## European Communities

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### **EUROPEAN PARLIAMENT**

# Working Documents

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## Report

on behalf of the Committee on Energy and Research

on the proposal from the Commission of the European Communities to the Council (Doc. 145/76) for a multi-annual research programme of the Joint Research Centre (1977-1980)

Rapporteur: Mrs H. WALZ

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PE 44.884/fin.

**English Edition** 

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By letter of 26 May 1976, the President of the Council of the European Communities consulted the European Parliament, on the proposal from the Commission of the European Communities to the Council for a multiannual research programme of the Joint Research Centre 1977-1980.

The President of the European Parliament referred this proposal to the Committee on Energy and Research as the committee responsible and to the Committee on Budgets and the Committee on the Environment, Public Health and Consumer Protection for their opinion.

On 20 May 1976, the Committee on Energy and Research appointed Mrs Walz rapporteur.

It considered this proposal at its meetings of 25 June and 15 July 1976.

At its meeting of 2 September 1975, the committee unanimously adopted the motion for a resolution and the explanatory statement.

Present: Mr Springorum, chairman: Mr Flämig and Mr Normanton, vicechairmen: Mrs Walz, rapporteur: Mr Artzinger (deputizing for Mr Burgbacher),
Mr Concas (deputizing for Mr Rizzi), Mr Dalyell, Mr Ellis, Mr Giraudo,
Mrs Kruchow, Mr Lautenschlager, Mr Mitchell, Mr Memmel, Mr W. Müller,
Mr K. Nielsen, Mr Noe, Mr Nyborg (deputizing for Mr Liogier), Mr Osborn,
Mr Pintat, Mr Pisoni, Mr Romualdi and Mr Vandewiele.

The opinion of the Committee on the Environment, Public Health and Consumer Protection is attached.

The opinion of the Committee on Budgets will be forwarded separately.

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The Committee on Energy and Research hereby submits to the European Parliament the following motion for a resolution, together with explanatory statement:

#### MOTION FOR A RESOLUTION

on the proposal from the Commission of the European Communities to the Council for a multiannual research programme of the Joint Research Centre 1977-1980

#### The European Parliament,

- having regard to the proposal from the Commission of the European Communities to the Council<sup>1</sup>,
- having been consulted by the Council (Doc. 145/76),
- having regard to its previous resolutions on Community research in the context of the JRC and in particular the resolution on the conditions for a fresh start in Community research at the  $\mathrm{JRC}^2$ ,
- having regard to the report of the Committee on Energy and Research and the opinions of the Committee on Budgets and the Committee on the Environment, Public Health and Consumer Protection (Doc. 283/76)
- Notes that the proposals for the future multiannual research programme form part of an overall concept for a multiannual research and development programme as recently drawn up by the Commission;
- Believes that the research activities proposed by the Commission correspond to the guidelines on the role of the JRC recently drawn up by Parliament<sup>2</sup>;
- 3. Welcomes the fact that the research activities were selected according to the criterion of being in the interest of the Community and therefore correspond to clearly defined objectives;
- 4. Approves the fact that the direct research programme concentrates on a limited number of research topics, a policy Parliament had often recommended in the past;
- 5. Expresses its agreement with the priority accorded by the Commission to research projects in the energy field;

<sup>1</sup> OJ No. C 147, 29.6.1976, p.3

<sup>&</sup>lt;sup>2</sup> Od No. c 125, 8.6.1976, pp. 16-18

- 6. Points out that the direct research projects in the new energy sectors (especially solar energy) and the environment sector must play a support role with regard to indirect action in these sectors;
- 7. Takes note of the Commission's statement that the JRC possesses competent and qualified staff for the implementation of these two kinds of action;
- 8. Calls on the Council, in accordance with its responsibilities, to obtain in future full information on the Joint Research Centre - particularly on the scientific and technical qualifications of the staff<sup>1</sup> - and, furthermore, requests the Commission to take, on its own initiative, the necessary steps to ensure that the Council is so informed;
- 9. Expects the Council, in its decision on nuclear fusion, not to confine itself to direct action but also to approve the JRC projects proposed in this field and to state its position in regard to the location of JET;
- 10. Points out that the proposed amendments of the Staff Regulations of the Communities in respect of the future regime for JRC staff will probably constitute only an initial step towards achieving a maximum degree of mobility of research staff;
- 11. Emphasizes again that the lack of a common industrial policy hampers the realization and full implementation of a common research and development policy;
- 12. Calls on the Commission to strengthen, especially in the key research sectors, the policy of cooperation with third countries working on similar projects, and on the Council to simplify the necessary decision-making procedures;
- 13. Believes that the structure of the budget for the future programme shows a more even balance between administrative and investment appropriations on the one hand and appropriations for staff expenditure on the other, and consequently represents a marked improvement; therefore considers it essential that this structure should be safeguarded by providing for the annual adjustment of the total volume of the budget to meet changes in costs and incomes;
- 14. Requests the Commission to submit a precise and generally comprehensible report to Parliament, on completion of the programme, on the progress achieved in implementing the research projects and an evaluation of their cost effectiveness;
- 15. Hopes that the machinery recommended by the Commission for the implementation and reorientation of the programme will be supplemented by checks, and possibly also by expert opinions, as to the completion of the individual sections of the programme;

See OJ No. C 139, 21.6.1976, p. 14

- 16. Stresses that direct Community research should not only have a pilot function resulting from the coordination of the research policy of the Community but must also, through its implementation, contribute to forging closer links with and among national research projects;
- 17. Requests the Commission to adopt the following proposal for an amendment pursuant to Article 149 of the Treaty establishing the EEC.

#### PROPOSAL FOR A COUNCIL DECISION

of .....

adopting a research programme to be performed by the Joint Research Centre for the European Atomic Energy Community and for the European Economic Community

THE COUNCIL OF THE EUROPEAN COMMUNITIES

unchanged

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

Having regard to the Treaty establishing the European Economic Community, in particular Article 235 thereof;

Having regard to the proposal from the Commission, submitted after consultation with the Scientific and Technical Committee for the nuclear actions;

Having regard to the Opinion of the European Parliament;

Whereas in the context of the common policy in science and technology the multi-annual research and training programme is one of the principal means whereby the European Atomic Energy Community can contribute to the rapid and safe growth of nuclear industries and also to the acquisition and dissemination of knowledge in the nuclear field;

Whereas Article 2 of the Treaty establishing the European Economic Community assigns to the Community, inter alia the task of promoting throughout the Community a harmonious development of economic activities, a continuous and balanced expansion and an increase in stability; whereas the objectives of the Community's activities for these purposes are set out in Article 3 of the same Treaty.

Whereas the non-nuclear research projects which form part of the subject of this Decision appear necessary in order to achieve these objectives;

Whereas the Treaty establishing the European Economic Community made no provision for the powers required for these purposes;

#### TEXT, PROPOSED BY THE COMMISSION OF THE EUROPEAN COMMUNITIES

AMENDED TEXT

Whereas the programme was drawn up in accordance with the Council Resolution of 17 December 1970 on the detailed rules for the adoption of research and education programmes 1;

Whereas the Italian Government has undertaken to take over the ESSOR complex made available to it by the Commission in accordance with Article 6(c) of the Treaty establishing the European Atomic Energy Community,

unchanged

Having regard to the illustrative breakdown of funds and staff in Annex II to this decision;

HAS DECIDED AS FOLLOWS:

ARTICLE I

A research programme, indicated in Annexes I and II, is hereby adopted for a period of four years from 1 January 1977. The annexes form an integral part of this decision.

ARTICLE I

unchanged

HAS DECIDED AS FOLLOWS:

ARTICLE 2

The commitment for expenditure, necessary for carrying out this programme, shall be 374,390 million units of account with a value as at 1 January 1977, on the basis of a technical evaluation of costs under the economic conditions effective at that date.

The maximum number of staff shall be 1,705 officials.

The allocation of funds and staff is given in Annex II.

ARTICLE 2

The commitment for expenditure earmarked for carrying out this programme shall be 374 million units of account with a value as at 1 January 1977, on the basis of a technical evaluation of costs under the economic conditions effective at that date.

The (<u>l word deleted</u>) number of staff shall be 1,705 officials.

The allocation of funds and staff is given in Annex II.

ARTICLES 3, 4 and 5 unchanged

 $<sup>^{</sup>m l}$  Official Journal No L 16, 20.1.1971, p. 13

#### EXPLANATORY STATEMENT

#### I. Introduction

- 1. The multiannual research programme which terminates at the end of 1976 will have formed an intermediate stage in the reorganization and revitalization of direct Community research. It has meant reorganization and revitalization because the 1973-1976 programme is the first multiannual programme since 1967. Between 1967 and 1973, for lack of agreement even on the principle of Community research, the Council had only adopted annual survival programmes. It constitutes an intermediate stage because, by its very content, this programme could only claim to provide a link between the previous situation, which had become untenable, and the definition and implementation of a new concept of direct Community research. Despite all these imperfections 1, this programme will have had as its principal merits the fact of ensuring the future of direct Community research and its instrument the JRC, and of enabling the problems of research and its management to be clarified during these four years.
- 2. Taking account of the experience thus acquired, it is now necessary to determine whether the proposals for a new multiannual research programme are likely to give Community research and the JRC a fresh start.
- 3. In our committee and the European Parliament, detailed information on the implementation of the 1973-1976 programme has been gained from a close analysis of the situation in direct Community research and the conclusions have formed the subject of four reports. The latest of these reports (Doc. 49/76) sets out in particular all the ways and means which in Parliament's view should be employed to encourage the Community research policy (direct actions).
- 4. As for the Commission, prior to its proposals for the future programme, it had submitted two communications which have been considered by the European Parliament on the basis of the reports submitted by our committee. In considering the future programme proposals, the guidelines and principles contained in the document 'Objectives, priorities and resources for a common research and development policy' (COM(75) 535 final) (Krieg report Doc. 71/76), and in the 'Overall concept for the next multiannual research programme of the JRC' (COM(75) 529 final) (Flämig report Doc. 49'76) must therefore be borne in mind.
- II. Analysis of the guiding principles of the future programme
- (a) Approach to the multiannual research programme
- 5. In its document the Commission points out that 'the competent departments

Resolution on the development of the Joint Research Programme presented by Mr Springorum - OJ No. C 14, 27.3.1973

Resolution on the conditions for a fresh start in Community research at the JRC presented by Mr Flämig and adopted on 11 May 1976 (Doc. 49'76)

- of the European Parliament have started their own study of the situation and of the prospects for the JRC, based on an analysis of its operation in the past. They have recommended that in future policy be modelled on the guidelines contained in the "overall concept" and discussed in the Council.'
- 6. It is certainly true to say that the approach recommended by the European Parliament is in line with that now put forward by the Commission. The guiding principles adopted by the latter coincide to a very great extent with those defined by the Committee on Energy and Research. Our committee can therefore only record its pleasure at finding that at last the research programme of the JRC, according to the Commission, is to be based on the following guidelines:
- '- the role to be played by the Centre must be one in which primary consideration is given to Community interests in the field of science and technology but which also ensures expert help and scientific and technical advice for the formulation and implementation of sectoral policies in the Community;
- there must be closer links between research projects carried out by direct and indirect action in order to achieve greater homogeneity and improved efficiency;
- there has to be a drastic concentration of activities on a small number of programmes comprising specific projects with fixed objectives and deadlines;
- stress must be placed on research in the energy and environment sectors, while at the same time encouragement must be given to the JRC's public service role;
- the implementation of a staff policy adapted to research requirements is of primary importance, partly in order to facilitate the mobility of research staff;
- a better balance must be achieved in the ratio of payroll costs to scientific and technical operating expenses in order to improve the efficiency of the Centre and increase the opportunities for cooperation with European research organizations;
- the structure for the execution and management of projects must be strengthened and the procedure for the assessment of work and results tightened up;
- a "rolling plan" must be evolved to enable the programme to be adapted to changing techniques and needs.'

- (b) The role of the JRC and selection of research activities
- 7. As regards the definition of the role to be filled by the JRC, it is to be noted that on this point too the committee's analysis has to a great extent been shared by the Commission. In line with the resolution adopted by the European Parliament on 11 May 1976, the Commission considers that there are three aspects to the role of the JRC:
- to carry out research of a 'central' nature,
- to develop its Community public service role,
- to provide the Commission with scientific and technical expertise and support.
- 8. On the basis of these criteria, the Commission has selected a series of research activities taking care
- to concentrate research potential on a small number of projects;
- to adopt projects in accordance with objectives of clearly defined content and with definite deadlines;
- to give priority to research on energy and the environment in view of the importance of these sectors in Community policy;
- to fully exploit the present skills of the Centre.
- 9. Subject to a more detailed examination of the environment programme, our commuttee finds that the choice of research activities proposed by the Communitation occords perfectly with the view taken by the European Parliament on 11 May 1976.
- (c) The main research topics
- 10. The Commission proposes to focus the future programme on five main topics, comprising ten programmes. These topics are:
- nuclear safety,
- future energies,
- environment and resources,
- measurements, standards and reference techniques,
- service and support activities.
- 11. These last three topics constitute programmes in themselves, but the first two comprise several separate programmes. Thus, 'nuclear safety' consists of programmes on
- reactor safety,
- plutonium fuels and actinide research,
- nuclear materials and radioactive waste management.

'Future energies' comprises programmes on

- solar energy,
- hydrogen,
- conceptual studies on thermonuclear fusion reactors,
- high temperature materials.
- 12. Following the final report on the conditions for a fresh start at the JRC, the committee now has to consider more particularly whether programmes such as 'solar energy' and 'environment' satisfy the conditions which the European Parliament had laid down for direct actions by the JRC.

#### III. Compatibility of research activities with the guiding principles

#### (a) Concentration

- 13. Paragraph 5 of the resolution adopted by the European Parliament on 11 May 1976 (Doc. 49/76) emphasized 'the need to concentrate Community research undertaken at the JRC on a limited number of topics which satisfy the criterion of being in the interest of the Community'.
- 14. Comparison of the 1973-1976 programme with the proposals for the future programme, shows that the Commission has in fact acted in accordance with the European Parliament's opinion by fitting the JRC into an overall concept again, that is, a Community research and development policy, by defining the purpose of direct research and consequently by reducing the number of programmes to a few priority areas which satisfy the criterion of being in the interest of the Community.

#### (b) Priority given to research in the energy sector

15. Paragraph 6 of the resolution of 11 May 1976 referred to above states that the European Parliament 'considers that research activities in the energy sector should constitute a central element of the future multiannual programme'.

To the extent that 60% of the appropriations and staff are allocated to energy research programmes (nuclear safety 48% and future energies 12%) the Commission has fallen in with Parliament's opinion. Your rapporteur would also point out that while 12% for future energies may seem totally inadequate, in view of the Community's energy situation, it must be stressed that this percentage applies to direct projects which constitute no more than support for more ambitious and elaborate programmes implemented in these areas in the form of indirect action.

16. With respect to the energy programmes, our committee would like to stress particularly the importance for the Community of developing research activities in the management of nuclear materials and radioactive waste, and reactor safety. As the committee has already pointed out in previous reports, research in these two sectors ought to result in Community action to coordinate the regulations in force in the individual Member States.

17. As regards hydrogen research, our committee has always considered that this programme constitutes 'a future-oriented area of research and, as such, of definite value to the Community'.

According to the Commission, the hydrogen programme will be undertaken in close collaboration with research carried out elsewhere in this sector, in particular at Julich, Aachen, and with the French CEA and Gaz de France. The research undertaken in the Netherlands and in Belgium is the result of contracts with the JRC.

18. The present state of research gives reason to hope that by about 1978 all the information necessary to proceed to a prototype phase will be available.

The committee considers that such an assumption presupposes compliance with several conditions. These conditions are necessary for all Community research programmes, but the particular case of the hydrogen programme is a very striking illustration:

- on the one hand, any transition to a prototype stage involves the need for the Community to have an industrial policy as a corollary to its research policy. Failing this, not only might the definition of the programmes be too abstract, but, in particular, exploitation of the research results might meet with insurmountable obstacles:
- secondly, the Community will only be in a position to utilize the research results, particularly in key sectors such as hydrogen, to the extent that such work is carried out as part of international cooperation, associating the Community with third countries such as the United States and Japan;
- finally, utilization of the results implies the existence at Community level of a political will capable of overriding certain purely national interests.
- 19. The Committee on Energy and Research also wishes to emphasize the importance for the hydrogen programme of the research carried out in respect of high-temperature reactors. In this connection, it would be highly desirable for the efforts made in this respect by the Federal Republic to be supported by other Member States as part of cooperation agreements.

#### (c) Links between direct and indirect actions

20. In adopting, on 11 May 1976, the resolution and explanatory statement submitted by our committee, the European Parliament expressed its doubts about the value to the Community of direct projects in respect of solar energy, the environment and remote sensing of the earth's resources. The report stated very clearly the reasons for such sceptism. It also pointed out that 'if the Community's research departments have good reasons for holding that one or more of these projects should be continued under the new programme as direct projects, the following should be most carefully considered:

firstly, the inclusion of such a project or projects in the JRC programme should under no circumstances result in an increase in staff; secondly, the personnel assigned to such project(s) should possess the appropriate qualifications; and finally the objective of direct action in these sectors should be limited to support for the other indirect actions.

Still on this assumption, the Commission must specify the precise ways and means by which the Joint Research Centre, through direct projects in these sectors, can support and promote the associated indirect research.'

- 21. The programme now submitted to us includes direct research programmes in the solar energy and environment sectors.
- 22. In presenting the 'solar energy' programme, the Commission has taken care to point out that 'the JRC has attempted to see what contribution it could bring to the global development in Europe of this form of energy, taking into account the recent adoption of an (indirect action) Energy Research and Development Programme (Council Decision of 22 August 1975). This analysis has led to consider essentially a role of support to the indirect action programme, and more specifically actions having a central character (inter-comparison, calibration of products developed elsewhere, setting-up of standard measuring stations).'
- 23. The same concern is evident in the presentation of the environment programme since the Commission points out that 'in the specific field of the environment, JRC activities are pursued in close liaison with the EEC's environmental research and development programme (indirect action); the two actions direct and indirect support the Community Programme of Action in this field approved by the Council on 22 November 1973 following the declaration on this date, on the objectives and principles of an environmental policy for the Community. In consequence, the role of supporting a Commission's sectoral policy constitutes the essential motivation for this programme.'
- 24. It recognizes however that 'if the nature of the studies on this subject undertaken by the JRC since 1972 has not always allowed the Centre to demonstrate a systematic central role, an effort in this direction has actually been accomplished. To this end, the JRC action has been concentrated on a limited number of themes presenting a collective interest and whose importance justifies an approach at Community level'.

Finally, the same arguments are developed as regards 'remote sensing of the earth's resources', which appears in the future programme under the new designation of 'activities on resources'.

- 25. From the details given by the Commission, your rapporteur recognizes that the conditions laid down by the European Parliament have been observed as regards direct actions on 'solar energy' and the 'environment'. In the latter case, it is to be noted that the Commission's proposals amount to a redefinition of this programme in the direction of a greater concentration of the activities and hence a reduction, both as regards staff and the budget, in the efforts devoted to this sector.
- 26. Finally, as regards remote sensing, which is used both in the context of the environment programme and the resources programme, it is evident that despite the small numbers of staff (about 20 scientists), the value of the information provided to the Community from this system justifies its retention in the new multiannual research programme.

#### IV. Implementation and management of the future programme

#### (a) Budgetary appropriations

27. According to the Commission's proposal, the overall financial requirement for the implementation of the multiannual research programme is 374.4 m u.a., i.e. 0.5% of the appropriations allocated to research by the Member States. Compared with the appropriations allocated to the multiannual research programme for 1973-1976, this figure of 374.4 m u.a. represents an increase of about 15%. It must be pointed out, however, that a large part of this increase in appropriations is intended to make up for capital investment not undertaken at the proper time.

In the overall budget, 57% is set aside for staff costs, the remaining 43% being allocated to operating and capital costs (21% for scientific expenditure and 22% for infrastructure).

- 28. The committee considers this budget structure to be an improvement over the previous situation which should help the JRC to adapt better to its tasks. A good budget structure implies that at least 40% of the expenditure is operating expenditure. As regards the allocation of the overall budget between the four budgetary years of the programme, the Commission considers that the highest appropriations would be needed for the first two years, because a certain amount of capital investment in scientific equipment and infrastructure is needed to start up the future programme. If, by reason of the rolling programme system, the fourth year of the programme were to constitute the first year of a new programme, the problem of the budgetary allocation would have to be reviewed.
- 29. The Committee on Energy and Research unreservedly supports the Commission's proposal whereby any Council decision amending the initial level of staff remuneration would have to be accompanied at the same time by a review of the provision of the necessary appropriations for the JRC. Similarly the principle

of annual adjustment of the budget to meet changes in costs must be followed, otherwise the budget structure referred to previously might very quickly be modified to the detriment of efficient Community research. The application of the principle of annual adjustment implies that the financial assessment on the basis of which the future decision on the multiannual programme will be taken should not be an integral part of that decision.

30. Finally, our committee recalls that in its previous reports it had suggested that part of the operating budget should be made directly available to the JRC to be used as research projects progressed. It considers that this arrangement would introduce greater flexibility in the management of the programme and facilitate the rapid reorientation of research. In the light of the Commission's proposals it would seem that such a measure has been partly adopted, since about 10% of the total allocations for the programme would be devoted to basic and orientation research extending the main programmes.

#### (b) Staff

31. The number of JRC staff is kept at 1,888 (officials and local staff), corresponding to the figure decided by the Council on 25 August 1975. To this must be added the present 471 local staff who hitherto have not appeared in the establishment plan, although they are included in the budget. On the other hand, if the Council adopts the proposal concerning the conditions applicable to JRC staff, these 471 people would be included in the establishment plan as staff under contract for an indefinite period.

The committee considers that the implementation of this first proposal will only constitute a first step towards achieving genuine mobility amongst the scientific staff.

- 32. A summary of the breakdown of staff and budgetary allocations between the research programmes appears on page 25 of the Commission's document. This shows in particular that the largest numbers of staff (i.e. 440 including 239 'research staff') are allocated to the 'reactor safety' programme.
- 33. The 'environment and resources' programme comprises a total staff of 188, including 115 research staff. Without wishing to call into question the quality of this staff, our committee would like to point out, however, that hitherto it has expected that the environment programme would only be carried out in the form of direct research if the JRC had staff with the required qualifications. If the Commission can give a formal assurance that this condition has been met, our committee would have no further objections.
- 34. As regards the JET project, the Commission states that 'at an appropriate date, the implications for the programme of a favourable decision in this respect, in particular the allocation of 100 JRC personnel for the project, will be examined by the Commission in conjunction with the consultative bodies, in particular with the General Advisory Committee'.

In anticipation of this possibility, the Commission should indicate whether it intends to replace these 100 staff for the implementation of the future programme or if, on the contrary, staff are to be re-assigned (and if so give the breakdown).

- (c) Management of the programme and retrospective scrutiny
- 35. The resolution adopted by the European Parliament on 11 May 1976 emphasized in paragraph 7 the need for retrospective scrutiny of research activities.

In the same spirit, the Commission proposes a number of measures designed to strengthen the management and supervision procedures of the research projects.

- 36. The objective being to ensure 'that the programme objectives are completed within the set time limits and to optimize use of men and materials', the Commission proposes the adoption of 'plans of action' which comprise the following elements:
- resources allocated to the objective;
- definition of the aims and the work plan (plan of action);
- indentification of critical activities and steps;
- work schedule with indication of milestones.
- 37. This provision, supplemented by other management and planning measures envisaged by the Commission, will ensure that the programmes are properly run with maximum flexibility and, where necessary, rapid reorientation of research activities. In this respect our committee fully endorses the Commission's plans, while hoping that this arrangement will be supplemented by further control of programme implementation by bodies external to the JRC and Commission. There remains, lastly, one of the main concerns of our committee, namely the provision to the European Parliament on completion of the programme, of a concise, precise and comprehensible report showing for each research project undertaken the extent to which it has been completed and the scientific results obtained.

#### (d) The JRC and coordination of national research policies

38. In its communication to the Council on the 'Objectives, priorities and resources for a common research and development policy' (COM(75) 535 final), the Commission stressed the importance of coordination at Community level of national research policies. One of the objectives of Community research and development policy is to promote such coordination. To achieve this objective, the Community has various instruments including the JRC. Direct Community research should not only be the outcome of coordination but, through its implementation, should enable close links to be established with national research.

'The Commission, concerning this point, places particular importance on the role of the Advisory Committees on Programme Management (ACPM). Such committees, which are common to both direct and indirect actions - when they co-exist - ensure cohesion of the research undertaken. In addition, these committees have a role to play in searching for increasing cooperation with work undertaken at the national level.'

39. Your rapporteur wishes to emphasize the importance of the Community having, as part of this coordination function and in support of the other services of the Community, a centre for documentation on the state of progress and results of research undertaken in Europe and third countries. She considers that the JRC should carry out this function or, failing that, be one of the principal bodies concerned.

#### V. Conclusions

40. The examination which our committee has made of the Commission's proposals shows that the conditions for a fresh start in direct Community research, as defined by the European Parliament in its resolution of 11 May 1976, have been amply fulfilled.

The Committee on Energy and Research notes with satisfaction that the long and patient work which it has undertaken in collaboration with the Commission is now beginning to bear fruit in the proposals for the future programme which have been submitted to it. It hopes that the same desire to serve the cause of direct Community research will be apparent at Council level.

41. Subject to the comments made in its explanatory statement, the Committee on Energy and Research records its agreement with the proposals for the multi-annual research programme of the JRC 1977-1980.

#### OPINION OF THE COMMITTEE ON THE ENVIRONMENT,

#### PUBLIC HEALTH AND CONSUMER PROTECTION

Draftsman: Lady FISHER of REDNAL

On 23 June 1976, the Committee on the Environment, Public Health and Consumer Protection appointed Lady Fisher of Rednal draftsman.

It considered the draft opinion at its meetings of 23 and 29 June and adopted it unanimously with four abstentions on 29 June.

Present: Mr Della Briotta, chairman and acting draftsman; Lord Bethell, vice-chairman; Mr Brégégère, Mr Pierre Bertrand, Mr Delmotte, Mr Guerlin, Mr Liogier (deputizing for Mr Hunault), Mr Martens, Mr Ney, Mr Noè, Mr Springorum and Mr Walkhoff.

#### I. INTRODUCTION

- 1. The Commission proposal for a multiannual rolling programme for the period from 1977 to 1980 in the Joint Research Centre (JRC) covers ten programmes on clearly identified and described lines of research, in general subdivided into projects and sub-projects. Four of the programmes primarily involve aspects of nuclear safety and environment protection, and are the subject of this draft opinion for the Committee on Energy.
- 2. Since some of the other programmes also include work on studying and improving safety levels in nuclear energy, it should be noted from the start that the appropriations proposed for nuclear safety and environment protection account for more than half of the total funds requested.
- 3. Each of the programmes proposed is the subject of a technical and financial description, and is accompanied by the opinion of the appropriate Advisory Committee on Programme Management.
- 4. These exhaustively detailed programmes form the subject of a proposal from the Commission to the Council for a Council decision adopting a 4-year research programme to be performed by the Joint Research Centre for the European Atomic Energy Community and for the European Economic Community as from 1 January 1977.
- 5. This draft opinion deals briefly with the work proposed in the specific research programmes on nuclear safety and environment protection, where special attention is called for or observations should be made.

#### II. PROGRAMMES ON NUCLEAR SAFETY

- In the nuclear safety area, three specific programmes have been drawn up, broken down into thirteen projects and some forty specific activities.
- 7. The reactor safety programme (No. 1)

  meets the requirements put by the Council in its resolution of
  22 July 1975 on technological aspects of nuclear plant safety.
- 8. The Committee points out that the introduction to the technical description of the first programme states that the expanding electrical energy needs in the Community can be met in the greater part only by an increase of the number of nuclear power plants. This assertion needs some amplification and is probably not meant to be so categorical, since the Commission has, within the framework of its limited possibilities, also proposed a specific programme for studying solar energy, hydrogen production and controlled nuclear fusion as future sources of energy (see programmes Nos 4, 5 and 6).

 $<sup>^{1}</sup>$ OJ No. C 185, 14 August 1975, p.1 and 2

- 9. The Commission should bear in mind that public opinion is still rather sceptical about nuclear energy, which provisionally is indeed the obvious energy source for meeting present needs. Anyway, for ecological reasons, the number of nuclear power stations cannot be increased without limit. Special attention should be paid to important options on siting and environment protection, and to aspects of population safety and health. Even if nuclear power shows clear financial and economic advantages, this should still be weighed objectively against human values that find no place in statistics.
- 10. Moreover, it has to be remembered that uranium stocks must be used sparingly, for they are limited and access to them may depend to some extent on international political factors.
- 11. In this connection, the committee welcomes the fact that the Commission has proposed for the JRC a specific, though possibly too limited, programme on 'plutonium fuels and actinide research' (Programme No. 2), since the aim of this programme is to support scientific research work on making better use of the limited uranium stocks. It is clear from the introduction to this programme that much research remains to be done in this field. Plutonium is much more radioactive than uranium and therefore requires, from the safety point of view, costly, dangerous and highly qualified research work.
- 12. Attention is further drawn to the fact that according to the technical description from the Advisory Committee on Programme Management, various research projects from the previous programme ought to be continued. This means that some of the projects on utilization limits of plutonium fuels and plutonium aspects of the fuel cycle could be cut back. The Committee therefore wonders whether more funds and researchers ought not to be put into this area, especially since there is still too much scientific uncertainty about the peaceful uses of plutonium in relation to public health.

- 13. This last also appears in Research Programme No. 3 on 'nuclear materials and radioactive waste management'.
  - From the environment and health protection point of view, this programme obviously deserves great attention.
- 14. As explained in the Commission's proposal, this programme is concerned with the different steps of the fuel cycle both before and after the reactor, concentrating on
  - (a) meeting the growing preoccupation with the safe and efficient management of fissile material over its entire use;
  - (b) the storage and management of radioactive wastes;
  - (c) the decontamination of reactor components.
- 15. This programme is rightly aimed at finding convincing answers to two major questions frequently posed by the general public to advocates of nuclear power:
  - (a) Will future generations have to pay for the benefits we get now from nuclear power?
  - (b) Can it be guaranteed that the nuclear materials used and generated by nuclear power are safely contained within the fuel cycle?
- 16. The Committee attaches great importance to research projects in this programme aimed at answering these questions objectively. Answers to them are certainly a necessary condition for nuclear power. The Commission also agrees with this, and says at the end of the introduction to this research programme that all the premises exist for a ready start towards the solution of problems which, if not tackled in time, may considerably slow down the development of the nuclear power industry.
- 17. Research projects in this area were carried out in the 1973-1976 programme. The Committee would therefore like to know what findings the Commission has reached already, and whether it thinks that in the short term it can convince public opinion so that there will be no delay in the development of nuclear energy.
- 18. As an independent and neutral public institution, the JRC has an important job to do in introducing, after empirical research in collaboration with national research projects, adequate common safety norms so as to offer the public and the environment a uniform maximum level of protection against radiation risks.

#### III. ENVIRONMENT AND RESOURCES (research programme No. 8)

- 19. This programme responds to a general concern and will be pursued in close liaison with the EEC's environmental research and development programme. In consequence, the role of supporting a Commission sectoral policy constitutes the essential motivation for this programme (indirect action).
- 20. It is subdivided into 4 projects, concentrated on points such as air and water pollution and noxious chemicals. The Committee is pleased to find that this programme shows an evolutionary character and that a certain progressive orientation towards subject relevant to the energy ecology is foreseen.

#### IV. CONCLUSION

Since nuclear energy is, at least temporarily, the only way towards replacing scarce oil and coal - which is increasingly difficult to extract - and meeting rapidly rising energy needs, the committee recommends, subject to the above observations, that a favourable opinion on the multiannual programme be delivered.

It hopes that the JRC's objective research, with particular regard to the production and use of plutonium, will lead to convincing results that can set public opinion at rest.