have the following specific objectives:

- To underpin the formulation and implementation of Community policies, bearing on the interests of possible future members of the Union as well as the existing Member States, and monitor their effects;
- To explore new and emerging scientific and technological problems and opportunities, including in particular interdisciplinary and multidisciplinary research areas, where European action is appropriate in view of the potential to develop strategic positions at the leading edge of knowledge and in new markets, or to anticipate major issues facing European society.

A feature common to these activities is that they will be implemented within a multi-annual perspective which takes direct account of the needs and viewpoints of the main associated actors (as appropriate: policymakers, industrial user groups, leading edge research groups, etc.). They will be implemented in conjunction with an annual programming mechanism, by which specific priorities, corresponding to identified needs and falling within the objectives indicated above, will be determined.

Priorities thus determined will then be inscribed in the workprogramme for the specific programme, alongside the priorities deriving from objectives in other parts of the programme, and updated regularly. This will result in a progressive allocation of the budget relating to these activities to the specific priorities identified, throughout the period of execution.

The programming will be carried out by the Commission, and will be based on suggestions received in response to a wide-ranging consultation of interested circles in the EU and the countries associated with the Framework Programme, regarding the topics to be included.

A budget of EUR 440 million will be allocated to the research activities specified below, which have been determined on the basis of needs which can be identified now. This represents 50 % of the amount destined for all activities under this heading; the remaining 50 % will be allocated to research activities to be defined during the course of implementation of the specific programme.

(i) Policy-orientated research

The activities under this heading will provide, in particular, support for:

- the implementation of common policies, in particular the common agricultural policy, and the common fisheries policy;
- the achievement of Community policy objectives, including in particular those set out in the 6th Environment Action Programme ⁽¹⁾ the Green Paper 'Towards a European strategy for the security of energy supply'; ⁽²⁾ and the White Paper on European transport policy ⁽³⁾; as well as those in such fields as public health and consumer protection, gender equality, regional development, trade, enlargement, external relations and development aid, and justice and internal affairs.
- the achievement of other important objectives of the Community, such as those set by the European Commission for the five years of its mandate and those derived from the political orientations given by the European Council, including the Lisbon strategy, with regard to economic policy, in the fields of the Information Society and e-Europe, enterprise, internal market and competitiveness, social policy and employment, and education and culture, including the requisite statistical methods and tools.

⁽¹⁾ COM(2001) 31.

⁽²⁾ COM(2000) 769.

⁽³⁾ COM(2001) 370.

Multi-annual programming

The multi-annual programming of these activities will take into account the opinions of the relevant Scientific Committees associated with the policies concerned. The programming will be conducted with the help of a User Group composed of different Commission Services, who will also have recourse, where appropriate, to an independent consultation structure composed of high-level scientific and industrial experts. The User Group will assess suggestions put forward regarding the topics to be included on the basis of the following criteria:

- their contribution to policy formulation and development (e.g. links with legislative proposals in preparation or with major deadlines in the area);
- their potential contribution to the EU's competitiveness, the strengthening of its scientific and technological bases and the achievement of the European Research Area, including the effective integration of the candidate countries.
- European added value, taking account in particular of research carried out in the Member States in the relevant fields;
- the scientific relevance and feasibility of the research themes and approaches proposed;
- assurance of an appropriate division of tasks, and synergy, between these activities and the Direct Actions of the Joint Research Centre in support of Community policies.

The programming may be altered by means of an emergency procedure based on the same evaluation criteria in the event of a crisis giving rise to urgent and unforeseen research needs.

Initial research priorities

The programming method described above has been applied to define policy-orientated research priorities responding to needs that can already be anticipated. In this first application, it has been based on suggestions for topics made by the Commission's policy services, drawing on the advice, as appropriate, of the relevant Scientific Committees, as well as the broader objectives of the Union as set out in successive conclusions of the meetings of the European Council. The priorities so defined will be incorporated in the workprogramme at the start of the programme.

They have been grouped within the following lines of action, in a structure which optimises synergies between different policy requirements and scientific inputs, and which cuts across and complements the thematic priorities:

- Sustainable management of Europe's natural resources. Research under this heading responds to policy requirements relating, in particular, to the modernisation and sustainability of the common agriculture and fisheries policies and the promotion of rural development, including forestry. It will focus on:

Development of bases for policies to promote sustainable, quality-based agriculture; definition of multifunctional models of sustainable agriculture and forestry management, benefits and trade-impact assessment; improved tools for forecasting and assessment of international agriculture policies and markets and related agreements, and the common agriculture policy; environmental implications of agriculture, fisheries and aquaculture-based production systems, including non-food agriculture, and their interactions; characterisation of spatial entities, and related drivers of change for assessment of rural development and to provide tools to support environmental impact assessment; development of evaluation and monitoring tools for animal health and welfare.

Development of alternative approaches to fisheries management, through better understanding of key biological and selectivity parameters within an eco-system-based approach; integration of multi-annual, multi-species and socio-economic aspects, and assessment of uncertainties; improvement of monitoring control and surveillance methods; development of bases for policies to promote sustainable aquaculture through, disease prevention, production systems diversification and improved husbandry.

Better understanding of the structure and functioning of terrestrial and marine ecosystems, including the assessment of soil functions and degradation processes; tools for assessing water quality status, contaminant concentrations and improvement options; integrated air pollution assessment; strategic noise mapping.

- Providing health, security and opportunity to the people of Europe. Research in this category responds to policy requirements relating, in particular, to the implementation of the European Social Agenda, public health and consumer protection and the creation of an Area of Freedom, Security and Justice. It will focus on:

Methods to evaluate the need for, and performance and efficiency of, social and consumer policy measures, including aspects related to consumer satisfaction, unfair practices and impacts of other EU policies; the transformation of the labour market, and the cost of 'non-social Europe', development of co-ordinated approaches and a comparative European knowledge base for policies to ensure sustainable pension and health care systems, in particular with respect to the impact of demographic change and ageing; development of improved methods for risk assessment, including non-animal test methods for chemical substances, measures related to product safety, and communication of emerging threats to consumers' and workers' health and safety.

Comparative assessment of health determinants, including nutrition, gender-related and socio-economic factors, of health services and e-health systems, and methods for intervention quality assessment; development of improved incidence measurement and understanding of transmission paths for emerging, rare and communicable diseases, including in the international context; development of safe and secure procedures for blood and organ donation, storage and use; methods to assess the distribution, and socio-economic impact, of disabilities.

Comparative research on factors underlying migration and refugee flows, including illegal immigration and trafficking in human beings, improved means to anticipate crime trends and causes, and to assess the effectiveness of crime-prevention policies; assessment of new challenges related to illicit drug use.

- Underpinning the economic potential and cohesion of a larger and more integrated European Union. Research in this category responds, in particular, to the needs of a series of policies concerned with the competitiveness, dynamism and integration of the European economy, in the context of enlargement, globalisation and Europe's commercial relations with the rest of the world. It will focus on:

Improved means to assess economic effectiveness and social impacts of monetary and fiscal policies, the contribution of financial market integration to economic development in the Euro area; the impact of cohesion policies on sustainable regional development; efficiency of sustainable development policies on key business sectors, to assess the economic/industrial impact of biotechnologies; methods of standardisation as tools to support internal market policies and to underpin Community trade policy positions and mutual recognition agreements.

Development of bases for a comprehensive approach to transport security (in particular for air transport); development of tools, indicators and operational parameters to assess sustainable transport and energy system performance (economic, environmental, social), and monitor achievement of targets, in the enlarged Europe; forecasting tools, incorporating socio-economic and technological aspects, and cost-effective data sourcing, for energy and transport, to enable validation of proposed measures, including technological and market-based measures, and to assist in the development of innovative policies and policy packages to assure sustainability in the medium and long term.

Assessment of means for management and protection of digital identities and digital assets; assessment of policies, policy tools and best practice for promoting inclusive and secure access to the information society, benchmarking of government process re-engineering best practices to improve public services; e-education and associated contexts of learning, including lifelong learning; consumer protection in relation to information and communications services; damage assessment methods and conservation strategies to protect cultural heritage; development of advanced methods and techniques to improve the quality, accessibility and dissemination of statistics produced by the European statistical system.

A co-ordinated approach will be ensured when addressing research questions that are common to different policy areas, in particular with respect to the measurement and impact assessment of demographic changes and more broadly in the development of policy-relevant statistics and indicators.

(ii) *Research to explore new and emerging scientific and technological problems and opportunities*

Research under this heading will respond to needs in new interdisciplinary and multidisciplinary areas or areas at the leading edge of knowledge, and which fall within the legitimate scope of Community research, as well as to unexpected major developments. By bringing together resources from across the EU, it will aim to put European research in a leading position, opening the way or creating new scientific and technological developments. It will stimulate the flow of ideas between academia and industry, and allow Europe better to exploit its research assets in the drive towards a dynamic knowledge-based society.

The following areas of activity will be supported initially:

- Research to assess rapidly new discoveries, or newly-observed phenomena, which may indicate emerging risks or problems of high importance to European society, and identify appropriate responses to them.
- Research in emerging areas of knowledge and on future technologies, in particular in transdisciplinary fields, which is highly innovative and involves correspondingly high (technical) risks. It will be open to any new idea that has significant potential for major industrial and/or social impact, or for the development of Europe's research capabilities in the longer term.

Proposals will be evaluated on the basis of research excellence, potential for future impact, and, in the first of these areas particularly, innovativeness.

Multi-annual programming

Specific topics within the above categories on which research will be focused during the implementation of the programme will be selected by means of the multi-annual programming on the basis of their urgency or potential for future societal, industrial, or economic relevance, taking account of the ongoing research activities under this heading. The assessment of topics will be carried out with the support of an independent consultation structure composed of high-level scientific and industrial experts and will also incorporate the following criteria:

- the potential contribution of the research topics proposed for innovation and the EU's competitiveness, the strengthening of its scientific and technological bases and the achievement of the European Research Area, including the effective integration of the candidate countries;
- the scientific relevance and timeliness of the research themes and approaches proposed.

The programming may be altered by means of an emergency procedure based on the same evaluation criteria in the event of a crisis giving rise to urgent and unforeseen research needs.

(iii) *Implementation*

The activities programmed will be carried out by means of calls for proposals. They will essentially take the form of:

- Targeted specific projects generally of a limited scale, carried out by means of partnerships of a size adapted to the needs to be covered.
- The networking of research activities carried out at national level where the objectives can be achieved by mobilising capacities existing in the Member States, candidate countries and other associated States.

In certain duly justified cases, where the objectives pursued can be better attained in this way, limited use may be made of the instruments used in the priority thematic areas.

The proposals will be selected by the Commission following evaluation by independent experts.

ANNEX II

INDICATIVE BREAKDOWN OF THE AMOUNT

Types of activities	Amount (EUR million)
Integrating research ⁽¹⁾	12 055 ⁽²⁾
<i>Priority thematic areas of research</i>	10 425
Genomics and biotechnology for health	2 000
Information Society technologies	3 600
Nanotechnologies, intelligent materials, new production processes	1 300
Aeronautics and space	1 000
Food safety and health risks	600
Sustainable development and global change	1 700
Citizens and governance in the European knowledge-based society	225
<i>Specific activities covering a wider field of research</i>	1 630
Anticipating the EU's scientific and technological needs	880 ⁽³⁾
Specific research activities for SMEs	450
Specific international cooperation activities	300
Strengthening the foundations of the European Research Area	450
Support for the co-ordination of activities	400
Support for the coherent development of policies	50
Total	12 505

⁽¹⁾ The aim is to allocate at least 15 % of the total financial resources assigned to this heading to SMEs.

⁽²⁾ Including EUR 600 million for international co-operation activities, and including any amounts provided for under decisions of the European Parliament and Council pursuant to Article 169 of the Treaty.

⁽³⁾ Of which EUR 440 million to be allocated to the research activities under this heading specified in Annex I, and EUR 440 million to be allocated to research activities that are identified during the course of implementation of the specific programme.