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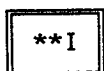
SESSION DOCUMENTS

English Edition

29 November 1990

SERIES A

DOCUMENT A3-0329/90/PART A



R E P O R T

drawn up on behalf of the Committee on Energy, Research and Technology

on the Commission proposal for a Council decision adopting a specific research and technological development programme in the field of Industrial and Materials Technologies (1990-1994) (COM(90) 0156 final-C3-0159/90 - SYN 261)

Rapporteur: Mr Giacomo PORRAZZINI

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Part A: Amendments to the Commission proposal
Draft legislative resolution

DOC_EN\RR\100210

PE 144.158/fin./Part A
Or. Fr.

A Series: Reports - B Series: Motions for Resolutions, Oral Questions - C Series: Documents received from other Institutions (e.g. Consultations)

***** = Consultation procedure requiring a single reading

****II** = Cooperation procedure (second reading) which requires the votes of a majority of the current Members of Parliament for rejection or amendment

****I** = Cooperation procedure (first reading)

******* = Parliamentary assent which requires the votes of a majority of the current Members of Parliament

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By letter of 11 June 1990 the Council consulted the European Parliament, pursuant to Article 130q(2) of the EEC Treaty on the Commission proposal for a Council decision adopting a specific research and technological development programme in the field of Industrial and Materials Technologies (1990-1994).

At its sitting of 15 June 1990 the President of Parliament announced that he had referred this proposal to the Committee on Energy, Research and Technology as the committee responsible and the Committee on Budgets and the Committee on Economic and Monetary Affairs and Industrial Policy for their opinions.

At its meeting of 22 May 1990, the Committee on Energy, Research and Technology had appointed Mr Porrazzini rapporteur.

At its meetings of 19 June, 19 September, 27 September, 7/8 November and 28 November 1990 it considered the Commission proposal and draft report.

At the last meeting it adopted unanimously the draft legislative resolution.

The following took part in the vote: Adam, acting chairman; Porrazzini, rapporteur; Anger, Bettini, Breyer, Garcia Arias, Gasoliba i Böhm, Hervé, Larive, Linkohr, Pierros, Pompidou, Quisthoudt-Rowohl, Regge, Robles Piquer, Sanz Fernandez, Seligman and Verwaerde.

The opinions of the Committee on Budgets and the Committee on Economic and Monetary Affairs and Industrial Policy will be published separately.

The report was tabled on 29 November 1990.

The deadline for tabling amendments will appear on the draft agenda for the part-session at which the report is to be considered.

A

Commission proposal for a Council decision adopting
a specific research and technological development programme
in the field of Industrial and Materials Technologies
(1990-1994)

Commission text¹

Amendments

(Amendment No. 1)
First recital

Whereas, by Decision 90/221/Euratom, EEC, the Council adopted a third framework programme for Community activities in the field of research and technological development (1990-1994), specifying inter alia the activities to be pursued for contributing to the rejuvenation of European manufacturing industry by strengthening its scientific and technological basis through research and development work; whereas this Decision should be taken in the light of the grounds set out in the preamble to that Decision;

Whereas, by Decision 90/221/Euratom, EEC, the Council adopted a third framework programme for Community activities in the field of research and technological development (1990-1994), specifying inter alia the activities to be pursued for contributing to the rejuvenation of European manufacturing industry by strengthening its scientific and technological basis through research and development work, and thereby allowing, on the one hand, the harmonious, general development of the twelve countries towards the objective of economic and social cohesion and, on the other hand, a reduction in the environmental impact of the manufacturing of material goods; whereas this Decision should be taken in the light of the grounds set out in the preamble to that Decision;

(Amendment No. 2)
Third recital

Whereas the Joint Research Centre shall contribute through its own programme to the implementation of the aforesaid activities;

Whereas the Joint Research Centre shall contribute through its own programme to the integrated and coordinated implementation of the aforesaid activities;

1 Full text (COM(90) 0156 final - OJ No. C 174, 16.7.1990, p. 28

Commission text

Amendments

(Amendment No. 3)

After the third recital, new recital (4)

Whereas fundamental research must be specifically encouraged Community-wide in each of the strategic research sectors of the Framework Programme;

(Amendment No. 4)

After the third recital, new recital (4a)

Whereas, in addition to the specific programme on human capital and mobility, training of researchers in each of the strategic research sectors of the Framework Programme must be ensured;

(Amendment No. 5)

After the third recital, new recital (4b)

Whereas the social, human and ecological impact of the programme must be assessed by an independent panel and a technological and risks assessment must be made;

(Amendment No. 6)

After the third recital, new recital (4c)

Whereas the EEC, and Europe as a whole must provide an adequate response to the challenges issued in the field of innovative industrial technologies and materials, at international level;

Commission text

Amendments

(Amendment No. 7)

After the fourth recital, new recital (5)

Whereas the international challenge, in both science and technology and trade, cannot be met if the EEC relies solely on the current processes of the merging of major undertakings, and requires, above all, the promotion of the balanced development of a new and more extensive network of innovative small- and medium-sized industries and a harmonious set of R & TD structures capable of cooperating with each other in a system of undertakings operating in one territory;

(Amendment No. 8)

Fifth recital

Whereas, pursuant to Article 4 and Annex I of Decision 90/221/EURATOM, EEC, the amount deemed necessary for the whole framework programme includes an amount of 57 million ECU for the centralized dissemination and exploitation of results, to be divided up in proportion to the amount envisaged for each activity; whereas in view of the importance of this specific programme within the industrial and materials technologies action the estimate of the financial resources needed by this programme is to be reduced by 6.7 million ECU, which amount is to be allocated to the centralized activities, in order to comply with the second sentence of Article 130p(2) of the Treaty;

Whereas, pursuant to Article 4 and Annex I of Decision 90/221/EURATOM, EEC, the amount deemed necessary for the whole framework programme includes an amount deemed necessary of 57 million ECU for the centralized dissemination and exploitation of results which is to be the subject of a decision of the Council in cooperation with Parliament; whereas, in view of the importance of this specific programme within the industrial and materials technologies action a financial contribution to the centralized activities is required; whereas this contribution is proportional to the financial capacity of the programme and corresponds to the effective demand for the results of research from the socio-economic operators in all the Member States;

Commission text

Amendments

(Amendment No. 9)
Seventh recital

Whereas this programme must be implemented essentially by the selection of research and development projects to enable them to benefit from Community participation; whereas the Commission should encourage the submission of such projects by the usual means of publishing calls for proposals in the Official Journal of the European Communities; whereas a special procedure should also be devised so as to maintain a degree of flexibility enabling the Commission, in the face of the continuous evolution and gradual acceleration of technological progress, also to take into consideration spontaneous proposals consistent with the objectives of the programme;

Whereas this programme must be implemented essentially by the selection of research and development projects to enable them to benefit from Community participation; whereas the Commission should encourage the submission of such projects by the usual means of publishing calls for proposals in the Official Journal of the European Communities; whereas an exceptional procedure should also be devised to come into effect between calls for proposals so as to maintain a degree of flexibility enabling the Commission, in the face of the continuous evolution and gradual acceleration of technological progress, also to take into consideration spontaneous proposals consistent with the objectives of the programme;

(Amendment No. 10)
Eighth recital

Whereas the projects to be carried out under the programme must be selected with special attention to the principle of economic and social cohesion in the Community, the transnational nature of the projects and the support to be given to small- and medium-sized enterprises;

Whereas the projects to be carried out under the programme must be selected with special attention to the principle of respect for environmental compatibilities and of economic and social cohesion in the Community, the transnational nature of the projects, projects with a reduced impact on the environment; and the support to be given to small and medium-sized enterprises;

Commission text

Amendments

(Amendment No. 11)

Article 1

A specific research and technological development programme for the European Economic Community in the field of industrial and materials technologies, as defined in Annex I, is hereby adopted for a period of five years as from 1 January 1990.

A specific research and technological development programme for the European Economic Community in the field of industrial and materials technologies, as defined in Annex I, is hereby adopted for the period from the date of publication of this decision in the Official Journal to 31 December 1994.

Should the Commission consider it necessary to adapt the definition set out in Annex I, it shall submit the corresponding proposal, together with a justification, to the Council and to Parliament.

(Amendment No. 12)

Article 2(1)

1. The Community funds estimated as necessary for the execution of the programme under this Decision amount to ECU 748 million. This amount includes ECU 670 million for the execution of the activities approved by the present Decision, and ECU 78 million for the activities which the JRC will contribute to the programme and which will be the subject of a separate decision of the Council.

1. The Community funds estimated as necessary for the execution of the programme under this Decision amount to ECU 748 million. This amount includes ECU 670 million for the execution of the activities approved by the present Decision, and ECU 78 million for the activities which the JRC will contribute to the programme and which will be the subject of a separate decision of the Council to be taken by 30 June 1991 at the latest.

The JRC programme will be managed in close coordination with this programme with, in particular, the provision of regular and full information to the Committee;

Commission text

Amendments

(Amendment No. 13)

Article 2(2)

2. From the above sum of 670 million ECU, an amount of 6.7 million ECU is drawn for the centralized action of dissemination and exploitation. The funds thus reduced to 663.3 million ECU include staff cost, which may amount to a maximum of 3%.

2. The amount of 670 million ECU estimated as necessary shall include costs relating to staff and a contribution to the costs of the centralized action of dissemination and exploitation.

(Amendment No. 14)

Article 2(3)

3. An indicative allocation of funds is set out in Annex II.

3. An indicative allocation of funds relating to the implementation of the actions covered by this programme is set out in Annex II. The procedures for the dissemination and exploitation of the results are set out in Annex III. The rules relating to staff are set out in Annex II. This may vary by + or - 10% between the different fields.

Commission text

Amendments

(Amendment No. 15)
Article 5

1. During 1992, the Commission shall review the programme and address a report on the results of the review to the Council and the European Parliament, together with proposals for any necessary changes.

2. At the end of the programme the Commission shall assess the results obtained. It shall address a report thereon to the Council and the European Parliament.

3. The reports shall be drawn up having regard to the objectives set out in Annex I to this Decision and in accordance with Article 2(4) of Decision 90/221/Euratom, EEC.

1. During 1992, the Commission shall review the programme and address, by 31 December 1992 at the latest, a report on the results of the review to the Council and the European Parliament, together with proposals for any necessary changes.

2. At the end of the programme the Commission shall assess the results obtained. It shall address a report thereon to the Council and the European Parliament.

3. The reports shall be drawn up having regard to the objectives set out in Annex I to this Decision and in accordance with Article 2(4) of Decision 90/221/Euratom, EEC. These reports shall assess the coherence of the programme's measurable implementation with the six major concerns set out in Annex II of Council Decision 90/221/Euratom, EEC¹

¹ OJ No. L 117, 8.5.1990.

(Amendment No. 16)

Article 6

1. The Commission shall be responsible for the execution of the programme. It shall be assisted by a committee, hereinafter referred to as 'the Committee', composed of representatives of the Member States and chaired by a representative of the Commission.

2. The contracts concluded by the Commission shall govern the rights and obligations of each party, including the procedures for disseminating, protecting and exploiting the research results, in accordance with the arrangements adopted pursuant to the second paragraph of Article 130k of the Treaty.

3. A work programme for each year shall be drawn up and updated where necessary. It shall set out the detailed objectives and types of projects to be undertaken, and the financial arrangements to be made for them. The Commission shall make calls for proposals for projects on the basis of the annual work programmes.

1. The Commission shall be responsible for the execution of the programme. It shall be assisted by a committee, hereinafter referred to as 'the Committee', composed of representatives of the Member States and chaired by a representative of the Commission.

The European Parliament shall be informed of the deliberations of the Committee in a comprehensive and timely manner.

2. The contracts concluded by the Commission shall govern the rights and obligations of each party, including the procedures for disseminating, protecting and exploiting the research results, in accordance with the arrangements adopted pursuant to the second paragraph of Article 130k of the Treaty and, where appropriate, procedures for training and evaluation.

3. A work programme shall be drawn up at the start of the programme and shall be regularly revised. It shall set out the detailed objectives and types of project to be undertaken, and the financial arrangements to be made for them. The annual financial arrangements must reflect the gradual development of the work programme. It shall be forwarded to the European Parliament without delay. The Commission shall make calls for proposals for projects on the basis of the work programmes.

Commission text

Amendments

(Amendment No. 17)
Article 6(4)(new)

4. The information packs providing back-up material for the calls for proposals shall be distributed by the Commission in all the Community languages, in order to ensure conditions of equality for the participation of companies, universities and other research centres in the Member States.

(Amendment No. 18)
Article 7

1. In the cases envisaged in Article 8(1), the Commission representative shall submit to the Committee a draft of the measures to be taken. The Committee shall deliver its opinion on the draft within a time limit which the chairman may set according to the urgency of the matter. The opinion shall be delivered by qualified majority as provided for in Article 148(2) of the Treaty in the case of decisions which the Council is required to adopt on a proposal from the Commission. The votes of the Member States' representatives within the Committee shall be weighted in the manner set out in that Article. The chairman shall not vote.

2. The Commission shall adopt the measures envisaged when they are in accordance with the Committee's opinion.

3. If the measures envisaged are not in accordance with the Committee's opinion, or if no opinion is delivered, the Commission shall forthwith submit to the Council a proposal relating to the measures to be taken. The Council shall act by a qualified majority.

1. In the cases envisaged in Article 8(1), the Commission representative shall submit to the Committee a draft of the measures to be taken. The Committee shall deliver its opinion on the draft within a time limit which the chairman may set according to the urgency of the matter, if necessary by taking a vote.

2. The opinion shall be recorded in the minutes; in addition, each Member State shall have the right to ask to have its position recorded in the minutes.

3. The Commission shall take account of the opinion delivered by the Committee. It shall inform the Committee of the manner in which its opinion has been taken into account.

Commission text

Amendments

(Amendment No. 19)
Article 8

1. The procedure laid down in Article 7 shall apply to:
- the preparation and updating of the work programmes referred to in Article 6(3):
 - evaluation of the projects referred to in Point 2 of Annex III, as well as the estimated amount of the Community's financial contribution when these projects are submitted through the ordinary procedure referred to in Point 4 of Annex III and the above-mentioned amount is more than ECU 5 million.
 - evaluation of all projects submitted through the exceptional procedure referred to in point 4 of Annex III, as well as the estimated amount of the Community's financial contribution,
 - measures for evaluating the programme.
2. The Commission may consult the Committee on any matter falling within the scope of the programme.

1. The procedure laid down in Article 7 shall apply to:
- the preparation and updating of the work programmes referred to in Article 6(3):
 - the contents of the calls for proposals, referred to in Annex III.
 - the participation in any project by non-Community organizations and enterprises referred to in Article 10,
 - any adaption of the indicative breakdown of funds set out in Annex II.
 - the measures to be undertaken to evaluate the programme and those projects submitted on the basis of the exceptional procedure,
 - accompanying measures and arrangements for the dissemination, protection and exploitation of the results of the research, for encouraging fundamental research, training of researchers and technological assessment carried out under the programme,
- Concerted actions referred to in point 2 of Annex III.

Commission text

Amendments

3. The Commission shall inform the Committee with regard to:

- the progress of the programme,
- draft calls for proposals, referred to in Article 6(3),
- projects, referred to in point 2 of Annex III, submitted through the ordinary procedure, for which the exceptional procedure referred to in point 4 of Annex III, as well as the estimated amount of the Community's financial contributions,
- accompanying measures referred to in point 2 of Annex III,
- concerted actions, referred to in point 2 of Annex III.

The Commission shall notify the European Parliament of draft decisions which, in the exercise of the Commission's implementing powers, are forwarded to the Committee.

(Amendment No. 20)
Article 10

Where cooperation with third countries and international organizations aiming at achieving the objectives of this programme requires legal undertakings between the Community and the third parties concerned, the Commission shall be authorized to negotiate, in accordance with Article 130n of the Treaty, international agreements laying down the terms of such cooperation.

Where cooperation with third countries and international organizations aiming at achieving the objectives of this programme requires legal undertakings between the Community and the third parties concerned, the Commission shall be authorized to negotiate, in accordance with Article 130n of the Treaty, international agreements laying down the terms of such cooperation.

Priority will be given to cooperation with regional groupings and European countries not members of the European Community, and to the guidelines agreed by the Council and the European Parliament.¹

The negotiations for such international agreements may only be initiated with third countries who are already signatories of a cooperation agreement with the Community which explicitly cites research and technological development or scientific progress as one of the objectives of cooperation.

¹ Drawn up during the conciliation on the Framework Programme for Community activities in research and technological development 1990-1994

Commission text

Decisions on the conclusion of such agreements shall be adopted in accordance with the procedure referred to in Article 130q(2) of the Treaty.

Amendments

Decisions on the conclusion of such international agreements shall be adopted in accordance with the procedure referred to in Article 130q(2) of the Treaty.

(Amendment No. 21)
Annex I, second paragraph

Paragraph 2 of Annex II to the Framework Programme, with the exception of the conditions relating to measurement and testing (for which another specific programme exists), form an integral part of the present specific programme.

Paragraph 1.2 of Annex II to the Council Decision (90/221/Euratom, EEC)* on the Framework Programme of Community activities in the field of research and technological development (1990 to 1994), with the exception of the conditions relating to measurement and testing (for which another specific programme exists), forms an integral part of the present specific programme.

* OJ No. L 117, 23.4.1990, p. 28

(Amendment No. 22)
Annex I, paragraph 2a (new)

The programme will have, as its prime objective in all sectors, the search for materials whose life cycle allows prolonged use, biodegradability and/or easy recycling with a low environmental impact.

Commission text

Amendments

(Amendment No. 23)
Annex I, fourth paragraph

Integrated projects will be supported in selected areas where a range of technologies need to be brought together. A particular example is the transport area - also taking into account the logistical aspects of harmonization and standardization - where such projects could include the 'clean car' and aeronautical technology (subject to a positive evaluation of the present action in area 5 of the BRITE/EURAM Programme). Other projects might include construction, production engineering (e.g. clean manufacturing) and clothing. Links with EUREKA projects will be encouraged, in line with the BRITE/EURAM experience of integrating certain results with EUREKA projects.

Integrated activities or projects will be financed in particular areas where many different technologies need to be made to converge. A particular example is specific research in aeronautics - taking particular account of the logistical aspects of harmonization, standardization, safety and the environment.

Other important integrated activities or projects, for example in the transport sector, construction, 'clean' manufacturing processes, and textiles, should be preceded by a definition phase (as in aeronautics). Particular attention will be given to ensuring that maximum advantage of the integrated activities is derived for the other sectors which are not included. Links with Eureka projects will be encouraged in line with the BRITE/EURAM experience of integrating certain results with Eureka projects.

The specific research measures in aeronautics, to be undertaken under the 'integrated project' instrument, will be allocated, on an annual basis, funds not exceeding, in real terms, the average amount used for the experimental research area No. 5 in the BRITE/EURAM programme.

The aid granted to the integrated projects may not exceed 15% of the total amount of the programme.

Commission text

Amendments

(Amendment No. 24)
Annex I, fifth paragraph

The following presents an analytical description of the content of the programme, based on and taking account of the above elements.

The following presents an indicative and not exhaustive description of the content of the programme, based on and taking account of the above elements.

In the listed areas, the level of research will be commensurate with strategic and economic interest and the foreseeable development thereof.

(Amendment No. 25)
Annex I, Area 1, 'Materials - Raw Materials' - Introduction

The objective is to contribute to improving the performance of materials at a cost which permits competitive industrial exploitation over a broad range of applications not restricted to a few high performance items. The accent is on the innovative use of industrial minerals, metals and materials, including their exploration, exploitation, recovery, transformation, production and recycling.

The objective is to contribute, having particular regard to the contents of the third paragraph of the introduction (Scientific and Technical Objectives and Content) to improving the performance of materials at a cost which permits competitive industrial exploitation over a broad range of applications not restricted to a few high performance items. Research aimed of the use at more advantageous costs of advanced materials over a broad range of products and applications will be supported in accordance with the distribution of these materials beyond the original areas of application. The accent is on the innovative use of industrial minerals, and dimension stone (e.g. decorative stone, marble, ...) metals and materials, including their exploration, exploitation, recovery, transformation, production and recycling.

Commission text

Amendments

(Amendment No. 26)

Annex I, Area 1, sub-heading 'Raw materials',
fourth paragraph

Research providing a better understanding of integrated systems will be pursued to underpin advanced exploration methods for hidden deposits, hydrothermal, biological or chemical processing, mining and quarrying technologies and those needed for the production of high purity metals, fired clay and industrial minerals. Work on new and improved drilling technologies for cost-effective exploration and exploitation will be undertaken. Special attention will be directed to prenormative research concerned with occupational safety conditions and the environmental impact of the exploitation technologies to be developed.

Research will be pursued to provide a better understanding of integrated systems to underpin advanced exploration methods for hidden deposits. Work on new and improved drilling technologies for cost-effective exploration and exploitation will be undertaken as well as for automation of extracting processes and metallurgical/mineralogical treatment (ovro- and hydrometallurgical processing). Also research to improve mining and quarrying technologies should be done. Research is needed for the production of basic and strategic metals and of high purity metals, fired clay, industrial minerals and dimension stone. Research should be carried out in the areas of chemical-physical and biological separation technologies.

(Amendment No. 27)

Annex I, Area 1, sub-heading 'Recycling'
before the first paragraph, new paragraph

Research will be directed to a comprehensive analysis of the cycles from the raw material to recycling, including the finished product, and taking into account the economic and energy aspects as well as environmental problems. It will relate to industrial waste.

Commission text

Amendments

(Amendment No. 28)

Annex I, Area 1, sub-heading 'Recycling', first paragraph

Here the goal is to reinforce the scope and effectiveness of recycling technologies. The economic and strategic consequences of the loss of many valuable metals and materials, including those in short supply, will be minimized. The environmental damage arising from harmful effluents will be reduced.

Here one of the goals is to reinforce the scope and effectiveness of recycling technologies. The economic and strategic consequences of the loss of many metals and materials, including those in short supply, will be minimized. The environmental damage arising from harmful effluents will be reduced.

(Amendment No. 29)

Annex I, Area 1, sub-heading 'Recycling', third paragraph

Research on technologies for physical and/or chemical separation of metals containing residues will be encouraged in order to increase the scale and efficiency of recycling and increase the applicability of recycled materials. Research will also cover thermal technologies, hydrometallurgy and refining applied to processing of complex residues, composite materials, new materials, alloys and multi-element scraps.

Research on technologies for physical and/or chemical treatment of residues containing metals will be encouraged in order to increase the scale and efficiency of recycling and increase the applicability of recycled materials. Research will also cover pyrometallurgy, hydrometallurgy and refining applied to processing of complex residues, composites and other new materials, alloys and multi-element scraps.

(Amendment No. 30)

Annex I, Area 1, third sub-heading

New and Improved Materials

New and Improved Materials and their Processing

Commission text

Amendments

(Amendment No. 31)

Annex I, Area 1, sub-heading 'New and improved materials',
first paragraph

Here the goals are developments in conventional mass commodity materials with enhanced properties and performance at a reasonable cost; advanced structural materials for high performance systems (i.e. metals, ceramics, polymers and their associate composites); and advanced functional materials (such as conducting polymers, power superconductors, high performance magnets and novel electronic materials) including their processing.

Here the goals are developments in materials and processes including conventional mass commodity materials with enhanced properties and performance at a reasonable cost; advanced structural materials for high performance systems, advanced functional materials, surface engineering and joining technology.

(Amendment No. 32)

Annex I, Area 1, sub-heading 'New and improved materials',
second paragraph

In the field of conventional mass commodity materials, attention will be applied to production and quality control technologies and the rules for long-term behaviour prediction required for meeting consumer requirements such as consistency and reliability.

In the field of conventional mass commodity materials, including materials for the construction industry, attention will be applied to production and quality control technologies, to new applications and materials improvements and to the rules for long-term behaviour prediction including reliability. Methods will be developed to enable the designer to take into account, from the outset, environmental and consumer acceptability.

Commission text

Amendments

(Amendment No. 33)

Annex I

Area 1, sub-heading 'New and improved materials'
new paragraph after second paragraph

Encouragement will also be given to
research directed to:

- the development or improvement of the performance of materials, by improving the properties for application and use, providing a more accurate description and specifying a more appropriate use, with the aid, in particular, of a reliable data base;
- the development of combinations of advanced materials; the research themes will be based on combinations with probable strategic industrial applications.

(Amendment No. 34)

Annex I, Area 1, sub-heading 'New and improved materials',
third paragraph

Research will be directed to new developments or radical innovations in advanced materials for key engineering applications which may also have important spin-off effects in other industrial areas.

Research will be directed to new developments or radical innovations in advanced materials for key applications which may also have important spin-off effects in other industrial areas.

It will regard also the use of advanced materials in a broad range of products and applications.

Commission text

Amendments

(Amendment No. 35)

Annex I, Area 1, sub-heading 'New and improved materials',
after the fourth paragraph, new paragraph

The following presents an indicative and not exhaustive set of topics to be included in the programme based on and taking account of the above elements.

For metallic materials efforts will be directed to open new markets for high value materials (e.g. speciality ferrous and non-ferrous alloys, superalloys, intermetallic compounds, refractory metals) customized for complex design specifications and severe service conditions.

(Amendment No. 36)

Annex I, Area 1, sub-heading 'New and improved materials'
sixth paragraph

In research into composite engineering the technologies needed to address the problems associated with large-scale production will be tackled.

Deleted

(Amendment No. 37)

Annex I, Area 1, sub-heading 'New and improved materials',
after the seventh paragraph, new paragraph

In research into composite engineering the technologies needed to address the problems associated with series production will be tackled.

Commission text

Amendments

(Amendment No. 38)

Annex I, Area 1, sub-heading 'New and improved materials', eighth paragraph

In the case of superconductors, the challenge is to increase the maximum critical current density and capacity together with advances in application technologies including cable production, formation and reliability.

The research in this area will be complementary to work which will be carried out in the specific programme on information technology (IT) foreseen in decision 90/.../EEC, Euratom on materials for specific IT applications.

In the case of superconductors, the challenge is to increase the maximum critical current density and capacity together with advances in application technologies including production, formation and reliability of cables.

The research in this area will be complementary to work which will be carried out in the specific programme on information technology (IT) foreseen in decision 90/.../EEC, Euratom on materials for specific IT applications.

Research will also be directed to the study and development of new bioactive and biomedical materials.

(Amendment No. 39)

Annex I, Area 2, first paragraph

The objective is to improve the capability of industry to design and manufacture products which are, at the same time, highly competitive and environmentally and socially acceptable.

The objective is to improve the capability of industry to design and manufacture products which are, at the same time, of high quality, easy to maintain, highly competitive and environmentally and socially acceptable.

This work will complement the computer integrated manufacturing (CIM) element of the specific programme on information technology (IT) foreseen in decision 90/.../EEC, Euratom on materials for specific IT applications.

Commission text

Amendments

(Amendment No. 40)

Annex I, Area 2, paragraphs 1a and 1b (new)

All forms of industrial production are part of a system, in which the needs of users, design, materials, production equipment and the manufacturing process interact.

For any given application, the system must be optimized so that the required quality and reliability of a product may be obtained at a minimum cost.

(Amendment No. 41)

Annex I, Area 2, second paragraph

Research will be directed to advanced enabling disciplines such as mechanics, optics, acoustics, fluid dynamics and process engineering, and their integration into new technological developments such as optomatronics (optics, materials and electronics), mechatronics (mechanical engineering, computing and electronics), zero loss cutting technologies, microtechnology and molecular engineering.

Research will be directed to the application of advanced enabling disciplines such as physics and chemistry, mechanics, optics, acoustics, fluid dynamics, mathematical modelling and process engineering, and their integration into new technological developments such as optomatronics (optics, materials and electronics), mechatronics (mechanical engineering, computing and electronics) microtechnology and micro- and nanostructural engineering, including molecular engineering.

Special consideration will be given to active involvement of SMEs with their particular know-how and as experimental shop-floors and to the modernization of traditional industry.

Commission text

Amendments

(Amendment No. 42)

Annex I, Area 2, new paragraph after second paragraph

It should be pointed out that research will not be carried out in areas covered by the ESPRIT programme, such as modelling, but that it may deal with the application to SMEs of tools developed through the ESPRIT programme.

(Amendment No. 43)

Annex I, Area 2, sub-heading 'Design', first paragraph

Research on design will address the impact on product performance, manufacturing and life-cycle costs. This approach will link the information requirements inherent in the engineering design process (material products form, fabrication and function) with the organizational procedures and the human factors that underlie the process. This work will complement the product modelling approach which is a leading IT theme, in the specific programme on information technologies foreseen in Decision 90/.../EEC, Euratom.

Research on design will address the impact on product performance, the length of time needed for design, manufacturing and life-cycle costs. This approach will link the information requirements inherent in the engineering design process (material products form, fabrication and function) with the organizational procedures and the human factors that underlie the process. This work will complement the product modelling approach which is a leading IT theme, in the specific programme on information technologies foreseen in Decision 90/.../EEC, Euratom.

Commission text

Amendments

(Amendment No. 44)

Annex I, Area 2, sub-heading 'Design', third paragraph

Design research will be directed towards design for ease of maintenance, recycling or reuse with a view to reducing whole life costs. Research on improved modelling and rapid prototyping techniques will support the engineering design process addressing product validation, optimization and prediction of service behaviour. Prenormative research will aim at the drawing up of codes of good design practice.

Design research will be directed towards design for ease of manufacturing, quality control, maintenance, recycling or reuse with a view to reducing whole life costs. Research on improved modelling/simulation and rapid prototyping techniques, with a broad application field, will support the engineering design process addressing product validation, optimization and prediction of service behaviour. In acknowledging the advantages of the spread of best practice, projects will, wherever possible, contribute to the generation and development of standards and good design practice.

(Amendment No. 45)

Annex I, Area 2, sub-heading 'Manufacturing', first paragraph

Research on the quality of manufacturing will address the use of efficient and cost-effective manufacturing processes and integrate other aspects including the design interface, quality control and the working environment.

Research on the quality of manufacturing will address the use of efficient and cost-effective manufacturing processes and integrate other aspects including the design interface, quality control, maintenance of facilities and the working environment.

Commission text

Amendments

(Amendment No. 46)

Annex I, Area 2, sub-heading 'Manufacturing', second paragraph

Attention will be directed to flexible small-batch production technologies and also to mass production technology in order to meet an emerging need for identical technical products in large quantities. In particular, appropriate materials application and related technologies, such as those for precision engineering or incorporation of ceramics into a mass production environment, will be addressed as well as technologies for shaping, machining and assembly of miniaturized components.

Attention will be directed to flexible small-batch production technologies and also to mass production technology in order to meet an emerging need for identical technical products in large quantities. In particular, appropriate materials application and related technologies, such as those for precision engineering or incorporation of speciality materials into a mass production environment, will be addressed as well as technologies for shaping, machining and assembly of miniaturized and/or complex components.

(Amendment No. 47)

Annex I, Area 2, sub-heading 'Manufacturing', fifth paragraph

Research in chemical engineering will develop integrated approaches. Subjects of study could include process modelling, separation technology, molecular engineering, catalysis and surface science and chemical sensors. Fundamental research into mixing and stirring, and particle and powder technology will be supported in order to develop a better understanding than is provided by current empirical approaches. Research will also be directed to providing the understanding of particular processes as a basis for software tailored to particular needs.

Research in chemical engineering will develop integrated approaches. Subjects of study could include process modelling, separation technology, molecular engineering, catalysis and surface science and technology and chemical sensors. Fundamental research into mixing and stirring, and particle and powder technology will be supported in order to develop a better understanding than is provided by current empirical approaches. Research will also be directed to providing the understanding of particular processes as a basis for software tailored to particular needs.

Commission text

Amendments

(Amendment No. 48)
Annex II

Indicative breakdown of expenditure
for the period 1990-1994 (%)

In percentages, for the period 1990-
1994

Area 1: Materials - raw materials

Area 1: Materials - raw materials

. Raw materials and recycling 12

. Raw materials and recycling 12

. Materials 50-60

. Materials 40

Area 2: Design and manufacturing 30-40

Area 2: Design and manufacturing 48

The breakdown between different areas
does not exclude the possibility that
projects could cover several areas.

The breakdown between different
areas does not exclude the
possibility that projects could
cover several areas.

The establishment plan deemed
necessary for the duration of the
programme consists of 81 statutory
posts (A, B and/or C). The
Commission shall indicate each year
in the preliminary draft budget the
number of staff deemed necessary and
the corresponding expenditure. The
budgetary authority shall decide on
the appropriations.

1. An amount equivalent to 10% of
the total, shall be used for
projects encouraging fundamental
research which should be clearly
identified.

2. An amount equivalent to 5% of
the total, shall be devoted to
projects encouraging the training of
researchers in the fields covered by
this specific programme.

Commission text

Amendments

3. The projects mentioned in paragraphs 1 and 2 shall be the subject of agreements concluded with the universities and research institutes organized in research networks.

4. An amount equivalent to 5% of the total amount deemed necessary, shall be used for technological and risk assessment, the results of which shall be communicated to Parliament with the evaluation reports.

5. An amount equivalent to 10% of the total amount, is earmarked for support for the feasibility premiums for SMUs.

6. A minimum of 4% of the funds allocated shall be reserved for the objective of basic research in the areas of materials development in which industrial progress is currently impeded by a lack of the necessary basic knowledge.

(Amendment No. 49)

ANNEX III, Paragraph 2, fifth sub-paragraph

The concerted actions are those defined in the Financial Regulation.

The concerted actions are those defined in Article 92 of the Financial Regulation.

Rates of Community participation will be in accordance with Annex IV of Council Decision 90/221/Euratom, EEC.

Commission text

Amendments

(Amendment No. 50)
ANNEX III, Paragraph 3

3. The participants in the projects must be natural or legal persons established in the Community, such as universities, research organizations and industrial firms, including small and medium-sized enterprises, or associations thereof, in particular European economic interest groupings (EEIGs).

3. The participants in the projects must be natural or legal persons established in the Community, such as universities, research organizations and industrial firms, including small and medium-sized enterprises, or associations thereof, in particular European economic interest groupings (EEIGs).

The participants in the projects must effect 50% of their research and development expenditure in the European Community.

Natural or legal persons established in countries which have concluded agreements with the Community foreseeing scientific and technical research, may, based on the criterion of mutual advantage, take part in the projects undertaken in the context of this programme. The contracting parties under such arrangements shall not benefit from Community funding. They shall contribute to the general administrative costs.

Natural or legal persons established in countries which have concluded agreements with the Community foreseeing scientific and technical research, may, based on the criterion of mutual advantage, take part in the projects undertaken in the context of this programme. The contracting parties under such arrangements shall not benefit from Community funding under the Framework Programme. They shall contribute to the general administrative costs.

(Amendment No. 51)
ANNEX III, paragraph 4

4. The choice of projects shall be carried out according to the following order of priority, the first method being the rule, the second the exception.

4. The choice of projects shall be carried out according to the following order of priority, the first method being the rule, the second the exception.

The participants in the projects shall be selected on the basis of the ordinary procedure of calls for proposals referred to in Article 6(3) and published in the Official Journal of the European Communities.

The participants in the projects shall be selected on the basis of the ordinary procedure of calls for proposals referred to in Article 6(4) and published in the Official Journal of the European Communities.

Commission text

Amendments

Where other criteria of scientific excellence are satisfied, and in accordance with the guidelines agreed between Council and the European Parliament, in the case of a number of project proposals of equal scientific value, preference shall be given:

(i) to project proposals whose implementation involves project participants in less-developed regions and/or regions in industrial decline as defined by Articles 8 and 9 of Council Regulation EEC No. 2052/88

(ii) to project proposals involving small and medium-sized enterprises or an association of such enterprises.

The Commission shall determine in each case whether the management of the programme, or parts thereof, can be undertaken by organizations or institutions outside the Commission, and it shall delegate the work accordingly.

The Commission may also accept proposals according to an exceptional procedure and under the conditions mentioned below, when they make a particularly promising and significant contribution as regards the originality of the theme proposed, the novelty of the scientific and technical approach and the methodology of execution, also taking into account the particular nature of the proposers.

A favourable technical evaluation of such proposals shall not by itself be a sufficient justification for accepting a project; this exceptional procedure may only apply after verification that the nature of the project, as defined above, does not justify the use of the normal procedure for calls for proposals.

The Commission may also accept proposals according to an exceptional procedure and under the conditions mentioned below, when they make a particularly promising and significant contribution as regards the originality of the theme proposed, the novelty of the scientific and technical approach and the methodology of execution, also taking into account the particular nature of the proposers.

A favourable technical evaluation of such proposals shall not by itself be a sufficient justification for accepting a project; this exceptional procedure may only apply after verification that the nature of the project, as defined above, does not justify the use of the normal procedure for calls for proposals.

Commission text

The exceptional procedure must be completed before the ordinary procedure in such a way that the available amount for the Community's financial participation in projects retained by the ordinary procedure can be determined precisely. The closing date for the exceptional procedure shall be published each year in the Official Journal of the European Communities.

The amount of the financial participation of the Community for all the projects retained by the exceptional procedure will be decided each year, in relation to the projects selected according to particularly strict criteria of excellence. In any case, this amount may not exceed 15%; it may be revised each year in the light of experience.

Amendments

The exceptional procedure shall take effect after the first call for proposals and must be completed before the ordinary procedure in such a way that the available amount for the Community's financial participation in projects retained by the ordinary procedure can be determined precisely. The closing date for the exceptional procedure shall be published each year in the Official Journal of the European Communities.

When it submits the preliminary draft budget the Commission shall inform the budgetary authority whether the appropriations approved in the budget of the previous year have also financed projects retained by the exceptional procedure and the amounts allocated. Should these projects cover several programmes, it shall state the type of committee which assisted it.

The amount of the financial participation of the Community for all the projects retained by the exceptional procedure will be decided each year, in relation to the projects selected according to particularly strict criteria of excellence. In any case, this amount may not exceed 10% of the annual budget appropriation; it may be revised each year in the light of experience.

A new, two-stage selection procedure for projects shall be introduced, on an exceptional and partial basis; the first stage will be to select projects from feasibility studies and the second will select them from operational projects resulting from the feasibility studies already approved. The results of this new selection procedure shall be assessed in the evaluation report half-way through the programme.

Commission text

The Commission shall draw up a vade mecum setting out all the rules applicable to this exceptional procedure in order to guarantee full transparency.

Amendments

The Commission shall draw up a vade mecum setting out all the rules applicable to this exceptional procedure in order to guarantee full transparency.

It shall forward this vade mecum to Parliament at the latest before this Decision is adopted.

(Amendment No. 52)

ANNEX III, after paragraph 4, new paragraph (4a)

4a. The Member States may not transfer to a governmental, national, regional, local, departmental or other budget the Community funds allocated to organizations of a Member State in implementation of projects accepted under the terms of the project selection procedure described in paragraph 4 above.

(Amendment No. 53)

ANNEX III, paragraph 7

7. The knowledge acquired during the course of the projects shall be disseminated on the one hand within the specific programme and on the other hand by means of a centralized activity, pursuant to the decision referred to in the third paragraph of Article 4 in Decision 90/221/EURATOM, EEC.

7. The knowledge acquired during the course of the projects shall be disseminated with the specific programme and by means of, and in compliance with, the provisions governing the centralized action to be the subject of a decision taken by the Council in cooperation with Parliament pursuant to the third paragraph of Article 4 in Decision 90/221/EURATOM, EEC. The financial contribution of this programme amounts to ECU, in accordance with the financial provisions of Council Decision concerning centralized activities.

DRAFT LEGISLATIVE RESOLUTION

embodying the opinion of the European Parliament
on the Commission proposal for a Council Decision
adopting a specific research and technological development programme
in the field of Industrial and Materials Technologies
(1990-1994)

The European Parliament,

- having regard to the Commission proposal to the Council (COM(90) 0156 final - SYN 261)¹,
 - having been consulted by the Council pursuant to Article 130q (2) of the EEC Treaty (C3-0159/90),
 - having regard to the report of the Committee on Energy, Research and Technology and the opinions of the Committee on Budgets and the Committee on Economic and Monetary Affairs and Industrial Policy (A3-0329/90),
 - having regard to the Commission position on the amendments adopted by Parliament,
1. Approves the Commission proposal subject to Parliament's amendments and in accordance with the vote thereon;
 2. Calls on the Commission to amend its proposal accordingly, pursuant to Article 149(3) of the EEC Treaty;
 3. Calls for the conciliation procedure to be opened if the Council should intend to depart from the text approved by Parliament;
 4. Asks to be consulted again should the Council intend to make substantial modifications to the Commission proposal;
 5. Calls on the Council to incorporate Parliament's amendments in the common position that it adopts in accordance with Article 149(2)(a) of the EEC Treaty;
 6. Instructs its President to forward this opinion to the Council and the Commission.
1. OJ No. C 174, 16.7.1990, p. 28

