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Legislation

Contents

I Acts whose publication is obligatory

.....

II Acts whose publication is not obligatory

Council

92/272/EEC:

- ★ Council Decision of 29 April 1992 on the dissemination and exploitation of knowledge resulting from the specific programmes of research and technological development of the Community 1

92/273/EEC:

- ★ Council Decision of 29 April 1992 adopting specific research programmes to be implemented by the Joint Research Centre for the European Economic Community (1992-1994) 11

92/274/Euratom:

- ★ Council Decision of 29 April 1992 adopting specific research programmes to be implemented by the joint research centre for the European Atomic Energy Community (1992-1994) 20

92/275/Euratom:

- ★ Council Decision of 29 April 1992 adopting a supplementary research programme to be implemented by the joint research centre for the European Atomic Energy Community (1992-1995) 27

II

(Acts whose publication is not obligatory)

COUNCIL

COUNCIL DECISION

of 29 April 1992

on the dissemination and exploitation of knowledge resulting from the specific programmes of research and technological development of the Community

(92/272/EEC)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 130q (2) thereof,

Having regard to the proposal from the Commission ⁽¹⁾,

In cooperation with the European Parliament ⁽²⁾,

Having regard to the opinion of the Economic and Social Committee ⁽³⁾,

Whereas Article 130g (c) of the Treaty states that the Community, complementing the activities carried out in the Member States, is to carry out activities for the dissemination and optimization of the results of activities in Community research, technological development and demonstration;

Whereas the second paragraph of Article 130k of the Treaty stipulates that the Council shall define the detailed arrangements for the dissemination of knowledge resulting from the specific programmes;

Whereas the Treaty establishing the European Coal and Steel Community stipulates that the Commission is to carry

out activities in the coal and steel sector which do not form part of the Framework Programme for research and technological development, the results of which must be disseminated and used by means of suitable separate activities, using the resources of the ECSC 'operating budget';

Whereas, by its Decision 90/221/Euratom, EEC ⁽⁴⁾, the Council adopted a third Framework Programme for Community activities in the field of research and technological development (1990 to 1994), specifying, *inter alia*, the activities to be pursued for developing the scientific knowledge and technical know-how needed by the Community and providing that the detailed arrangements for the dissemination of the knowledge gained, in particular the definition and the implementation of the centralized action, should be the subject of a Council Decision;

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 ECU 57 million for the exploitation and dissemination of knowledge resulting from the specific R & D programmes;

Whereas the Euratom Treaty contains detailed provisions for the dissemination of information which apply, *inter alia*, to nuclear research programmes;

⁽¹⁾ OJ No C 53, 28. 2. 1991, p. 39.

⁽²⁾ OJ No C 13, 20. 1. 1992, p. 75; and Decision of 8 April 1992 (not yet published in the Official Journal).

⁽³⁾ OJ No C 339, 31. 12. 1991, p. 90.

⁽⁴⁾ OJ No L 117, 8. 5. 1990, p. 28.

Whereas the decisions relating to the research and training programmes in the fields of controlled thermonuclear fusion (1990-1994) and nuclear fission safety (1990-1994), together with the activities undertaken by the Joint Research Centre in the field of nuclear research, envisage that the amount estimated as necessary as the contribution of these programmes to the present centralized action for the dissemination and exploitation of results is ECU 6,57 million;

Whereas the dissemination of knowledge and exploitation of results should be dealt with in a coherent manner;

Whereas it is necessary to ensure the coherence of schemes for disseminating the knowledge resulting from specific programmes in the Framework Programme; whereas such coherence must be based on general rules which guarantee the protection of the legitimate interests of the public and private contracting parties and of the rights linked to the obtaining and exploitation of the results, as well as their exploitation in conformity with the Community's interests, in particular with respect to its economic and social cohesion;

Whereas, in order to improve the insertion of Community research into a broader context and to optimize the utilization of the knowledge which results from it, it is important that the centralized action should both intensify its emphasis on the research-industry interface and widen its scope to the research-science and research-society interfaces;

Whereas it is desirable to cooperate with existing networks for the dissemination and the promotion of innovation and to encourage new networks where these do not exist;

Whereas links with complementary mechanisms for downstream exploitation should also be developed, in particular with the Eureka initiative;

Whereas, in the context of this action, an assessment should be made of the economic and social impact as well as of any eventual technological risks;

Whereas basic research in the field of the dissemination and exploitation of R & D knowledge must be encouraged throughout the Community;

Whereas, in addition to the specific programme concerning human resources and mobility, it is necessary to encourage the training of research workers in the context of this action;

Whereas Decision 90/221/Euratom, EEC provides that a particular aim of Community research must be to strengthen the scientific and technological basis of European industry and to encourage it to become more competitive at international level; whereas it also provides that Community action is justified where research contributes, *inter alia*, to the strengthening of the economic and social cohesion of the Community and to the promotion of its overall harmonious development, while being consistent with the pursuit of scientific and technical excellence; whereas the present action is looked upon as contributing to the achievement of these objectives;

Whereas small and medium-sized enterprises (SMEs) should be involved to the maximum extent possible in this action; whereas account should be taken of their special requirements, without prejudice to the scientific and technical quality of the programme;

Whereas, in accordance with Article 130g of the Treaty, the Community's activities aimed at strengthening the scientific and technological basis of European industry and encouraging it to become more competitive include promoting cooperation on research and technological development with third countries and international organizations; whereas such cooperation may prove particularly beneficial for the development of this action;

Whereas the Scientific and Technical Research Committee (Crest) has delivered its opinion,

HAS ADOPTED THIS DECISION:

Article 1

1. The dissemination and exploitation of knowledge shall be carried out as part of the specific programmes and by means of a centralized action.

2. The centralized action, as defined in Annex I, shall ensure overall coordination and coherence in the field covered by the Framework Programme. It is adopted for the period running from 29 April 1992 to 31 December 1994.

Article 2

1. The amount of Community expenditure deriving from the levies on the funds estimated as necessary for the execution of the specific programmes, with a view to the implementation of the centralized action established by this Decision, is estimated at ECU 57 million, including expenditure on staff and administration amounting to ECU 9 million.

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

3. If the Council takes a decision pursuant to Article 1 (4) of Decision 90/221/Euratom, EEC, this Decision shall be adapted accordingly.

Article 3

Detailed rules for the implementation of the programme and the amount of the Community's financial contribution are set out in Annex III.

Article 4

1. In the course of the second year of the implementation of the action, the Commission shall review it and send a report on the results of its review to the European Parliament, the Council and the Economic and Social Committee; the report shall be accompanied, where necessary, by proposals for amendment of the action.

2. At the end of the action, an evaluation of the results achieved shall be conducted for the Commission by a Group of independent experts. The Group's report, together with the Commission's comments, shall be submitted to the European Parliament, the Council and the Economic and Social Committee.

3. The reports referred to in paragraphs 1 and 2 shall be established 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.

Article 5

1. The Commission shall be responsible for the implementation of the action.

2. A work programme shall be drawn up in accordance with the aims set out in Annex I 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 work programme.

Article 6

For the execution of this action, insofar as it relates to the specific programmes based on Article 130q (2) of the Treaty, the Commission shall be assisted by a committee composed of the representatives of the Member States and chaired by the representative of the Commission.

The representative of the Commission 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 lay down according to the urgency of the matter. The opinion shall be delivered by the majority laid down 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 representatives of the Member States within the committee shall be weighted in the manner set out in that Article. The Chairman shall not vote.

The Commission shall adopt the measures envisaged if they are in accordance with the opinion of the committee.

If the measures envisaged are not in accordance with the opinion of the committee, or if no opinion is delivered, the Commission shall, without delay, submit to the Council a proposal relating to the measures to be taken. The Council shall act by a qualified majority.

If, on the expiry of a period of three months from referral of the matter to the Council, the latter has not acted, the proposed measures shall be adopted by the Commission.

Article 7

1. The procedure laid down in Article 6 shall apply to:

- the preparation and updating of the work programme referred to in Article 5 (2),
- the contents of the calls for proposals,
- the assessment of the projects proposed and the estimated amount of the Community's contribution to them, where this amount exceeds ECU 150 000,
- departures from the general rules set out in Annex III,
- any adaptation of the indicative breakdown of the amount set out in Annex II,
- the measures to be undertaken to evaluate the action,
- measures for implementing the rules laid down in Article 8.

2. Where, pursuant to the third indent of paragraph 1, the amount of the Community contribution is less than or equal to, ECU 150 000, the Commission shall inform the committee of the projects and concerted actions and of the outcome of their assessment. The Commission shall also inform the committee of the implementation of the accompanying measures referred to in Annex III.

Article 8

For the execution of this action, insofar as it relates to the dissemination and exploitation of knowledge resulting from the specific programmes based on Article 130a (2) of the Treaty, hereinafter referred to as 'knowledge', the following rules, while respecting pre-existing rights, shall apply:

- (a) the knowledge resulting from work undertaken directly or the cost of which is wholly supported by the Community shall in principle be the property of the Community.

The knowledge resulting from work under a shared-cost contract shall be the property of the contractors who carry out the work. They shall agree between themselves on particular arrangements for such ownership;

- (b) knowledge which could be used in an industrial or commercial application, if its nature justifies such a measure, shall be protected in any appropriate form to the extent required in the light of the interests of the Community and its co-contractors and in accordance with any applicable legislation or convention;
- (c) the Community and its co-contractors shall be required to exploit the knowledge in their possession, or have it exploited, in conformity with the Community's interests and taking full account of the objective of strengthening the international competitiveness of European industry and the economic and social cohesion in the Community;
- (d) knowledge belonging to the Community shall be made available to its co-contractors and to interested third parties established in the Community who undertake to exploit it, or have it exploited, in conformity with

the Community's interests. Such provision of knowledge may be subject to appropriate conditions, particularly concerning the payment of fees.

All contractors shall make the knowledge in their possession, together with any information necessary for its use, available to the co-contractors and to interested third parties under contractually defined conditions, provided that the interests of the Community and the legitimate interests of its co-contractors are safeguarded;

- (e) the Commission shall ensure that knowledge suitable for dissemination according to the contractual terms is disseminated or published either by the Commission itself or by its co-contractors, without any restriction other than those imposed by the need to safeguard intellectual and industrial property, confidentiality or legitimate commercial interests.

The Commission shall lay down the arrangements for implementing the rules laid down in the first subparagraph of this Article, in accordance with the procedure described in Article 6.

Article 9

This Decision is addressed to the Member States.

Done at Luxembourg, 29 April 1992.

For the Council

The President

Luis VALENTE DE OLIVEIRA

ANNEX I

OBJECTIVES AND TECHNICAL CONTENT

The general aim of the centralized action for the dissemination and exploitation of knowledge resulting from Community research activities, carried out under this action, is to give specific added value to the R & D activities which are the subject of the third Framework Programme for 1990 to 1994. On the one hand, it provides the necessary continuity for some of the measures carried out under the Value programme; on the other, it introduces new topics concerned particularly with the repercussions of research and technological development activities and their results on society as a whole.

This centralized action is to be conducted in accordance with the following guiding principles.

(a) **Horizontality**

Measures to publish and utilize research results must apply to the whole range of Community R & D activities, covered by the Community Framework Programme, irrespective of the nature of programmes, the persons involved and the administrative authorities responsible. This criterion will be implemented through coordination and liaison between RTD specific programmes and the centralized action.

(b) **Internal complementarity**

The centralized action will coordinate and supplement the measures taken under the specific RTD programmes. It will also concentrate on activities requiring special infrastructure and skills (computerized information systems, a network of 'relay stations', etc.) or special capabilities for transferring know-how to fields of activity in other disciplines.

(c) **Subsidiarity**

The centralized action will build on the synergies between decentralized (public and private) and Community R & D activities and is designed, in conjunction with other Community measures and in cooperation with the national and regional authorities responsible, to establish a coherent mechanism for the utilization and transfer of the technologies and the know-how obtained from research and technological development, using, wherever possible, the existing structures in Member States.

As far as the content of the present action is concerned, those measures already launched to forge closer links between research and industry will be supplemented by other new measures designed to forge closer links between research and society and between research and the scientific community. These are measures which reflect the new scientific and technological objectives and constraints set by society and its institutions, and the increasing interest in the interdisciplinary approach to research and technological development activities. At this stage, and now that its activities are more developed, this centralized action will incorporate these new topics into its conceptual and operational framework.

Detailed objectives for the centralized action, including measurable targets and milestones, will be described in workplans, which will be submitted annually to the committee.

I. **RESEARCH-INDUSTRY INTERFACE**

The aim is to help to improve the international competitiveness of Europe's industry in accordance with the provisions of the Treaty by means of specific projects designed to maximize the impact of Community R & D activities on industry as a whole.

For this purpose, the networks and partnerships between companies and laboratories from the different countries which result from the Community R & D programmes constitute an important element of the mechanism set up for the dissemination and exploitation of their results.

It is up to companies, first and foremost, to make good use of the results and to protect these results as necessary. Cooperation between universities and industry is encouraged within the framework of specific programmes. The centralized action will help organizations involved in Community RTD projects to

protect their findings in certain cases where, for example, they lack the necessary expertise and are unable to obtain this through the usual national and commercial channels, and at the same time help them to exploit and promote such findings. The following measures are proposed:

I.1. New channels of information

(a) Network of relay centres

A network of relay centres will be set up to promote the dissemination and exploitation of Community R & D results, while taking into account, and building on, the existing structures in Member States designed for the same purpose. The relay centres will have special access to Community information, under the control of the Commission, and will have as their main task the tailoring and interpretation of this information to local needs, especially in relation to companies, particularly SMEs, universities and research institutes. The specific needs of the more peripheral and least-favoured areas of the Community will also be taken into account.

While giving full consideration to local needs and circumstances, the following activities, *inter alia* may be undertaken by the relay centres:

- the dissemination of information on Community programmes and calls for proposals;
- identification of opportunities for participation in Community R & D programmes, and general guidance to candidates in the preparation of proposals,
- facilitating the interpretation and dissemination of Community programme results for target audiences and local firms,
- promotion of the exploitation of the research results with potentially interested enterprises,
- assistance to organizations which have produced results in the identification of exploitation opportunities at a European level and market research possibilities,
- providing information on specialized agencies dealing with intellectual property and legal protection of results,
- providing information on possibilities for financial support.

Competent national authorities and the scientific, technical and industrial community will help the Commission to select the relay centres in the Member States and to define their specific tasks.

The relay centres will, at the outset, analyse current practice on dissemination and exploitation, identify new approaches, where necessary, and formulate a Plan of Action with specific targets.

I.1. (b) Basic Service

A user-friendly computerized information service called Cordis will become available in 1992. After 1992, and depending on the results of a detailed evaluation, the aim of the centralized action will be to update and expand the Cordis information service. The service could provide new functions and continue to expand using new sources of information, harmonize and/or integrate databases, use electronic storage devices (CD-ROM and video discs) and develop user-friendly systems for electronic data exchange in cooperation with related Community programmes.

The development of computerized methods does not exclude the use of more traditional methods such as the publication of bulletins and bibliographies which will provide wider access to information services.

I.2. Utilization of results

This activity, which was already started in the Value programme, should be extended to the new fields covered by the Framework Programme and developed in line with the results that become available in the years ahead. This means utilizing the research and development results of which the Community is the owner and, where needed, helping to utilize the results of research and development projects undertaken on a shared-cost basis. In the latter case, the aim will be to help contractors who do not have sufficient expertise, in particular the universities, research institutes and SMEs, to take advantage of the results of their research and development work and to help them to use the Community R & D results made available.

The work to be undertaken could take different forms, depending on each specific case, as follows:

- identifying, controlling and appraising the results of research in order to develop and target utilization plans,
- finding licensees, including for the JRC and, more generally, parties interested in utilizing results,
- providing adequate financing support for studies or tests and experimental developments.

This work will be carried out with the help of outside experts and competent organizations in the Member States.

I.3. Protection of results

The protection of results belonging to the Community and management of the patents portfolio that it holds will be continued, as in the past, through systematic examination of the final reports and results obtained by the JRC. The activities described below, which have already been started in the Value programme, will be developed more intensively by the centralized action.

Those universities, research centres and SMEs which do not have access to patenting expertise will, on request, be provided with aid by the centralized action. It will supply expertise on patents and financial support limited to the costs of searches for prior claims to novelty and first patent applications.

Public awareness campaigns may also be organized on the importance of protection results for the research scientists participating in community R & D programmes.

I.4. Promotional activities

Promotion on the results could take the following form:

- financial support for organizations making an active contribution to the promotion of results and, in general, for organizations within a transnational network set up in order to facilitate, promote and coordinate access to Community programmes,
- organization of seminars, conferences and other means of communication, including in association with the respective bodies in the Member States and, in particular, with the 'relay centres',
- attendance of trade fairs.

Specific activities are planned to provide economic and social cohesion in regions where dissemination and utilization structures do not exist or are still in their infancy.

II. INTERFACE BETWEEN RESEARCH AND THE SCIENTIFIC COMMUNITY

The objective of the activities under this heading is to contribute to interdisciplinary reflection in relation to research, its methods, problems and impact. Such activities will be structured around the following four areas:

II.1. General context of research

The aim is to study the constraints and/or opportunities for the dissemination and exploitation of R & D activities applying the disciplines of law, political sciences, social and human sciences. Examples of topics to be considered could be:

- history and comparative analysis of public and private research structures,
- aspects of civil and public law, mainly in respect of intellectual property rights,
- international rules on scientific and technological information.

II.2. Communication of research

The objective is to improve the communication of research towards its various users, by obtaining a better understanding of communication patterns. Disciplines of a sociocultural nature will play an important role in those studies. Therefore, findings in certain disciplines, such as logic, semiotics, epistemology and cognitive sciences, will be applied to the analysis and development of the communication of research.

II.3. Economics of research

Macroeconomic instruments and business sciences must be used to determine the optimum use of resources to be channelled into research as part of general economic development objectives and company objectives. Taking account also of studies conducted in other contexts, the cost/benefit aspects of the cycle of research and development, and the economic obstacles to its exploitation, will be examined, in particular with a view to main optimal use of the financial resources allocated under the third Framework Programme.

II.4. Management of research

The overall objective is to promote knowledge of best practice in the management of R & D in order to contribute to better exploitation of results. Management studies will help with the organization of research and laboratory management. They can make a contribution to project management, administrative procedures and methods of management. Particular attention will be paid to subjects relating to decentralized management and making more efficient use of human resources in the departments which manage research. Comparative studies will be conducted on the different management models used by universities and industrial research institutes.

III. INTERFACE BETWEEN RESEARCH AND SOCIETY

This heading covers measures designed to identify and study the impact on society of the new scientific and technological knowledge acquired as a result of Community activities, especially where the interaction between science and technology, on the one hand, and society, on the other, is particularly critical. The aim is to spread scientific know-how widely through Europe in order to seek to ensure that changes in the contemporary approach to science are compatible with developments in society.

To this end, it should take its place in an efficient interactive process consisting of the following stages: research, research results, public perception and reaction, assessment of social impact, modification of research activities where necessary. In order to ensure that this procedure works effectively, close links will have to be forged across the board with the specific study programmes developed prior to the policy-making process. Wherever possible, activities will be based on the work of, and executed in close coordination with, existing organizations in the Member States. The centralized action will be in three parts.

III.1. Contribution to assessment of the social impact of science and technology

In conjunction with the more specific activities provided for in the individual specific programmes and with the activities of the Monitor programme, more general 'technology assessment' schemes will be developed. Those areas which will be specially monitored and studied are not only those which relate to the exploitation of new technologies affecting health, safety and the environment, but also ethical and legal questions relating to the exploitation of results.

III.2. Communication with the public

The centralized action will make use of channels of communication, particularly the mass media, to provide information for the public, building on existing structures in Member States. Where appropriate, use could be made of the relay centres mentioned under I.1. (a).

III.3. Analysing public demand and new requirements

In conjunction with other programmes concerned, including the Monitor programmes ⁽¹⁾, the centralized action will provide studies and surveys designed to identify the latest social needs, through its direct contact with actual or potential users of the knowledge resulting from R & D programmes.

(¹) Decision 89/414/EEC of 27 June 1989 (OJ No L 200, 13. 7. 1989, p. 38).

ANNEX II

INDICATIVE BREAKDOWN OF EXPENDITURE

	(ECU million)
I. Research-industry interface	50
II. Research-scientific community interface	4
III. Research-society interface	3
	57 ⁽¹⁾

⁽¹⁾ Including expenditure on staff amounting to ECU 4 million and administrative expenditure totalling ECU 5 million.

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

ANNEX III

RULES FOR IMPLEMENTING THE ACTION

1. The Commission will implement the action on the basis of the scientific and technical content described in Annex I. It will apply the accumulated experience and best practice of both European and international experts in this field.
2. The rules for implementing the action, referred to in Article 3, comprise projects, concerted actions and accompanying measures. Selection of projects must take account of the criteria listed in Annex III to Decision 90/221/Euratom, EEC and of the objectives set out in Annex I to this programme.

— Projects

The projects will be the subject of shared-cost contracts and Community financial participation which will not normally be more than 50 %. Universities and other research centres participating in shared-cost projects will have the option of requesting, for each project, either 50 % funding of total expenditure or 100 % funding of the additional marginal costs.

Shared-cost projects must, as a general rule, be carried out by participants established in the Community, for example universities, research organizations and industrial firms, including small and medium-sized enterprises. Contracts relating to shared-cost projects must as a general rule be concluded following a selection procedure based on calls for proposals published in the *Official Journal of the European Communities*.

— Concerted actions

Concerted actions consist of action by the Community to coordinate the individual activities carried out in the Member States. They may benefit from funding of up to 100 % of coordinating expenditure.

— Accompanying measures

The accompanying measures referred to in Article 7 will in particular be implemented through:

- the organization of seminars, workshops and scientific conferences;
 - internal coordination through the creation of integrating groups;
 - independent scientific and strategic evaluation of the operation of the projects and the action;
 - contribution to studies and enquiries.
-

COUNCIL DECISION

of 29 April 1992

adopting specific research programmes to be implemented by the Joint Research Centre for the European Economic Community (1992-1994)

(92/273/EEC)

THE COUNCIL OF THE EUROPEAN COMMUNITY

Having regard to the Treaty establishing the European Economic Community, and in particular Article 130q (2) thereof,

Having regard to the proposal from the Commission ⁽¹⁾,

In cooperation with the European Parliament ⁽²⁾,

Having regard to the opinion of the Economic and Social Committee ⁽³⁾,

Whereas on 29 April 1992, the Council adopted a Resolution concerning the activities to be undertaken by the Joint Research Centre ⁽⁴⁾;

Whereas, by its Decision 90/221/Euratom, EEC ⁽⁵⁾, the Council adopted a third framework programme for Community activities in the field of research and technological development (1990-1994), specifying in particular the activities to be pursued concerning enabling technologies, the management of natural resources and the management of intellectual resources; whereas this Decision should be taken in the light of the grounds set out in the preamble to that Decision;

Whereas Article 130k of the Treaty stipulates that the framework programme is to be implemented through specific programmes developed within each activity, whereas specific Community programmes implemented by the Joint Research Centre (JRC) are carried out in parallel with the corresponding framework programmes;

Whereas the JRC, as set out in Decision 90/221/Euratom, EEC and as reaffirmed in the Council Resolution of 29 April 1992, is called on to contribute to the implementation of the framework programme, particularly

in those fields where it has the necessary competence to offer impartial and independent expertise for the benefit of all Community policies; whereas such activity should form part of a long-term strategy resulting in the JRC playing a significant role in European scientific cooperation with a view to meeting the international competitive challenge;

Whereas the JRC can contribute to the realization of the said activity, particularly in the fields of industrial and materials technologies, measurement and testing, human capital and mobility and in the field of the environment;

Whereas the JRC should contribute to research with a view to identifying options for combating the greenhouse effect and the major industrial risks facing the Community and should contribute to international cooperation in the fields of energy and environment with regard to worldwide climatic change;

Whereas the JRC should continue to play a role in examining the issues relating to renewable energy sources, with particular regard to the harmonization of standards;

Whereas the JRC with its laboratories and installations can provide an efficient focal point for the training and mobility of researchers, in particular young researchers; whereas, to this end, collaboration should be encouraged with public laboratories, scientific institutions and industry in all the Member States;

Whereas, in the context of all these programmes, it is desirable that an assessment be made of the economic, social and, where appropriate, ethical impact as well as of any technological risks;

Whereas, pursuant to Article 4 of, and Annex I to, Decision 90/221/Euratom, EEC, the funds estimated as necessary for the whole framework programme include an amount of ECU 57 million for the centralized action of dissemination and exploitation of results, to be divided up in proportion to the amount envisaged for each specific programme;

Whereas Decision 90/221/Euratom, EEC provides that a particular aim of Community research must be to strengthen the scientific and technological basis of European industry and to encourage it to become more

(1) OJ No C 234, 7. 9. 1991, p. 9.

(2) OJ No C 13, 20. 1. 1992, p. 10; and Decision of 8. 4. 1992 (not yet published in the Official Journal)

(3) OJ No C 49, 24. 2. 1992, p. 16.

(4) OJ No C 118, 9. 5. 1992, p. 8.

(5) OJ No L 117, 8. 5. 1990, p. 28

competitive at international level; whereas that Decision also provides that Community action is justified where research contributes, *inter alia* to the strengthening of the economic and social cohesion of the Community and to the promotion of its overall harmonious development, while being consistent with the pursuit of scientific and technical excellence; whereas the programmes of the JRC should contribute to the achievement of these objectives;

Whereas the JRC could explore, and seek to benefit from, new perspectives for scientific and technical cooperation with certain third countries;

Whereas the Board of Governors of the Joint Research Centre plays a significant part, on one hand, in the administrative operation of the Centre and, on the other, in the implementation of its research programmes;

Whereas the Scientific and Technical Research Committee (CREST) has been consulted,

HAD ADOPTED THIS DECISION:

Article 1

1. The specific research and development programmes to be executed by the JRC for the Community in the fields of industrial and materials technology, measurement and testing, environment, as well as in the field of human capital and mobility, as defined in Annex I, including exploratory research activities, are hereby adopted for a period running from 1 January 1992 to 31 December 1994. They shall be implemented in parallel with corresponding specific programmes of the third framework programme.

2. The JRC may take part, as appropriate, in the centralized action for the dissemination and exploitation of knowledge resulting from Community research activities, as provided for in the framework programme and in close coordination with the Committee set up under that action.

Article 2

1. The funds estimated as necessary for the execution of the programmes amount to ECU 341,55 million.

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

3. Should the Council take a decision pursuant to Article 1 (4) of Decision 90/221/Euratom, EEC, this Decision shall be adapted accordingly.

Article 3

Detailed rules for the implementation of the programmes are set out in Annex III.

Article 4

1. The Commission shall each year before 31 March present to the European Parliament, the Council and the Economic and Social Committee a report on the implementation of this Decision.

2. The report referred to in paragraph 1 shall be accompanied by the observations of the Board of Governors of the JRC (hereinafter referred to as the 'Board of Governors'). The latter may also present through the Commission to the European Parliament, the Council and the Economic and Social Committee a separate report on any aspect of the implementation of this Decision.

Article 5

1. Research carried out by the JRC will be evaluated by a group of independent external experts set up by the Commission after consulting the Board of Governors. An evaluation report on the subject shall be established at the end of the programmes.

2. The evaluation report referred to in paragraph 1, accompanied by the opinion of the Board of Governors, shall be forwarded by the Commission to the European Parliament, the Council and the Economic and Social Committee.

Article 6

The reports referred to in Articles 4 and 5 shall be established 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.

Article 7

1. The Commission, assisted by the Board of Governors, shall be responsible for carrying out the programmes and to this end shall call upon the services of the JRC.

2. The Commission, in cooperation with the Board of Governors, shall ensure periodical consultation with relevant Committees to ensure close coordination between Community shared-cost actions, corresponding national activities and those of the JRC in the same areas with the aim of ensuring a coherent approach.

Article 8

The Commission shall decide on the terms of reference of the Board of Governors.

Article 9

1. The Commission is authorized to negotiate, in accordance with Article 130n of the Treaty, international agreements with third country members of COST, in particular member countries of the European Free Trade Association (EFTA) and Central and Eastern European countries, with a view to associating them with the JRC activities.

2. The Commission, assisted by the Board of Governors, may, on the basis of the criterion of mutual benefit, request the JRC to execute projects with bodies and enterprises established in European third countries in the context of the specific programmes carried out by the JRC.

No contracting body based outside the Community and participating in an action undertaken within the

arrangements of a programme shall benefit from the financing granted to the programme by the Community. Such a body shall contribute to the general administrative costs.

Article 10

This Decision is addressed to the Member States.

Done at Luxembourg, 29 April 1992

For the Council

The President

Luis VALENTE DE OLIVEIRA

ANNEX I

SCIENTIFIC AND TECHNICAL OBJECTIVES

The work of the JRC will be to conduct both basic/strategic and applied/target oriented research. It will be carried out as an integral part of the European science and technology system and following the basic principles of customer/contractor and subsidiarity, taking account of the following characteristics:

- scientific and technical excellence,
- neutrality and independence,
- unique research facilities,
- openness to all Member States.

The basic and applied research in science and technology carried out by the JRC should meet the needs of the Community as a whole, its institutions and Member States with the objectives of:

- contributing to the strengthening of the scientific and technological basis for European industry and to the development of its international competitiveness,
- contributing to the enhancement of the quality of the human and natural environment,
- contributing to the improvement of public safety aspects of new technologies,
- contributing to the reduction of scientific and technological disparities between the Member States,
- providing scientific and technical services to Community institutions and making JRC competences and scientific and technical installations available to public and private bodies.

The European dimension of its work must remain one of the fundamental strengths of the JRC. Its activity should be characterized by a multidisciplinary approach based on the large span of its competences. This multidisciplinary shall be reflected in the choice of subjects of its institutes, thus ensuring its aptitude to take up new eventual challenges.

This large exposure should not, however, lead to an excessive dispersion of the activities which are undertaken. Without ignoring the expectations of its customers, the Centre and its management must have clear views on the proper scientific-technical orientations for the JRC and be able to keep a balance in order to ensure that the activities and contracts which are accepted can be executed at any time with the requisite level of competence, qualitatively as well as quantitatively.

Paragraphs 2A and 2C of Section I, 3A and 3B of Section II and paragraph 6 of Section III of Annex II of the framework programme form an integral part of the present JRC multiannual programmes.

The following presents a summary of the objectives of the programmes based on, and taking into account, the above elements.

I. ENABLING TECHNOLOGIES

Line 2: Industrial and materials technologies

The objective is to provide a contribution to the strengthening of European industry and its working environment by extending its scientific base through research and development work. The emphasis will be on the acquisition of the scientific and technical knowledge needed in order to establish standards and codes of good practice facilitating the transfer of technologies, and the harmonization of methods of measurement and testing.

Working environment

While keeping in mind the normal application of the subsidiarity principle, an important project selection criterion will be the orientation towards prenormative research. The Community will be called upon for further regulatory actions in areas such as health care and risk control, setting upper and lower limits (e.g. toxicology), standard evaluation methods and procedures for analysis, evaluation or risks to workers and

evaluation of the working environment in relation to the introduction of new technologies. Research should furthermore evolve in close collaboration with relevant national bodies in the Member States and with the propose European Agency for Safety and Health at Work.

Consequently, the JRC has selected the following research themes which match existing JRC skills with the objective of actively contributing to this work:

- toxicology and occupational health,
- occupational accident research,
- risk prevention.

Materials

With regard to materials, research will be oriented in particular towards the following areas which all have a strong prenormative dimension and represent important enabling technologies for a whole range of advanced industrial applications:

- alloys and intermetallics,
- ceramics and composites,
- coatings and processing,
- surface modification technology,
- new functional materials,
- non-destructive and evaluation techniques for advanced materials and components,
- information and data management.

These projects have the objective of helping to ensure that Community manufacturing industry has better access to a range of cost-effective, well-characterized advance materials are incorporated into high performance components. The activity also provides a focal point for the exchange of information on prenormative research on advanced materials. The research supported by unique facilities at the JRC will be conducted in close contact with manufacturing and user industries and, furthermore, aim at supporting wider European and international standardization efforts in the vast field of new materials.

Measurement and testing

The Central Bureau for Nuclear Measurements will continue its activities in both the nuclear and non-nuclear fields of reference materials and measurements, notably in the following areas:

- preparation, characterization and certification of samples,
- long-lived or stable isotope mass spectrometry,
- nuclear data measurements and evaluation,
- radionuclide metrology,
- applied radiation techniques.

Research also in the growing application of these specialized techniques to non-nuclear areas will capitalize on the existing experimental facilities including the particle accelerators. Activities in support of consumer protection policy will be continued. Furthermore, specific prenormative research activities will be continued in the fields of reliability of structures and on a lesser scale in renewable energies (photovoltaic), the latter activity being centred on the utilization of the existing European Solar Test Installation (ESTI). Research and reliability of structures will be refocussed on the use of the new reaction wall facility. In the context of a multinational programme, other significant activities with national participation are performed in the areas of life prediction of structures and the evaluation of their lifetime in service.

II. MANAGEMENT OF NATURAL RESOURCES

Line 3: Environment

The objective is to provide a contribution to the scientific knowledge, technical know-how and data needed by the Community, in particular to carry out its role with regard to the environment, as spelt out in Title VII of the Treaty, and with particular emphasis on prenormative work.

Special emphasis will be placed on, in addition to the evaluation of the effects of pollution from industrial and other sources, the assessment of environmental degradation caused by the use of energy in the home, transport and industry.

The JRC will contribute to the implementation of Community environment policy in three areas:

- participation in global change programmes,
- technologies and engineering for the environment,
- research on industrial hazards.

In the global change area, emphasis will be placed on strong cooperation with laboratories and institutes in the Member States and at international level. The JRC contribution will concern mainly:

- modelling and air pollution transport,
- air chemistry linked notably to the fate of biogenic and anthropogenic emissions,
- biosphere-atmosphere interaction,
- related applications of remote sensing, which will focus on the interactions between land and ocean surface parameters and climate. It is furthermore aimed at the development of remote sensing methods applied to critical components of global change.

Activities under the heading of technologies and engineering for the environment will concern mainly:

- environmental chemicals (migration and transformation in soil and their impact on ground water, harmonization of analytical methods for waste analysis, development of a mobile laboratory for in-field analysis of contaminants in soil and water, characterization of algalblooms, biomonitoring of environmental chemicals, trace metal exposures and human diseases, risk evaluation of environmental chemicals); these activities will notably be aligned towards chemical waste problems,
- the further development of techniques and systems to protect the environment, more specifically systems to prevent or mitigate process and equipment failures in the chemical and process industry,
- environment monitoring by remote sensing centred on advanced techniques: research, with development of techniques for applications of data derived from earth observation satellites, on environmental mapping and monitoring. Application of similar techniques as a contribution to global change programmes with emphasis on the monitoring of marine environment and on processes related to large-scale changes in terrestrial ecosystems. Development of a series of advance techniques, their technologies and engineering, for use in connection with the exploitation of new earth-observation systems, including microwave remote sensing, imaging spectroscopy and data processing.

The research on environmental technologies and engineering will underpin the contribution to the European Environment Agency with development of new instruments and trial techniques, to the harmonization of methods of measurement and to intercalibration.

The research and application of remote sensing techniques will be performed in close collaboration with the other agents and the European users.

Research on economic and social aspects will relate essentially to risk management and conventional industrial safety such as the development of decision support systems for plant safety, plant emergency management and territorial risk management.

The existing work on reliability, risk assessment and accident management will be strengthened.

Given the interdisciplinary character of safety-related problems and the research required for their solution, the above work, together with other related research work, should result in:

- the development and verification of reference calculation tools in those areas in which the complexity and nature of events to be analysed demand a harmonized approach in the Member States,
- addressing the accident prevention issue in the following areas: validation and further improvement of construction norms and standards, structural diagnostic and reliability and validation and harmonization of inspection procedures,
- providing response/rescue organizations with promptly available information and research results to help in an actual emergency, plus the data acquisition and management to facilitate post-accident analysis and mitigation. One area of particular concern should be the transportation of hazardous material.

In addition to research, development and support, the programme would provide education and training in each of the above areas and establish data collection, interpretation and distribution facilities where necessary.

These activities could become the point of contact and common interface for national organizations, in particular public authorities and industries, and for support to other Commission services, including DGs V and XI.

Line 6: Human capital and mobility

The objective is to provide a particular contribution to help increase the human capital in terms of research and technological development, which the Member States will be needing for the next decade, and to focus on the interaction and collaboration between teams and laboratories in all Member States and the JRC by providing training opportunities for researchers, in particular young researchers, setting up networks with the JRC, and encouraging the use of JRC experimental facilities by national teams.

The action of providing training opportunities for researchers embarking on careers in research and technological development is pursued by offering them temporary attachment to relevant JRC institutes and embedding them in research teams working through networks with national laboratories. Specific joint projects may be of a theoretical nature or such as call for the utilization of scientific experimental facilities at the JRC.

Within the networks, particular emphasis should be placed on the encouragement of exchange of researchers — junior as well as more experienced — between national laboratories and the JRC, allowing both for national staff to join the JRC for a limited period of time — up to three years — and for the JRC staff, in the same way, to join national laboratories and teams.

The network-oriented actions aim at consolidating existing agreements between national laboratories and the JRC and stimulating the creation of such new agreements with national laboratories around specific themes and calling for collaboration on specified joint projects throughout the networks of laboratories, including relevant JRC scientific institutes.

Joint projects to be executed within the networks should be defined in concert with all partners of the network concerned. The selection of researchers who should take advantage of the mobility and training opportunities should also be made in concert with the partners, taking into account the selection criteria defined in Annex III of the human capital and mobility programme.

Alongside the network agreements, access by interested national teams to JRC experimental facilities should be encouraged by offering appropriate hosting support for experiments of mutual interest between the national teams and the JRC.

Finally, the training opportunities for young researchers should be strengthened by provision and support for participation in JRC Euroconferences and similar activities conducted on JRC sites or elsewhere in the Community in collaboration with national research laboratories.

ANNEX II

AMOUNTS DEEMED NECESSARY FOR SPECIFIC PROGRAMMES WITH INDICATIVE BREAKDOWN
OF EXPENDITURE FOR THE PERIOD 1992-1994

	(ECU million)
I. ENABLING TECHNOLOGIES	
<i>Line 2: Industrial and materials technologies</i>	
— Industrial and materials technologies	77,22 ⁽¹⁾
— Measurement and testing	91,08 ⁽¹⁾
II. MANAGEMENT OF NATURAL RESOURCES	
<i>Line 3: Environment</i>	
— Environment	148,50 ⁽¹⁾
III. OPTIMIZATION OF INTELLECTUAL RESOURCES	
<i>Line: 6: Human capital and mobility</i>	
— Human capital and mobility	<u>24,75 ⁽¹⁾</u>
Total	341,55 ⁽²⁾

⁽¹⁾ These totals include an amount equivalent to 6 %, which may be used for exploratory research.

⁽²⁾ An amount of ECU 3,45 million not included in the ECU 341,55 million is reserved, as a contribution from the specific programmes of the present Decision, for the centralized action on dissemination and exploitation of results.

ANNEX III

RULES FOR IMPLEMENTING THE PROGRAMMES AND ACTIVITIES FOR DISSEMINATION AND EXPLOITATION OF THE RESULTS

1. The Commission, assisted by the Board of Governors of the Joint Research Centre, shall implement the programmes on the basis of the scientific and technical objectives and content described in Annex I.
2. The rules for implementing the programmes, referred to in Article 3, comprise research and technological development projects and accompanying measures.

The projects shall be the subject of research and technological development performed in the relevant institutes of the Joint Research Centre (JRC).

3. The institutes of the JRC shall endeavour, whenever feasible, to execute the projects in proper collaboration and in concert with national research bodies in the Member States, taking into account as far as possible regional development aspects of research and technology activities and their potential socio-economic effects. Particular attention will be paid to associations with industry, notably with small and medium sized enterprises, in collaborative schemes around the projects. In the same way, research bodies established in third countries may also collaborate on projects in accordance with Article 9.

Research projects open to international cooperation under the terms set out in the previous subparagraph shall include cooperation measures with international research laboratories and make provision for the exchange of researchers. Supplementary measures should allow cooperation with research laboratories and institutions located in the countries of Central and Eastern Europe.

4. Accompanying measures shall include:

- the organization of seminars, workshops and scientific conferences,
- activities of internal coordination, including the organization of particular internal centres, which ensure homogeneity of the approach and a unique common interface to the users of, and partners in the projects,
- activities of specialized training with accent on multidisplinary,
- a system for information exchange,
- the promotion of the exploitation of research results,
- the scientific and strategic independent evaluation of the performance of the projects and the programmes.

5. Knowledge gained through the realization of the projects will be disseminated on the one hand by the programmes themselves, and, on the other, by the centralized action described in the third subparagraph of Article 4 of Decision 90/221/Euratom, EEC.

COUNCIL DECISION

of 29 April 1992

adopting specific research programmes to be implemented by the joint research centre for the European Atomic Energy Community (1992-1994)

(92/274/Euratom)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Atomic Energy Community, and in particular Article 7 thereof,

Having regard to the proposal from the Commission submitted after consultation of the Scientific and Technical Committee ⁽¹⁾,

Having regard to the opinion of the European Parliament ⁽²⁾,

Having regard to the opinion of the Economic and Social Committee ⁽³⁾

Whereas the Council adopted a Resolution on 29 April 1992 concerning the activities to be undertaken by the Joint Research Centre ⁽⁴⁾.

Whereas, by its Decision 90/221/Euratom, EEC ⁽⁵⁾, the Council adopted a third Framework Programme for Community activities in the field of research and technological development (1990 to 1994), specifying in particular the activities to be pursued concerning the management of natural resources; whereas this Decision should be taken in the light of the grounds set out in the preamble to that Decision;

Whereas, for activities covered by the EAEC Treaty, Article 2 of Decision 90/221/Euratom, EEC provides for the implementation of the third Framework Programme through programmes adopted in accordance with Article 7 of the said Treaty;

Whereas the Joint Research Centre (JRC), as provided for in Decision 90/221/Euratom, EEC is called on to contribute to the implementation of the Framework Programme, particularly in those fields where it can offer impartial and independent expertise for the benefit of all Community policies;

Whereas the JRC can contribute to the realization of said actions, particularly in the field of research in nuclear fission safety, especially concerning prenormative aspects;

Whereas, in the context of these programmes, it is desirable that an assessment be made of the economic and social impact as well as of any technological risks;

Whereas, pursuant to Article 4 and Annex I of Decision 90/221/Euratom, EEC the funds estimated as necessary for the whole Framework Programme include an amount of ECU 57 million for the centralized dissemination and exploitation of results, to be divided up in proportion to the amount envisaged for each specific programme;

Whereas Decision 90/221/Euratom, EEC provides that a particular aim of Community research must be to strengthen the scientific and technological basis of European industry, and to encourage it to become more competitive at the international level; whereas that Decision also provides that Community action is justified where research contributes, *inter alia*, to the strengthening of the economic and social cohesion of the Community and to the promotion of its overall harmonious development, while being consistent with the pursuit of scientific and technical excellence; whereas the programmes of the Joint Research Centre should contribute to the achievement of these objectives;

Whereas the JRC could explore and seek to benefit from new perspectives for scientific and technical cooperation with some third countries;

Whereas, particularly with regard to nuclear safety, the JRCs work and experience should be usefully exploited by the Commission in its action of assisting the countries of central and eastern Europe with regard to improving safety conditions in their nuclear plants, which is a matter of concern throughout the European continent;

Whereas the Board of Governors of the JRC plays a significant part on one hand in the administrative operation of the Centre and on the other in the implementation of its research programmes,

(1) OJ No C 234, 7. 9. 1991, p. 15.

(2) OJ No C 13, 20. 1. 1992, p. 510.

(3) OJ No C 49, 24. 2. 1992, p. 16.

(4) OJ No C 118, 9. 8. 1992, p. 8.

(5) OJ No L 117, 8. 5. 1990, p. 28.

HAD ADOPTED THIS DECISION:

Article 1

1. The specific research and development programmes to be implemented by the Joint Research Centre (JRC) for the European Atomic Energy Community in the fields of research in nuclear fission safety and controlled nuclear fission, especially concerning prenormative aspects, as defined in Annex I, including exploratory research activities, are hereby adopted for a period running from 1 January 1992 to 31 December 1994. They shall be implemented in parallel with corresponding specific programmes of the third Framework Programme.

2. The JRC may take part, as appropriate, in the centralized action for the dissemination and exploitation of knowledge resulting from Community research activities as provided for in the Framework Programme and in close coordination with the Committee set up under that action.

Article 2

1. The funds estimated as necessary for the execution of the programmes amount to ECU 202,95 million.

2. An indicative breakdown of funds is set out in Annex II.

3. Should the Council take a decision pursuant to Article 1 (4), of Decision 90/221/EEC, this Decision shall be adapted accordingly.

Article 3

Detailed rules for the implementation of the programmes are set out in Annex III.

Article 4

1. The Commission shall each year before 31 March submit to the European Parliament, the Council and the Economic and Social Committee a report on the implementation of this Decision.

2. This report shall be accompanied by the observations of the Board of Governors. The latter may also submit through the Commission to the European Parliament, the Council and the Economic and Social Committee a separate report on any aspect of the implementation of this Decision.

Article 5

1. Research carried out by the JRC shall be evaluated by a group of independent external experts set up by the Commission after consulting the Board of Governors. A report on the subject shall be established at the end of the programmes.

2. The evaluation report, accompanied by the opinion of the Board of Governors of the JRC, shall be transmitted by the Commission to the European Parliament, the Council and the Economic and Social Committee.

Article 6

The reports referred to in Articles 4 and 5 shall be established 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.

Article 7

1. The Commission, assisted by the Board of Governors of the JRC shall be responsible for carrying out the programmes and to this end shall call upon the services of the JRC.

2. The Commission in cooperation with the Board of Governors, shall ensure periodical consultation with relevant Committees to ensure close coordination between Community shared cost actions, corresponding national activities and those of the JRC in the same areas with the aim of ensuring a coherent approach.

Article 8

The Commission shall decide on the terms of reference of the Board of Governors.

Article 9

1. The Commission is authorized to negotiate, in accordance with the second paragraph of Article 101, of the Treaty, international agreements with third country members of COST, in particular member countries of the European Free Trade Association (EFTA) and central and eastern European countries, with a view to associating them with the JRC activities.

2. The Commission, assisted by the Board of Governors, may, on the basis of the criterion of mutual benefit, request the JRC to execute projects with bodies and enterprises established in European third countries in the context of the specific programmes carried out by the JRC.

No contracting body based outside the Community and participating in an action undertaken within the arrangements of a programme shall benefit from the financing granted to the programme by the Community. Such a body shall contribute to the general administrative costs.

Done at Luxembourg, 29 April 1992

For the Council

The President

Luis VALENTE DE OLIVEIRA

Article 10

This Decision is addressed to the Member States.

ANNEX I

SCIENTIFIC, TECHNICAL OBJECTIVES AND CONTENT OF THE PROGRAMMES

The work of the JRC will be to conduct both basic/strategic and applied/target oriented research; It will be carried out as an integral part of the European science and technology system and following the basic principles of customer/contractor and subsidiarity, taking account of the following characteristics:

- scientific and technical excellence,
- neutrality and independence,
- unique research facilities,
- openness to all Community Member States.

The basic and applied research in science and technology carried out by the JRC should meet the needs of the Community as a whole, its Institutions and Member States with the objectives of;

- contributing to the strengthening of the scientific and technological basis for European industry and to the development of its international competitiveness,
- contributing to the enhancement of the quality of the human and natural environment,
- contributing to the improvement of public safety aspects of new technologies,
- contributing to the reduction of scientific and technological disparities between the Member States of the Community,
- provide scientific and technical services to Community Institutions and making JRC competences and scientific and technical installations available to public and private bodies.

The European dimension of its work must remain one of the fundamental strengths of the JRC. Its activity should be characterized by a multidisciplinary approach based on the large span of its competences. This multidisciplinaryity shall be reflected in the choice of subjects of its institutes, thus ensuring its aptitude to take up new possible challenges.

This large exposure should not, however, lead to an excessive dispersion of the activities which are undertaken. Without ignoring the expectations of its customers, the Centre and its management must have clear views on the proper scientific-technical orientations for the JRC and be able to keep a balance in order to ensure that the activities and contracts which are accepted can be executed at any time with the requisite level of competence, qualitatively as well as quantitatively.

Paragraphs 5b and 5c of Annex II of the Framework Programme form an integral part of the present JRC multiannual programmes.

The following presents a summary of the objectives of the programmes based on and taking into account the above elements.

Nuclear fission safety

The objective is to increase scientific and technical knowledge by research on the prevention of accidents and studies on severe accidents, participating in the elaboration of risk assessment techniques and methods by using experimental installations of the JRC and by sharing a national research facility.

The contribution of the JRC will be in the following areas:

- reactor safety,
- safeguards and fissile materials management,
- radioactive waste management, and
- actinides in nuclear fuel cycle safety.

Reactor safety

The JCR activities will concentrate on:

- accident prevention studies;
- severe accident studies, in connection with risk assessment and concentrating on the study of phenomena, by using an existing JRC experimental installation and by sharing a national research facility.

Safeguards and fissile materials management

The research conducted in networks of national laboratories underpins and aims at the provisions of timely results or new techniques essential for fulfilling Treaty obligations for safeguards, as well as those of the Non-Proliferation Treaty. Work will include nuclear materials measurements, containment and surveillance techniques and the integration of safeguards measures.

Radioactive waste management

JRC objectives are to support the present strategy of the Member States, aiming at the disposal of radioactive waste in geological formations and to carry out research on management strategies which may lead to diminution of waste arising from future fuel cycle installations. Research conducted in collaboration with national laboratories will benefit from existing and newly constructed experimental facilities.

Actinides in nuclear fuel cycle safety

Activities for 1992-1994 will focus on the following subjects:

- safety studies of nuclear fuel behaviour (UO₂ and MOX) at extended burn-up, under transient, off-normal and accident conditions,
- basic physico-chemical and solid state studies actinides,
- study of nuclear aerosols,
- mitigation of the minor actinides and other long-lived radioactive nuclides arising in the nuclear fuel cycle,
- plutonium fuel technology (minor activity aimed at maintaining competence in the field).

Controlled thermonuclear fusion

This activity is intended to improve the knowledge base and technology of safety and environmental aspects of future fusion machines for the European fusion programme. The main part of the work will be in support to the next step (NET/ITER). An important feature of this programme will be the operation of the Ethel laboratory for the experimental study of the safe management of tritium. Other support to the next step will encompass design and development in specific technological areas such as remote handling of in-vessel components, plasma-facing components tests, data base for structural materials properties and nuclear data. Long term actions will include low activation materials research.

ANNEX II

AMOUNTS DEEMED NECESSARY FOR SPECIFIC PROGRAMMES WITH AN INDICATIVE
BREAKDOWN OF FUNDS FOR THE PERIOD 1992-1994

MANAGEMENT OF NATURAL RESOURCES

	(Ecu million)
<i>Line 5: Energy</i>	
— Nuclear fission safety	161,37 ⁽¹⁾
— Controlled thermonuclear fusion	<u>41,58 ⁽¹⁾</u>
	202,95 ⁽²⁾

⁽¹⁾ These totals include an amount equivalent to 6 %, which may be used for exploratory research.

⁽²⁾ An amount of ECU 2,05 million not included in the ECU 202,95 million is reserved, as a contribution from the specific programmes of the present decision, for the centralized action of dissemination and exploitation of results.

ANNEX III

**DETAILED RULES FOR IMPLEMENTING THE PROGRAMMES AND ACTIVITIES FOR
DISSEMINATION AND EXPLOITATION OF THE RESULTS**

1. The Commission, assisted by the Board of Governors of the JRC, shall implement the programmes on the basis of the scientific and technical objectives and content described in Annex I.
2. The rules for implementing the programmes, referred to in Article 3, comprise research and technological development projects and accompanying measures.

The projects shall be the subject of research and technological development performed in the relevant institutes of the JRC.

3. The institutes of the JRC shall endeavour, whenever feasible, to execute the projects in proper collaboration and in concert with national research bodies in the Member States. Particular attention will be paid to associations with industry, notably with small and medium-sized enterprises, in collaborative schemes around the projects. In the same way, research bodies established in third countries may also collaborate on projects in accordance with the provisions of Article 9.
4. The accompanying measures shall include:
 - the organization of seminars, workshops and scientific conferences,
 - the activities of internal coordination, including the organization of particular internal centres, which ensure homogeneity of the approach and a unique common interface to the users of and partners in the projects,
 - the activities of specialized training with accent on multidisciplinarity,
 - a system for information exchange,
 - the promotion of the exploitation of the research results,
 - the scientific and strategic independent evaluation of the performance of the projects and the programmes.

In the field of nuclear safety, supplementary measures should allow for collaboration on concrete projects, taking into account existing forms of cooperation, in cases where the know-how and experience of the JRC are essential in the Commission's action of assisting the countries of central and eastern Europe.

5. The dissemination of the knowledge gained through the realization of the projects will be done on the one hand by the programmes themselves, and on the other hand by the centralized action described in the third subparagraph of Article 4 of Decision 90/221/Euratom, EEC.
-

COUNCIL DECISION

of 29 April 1992

adopting a supplementary research programme to be implemented by the joint research centre for the European Atomic Energy Community (1992-1995)

(92/275/Euratom)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Atomic Energy Community, and in particular Article 7 thereof,

Having regard to the proposal from the Commission submitted after consultation of the Scientific and Technical Committee ⁽¹⁾,

Having regard to the opinion of the European Parliament ⁽²⁾,

Having regard to the opinion of the Economic and Social Committee ⁽³⁾,

Whereas, the Council adopted a Resolution on 29 April 1992 concerning the activities to be undertaken by the Joint Research Centre ⁽⁴⁾;

Whereas, in the context of the common policy relating to the field of science and technology, the research programme is one of the principal means whereby the European Atomic energy Community can contribute to the safe use of nuclear energy and to the acquisition and dissemination of information in this field,

HAS ADOPTED THIS DECISION:

Article 1

The supplementary programme on the operation of the high flux reactor (HFR), hereinafter referred to as 'the programme', the objectives of which are set out in Annex I, is hereby adopted for a period of four years, starting on 1 January 1992.

Article 2

The funds estimated as necessary for the execution of the programme amount to ECU 75 million. An indicative breakdown of this amount is given in Annex II.

Article 3

The Commission, assisted by the Board of Governors of the Joint Research Centre (JRC) shall be responsible for carrying out the programme and, to this end, shall call upon the services of the JRC.

Article 4

The Commission shall decide on the terms of reference of the Board of Governors.

Article 5

1. The Commission shall each year, before 31 March, submit to the European Parliament, the Council, and the Economic and Social Committee a report on the implementation of this Decision.

2. This report shall be accompanied by the observations of the Board of Governors. The Board of Governors may also submit through the Commission to the European Parliament, the Council, and the Economic and Social Committee a separate report on any aspect of the implementation of this Decision.

Article 6

This Decision is addressed to the Member States.

Done at Luxembourg, 29 April 1992.

For the Council

The President

Luis VALENTE DE OLIVEIRA

(1) OJ No C 234, 7. 9. 1991, p. 19.

(2) OJ No C 13, 20. 1. 1992, p. 510.

(3) OJ No C 49, 24.2.1992, p. 16.

(4) OJ No C 118, 9. 5. 1992, p. 8

ANNEX I

SCIENTIFIC AND TECHNICAL OBJECTIVES

The principal objectives of the programme are:

1. The safe operation of the HFR (high flux reactor) in Petten. This comprises routine operation of the facility for more than 250 days/year, fuel cycle management and safety and quality management.
2. Efficient utilization of the reactor in a wide scope of topical sectors: irradiation testing of materials for fission reactors, as well as for future thermonuclear fusion reactors, neutron applications to solid state physics and materials sciences investigations, radioisotope production and related activities, neutron radiography as a non-destructive testing method, and treatment of certain types of cancer with neutrons (Boron neutron capture therapy) and related research.

ANNEX II

INDICATIVE BREAKDOWN OF FUNDS

The funds to be contributed to the supplementary programme are broken down as follows:

- Germany 50 %
- Netherlands 50 %

Other funds are provided for, in addition to the supplementary programme, either under the heading of work carried out as part of the JRC specific programmes or under the heading of contractual work.

The indicative breakdown is as follows:

— **Supplementary programme:**

(a) *Exploitation of reactor*

- Germany ECU 32,5 million ⁽¹⁾
- Netherlands ECU 32,5 million ⁽¹⁾

(b) *Preparation of experiments (studies, rigs, etc.)*

- Germany ECU 10,0 million
- Netherlands p.m. ⁽²⁾

Total appropriations ECU 75,0 million

— **JRC specific programmes and contractual work for external third parties**

ECU 15,0 million + p.m. ⁽¹⁾

⁽¹⁾ These figures should be the subject of a review and a possible revision at mid-term (mid-1993).

⁽²⁾ Work to be carried out directly by the Netherlands, the equivalent of such work valued by the Commission at ECU 10 million.