COMMISSION
OF THE EUROPEAN COMMUNITIES

Commission Memorandum to the Council

concerning

OVERALL COMMUNITY ACTION

on

scientific and technological

RESEARCH AND DEVELOPMENT

Supplement 1/71 - Annex to the Bulletin of the European Communities 1 - 1971

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11 November 1970

Brussels

Contents

The Commission has directed its attention to the elaboration of a policy for scientific and technological research and development, which was recognized by the Hague Conference to be a task of the Community, and to the state of crisis which has existed for some years in regard to the research activities of Euratom. Conscious of its duty not only to put forward concrete proposals but also to indicate the general justification for these proposals and in response to the Council's demand for a general review of the problem, the Commission is submitting the present document, which is to be regarded as the basis of all steps to be taken in regard to scientific and technological research and development work undertaken in the coming years.

I. INTRODUCTION

A. Background of the problem

1. The Community Member States are at the present time pursuing numerous research and development activities. These projects are carried out by the States themselves, their universities, public or semi-public research centres, private enterprise and by a variety of national and private associations.

The wide variety of measures taken may have the advantage of stimulating the inventive spirit or the competitive capacity of research and production centres, but the uncontrolled increase in research activities in countries having small or moderate resources involves grave disadvantages :

— costly dispersion of effort,

— sterile competition in various sectors,

— excessively modest projects compared with the intended aims or action undertaken by non-member countries,

— the uncertain nature of the national R & D options due to a failure to take into account the European or international outlets necessary for the various activities.

The creation of the European Communities could have altered the nature of the problem but has not done so. With few exceptions the new dimension resulting from the association of the Six has not in practice been exploited in regard to scientific and technological development.

In particular, this attitude has limited the possibilities of large-scale and original technological programmes being implemented by the Community. At the same time it has deprived the most advanced industries in the Community of the advantages of the Common Market.

2. In the absence of any general picture of the activities now in progress or planned in the Member States, and in the absence of any systematic examination of solutions aimed at stimulating technological development, the Community has adopted a wait-and-see attitude or has only concerned itself with the leisurely development of individual operations. Not being in a position to make clear and coherent choices between national, Community and concerted international courses of action, the Community Member States have not up to now coordinated their efforts, let alone defined the general lines of a Community policy for R & D—apart from fairly futile attempts in the nuclear field.

B. Precedents. The Hague Conference (1-2 December 1969) and the Resolution of the Council of Ministers of 6 December 1969, Cf. 3

3. It does not appear opportune to give here a historical rundown of the projects carried out and the steps taken by the EEC in regard to nuclear research and scientific research policy.

In order to provide a better basis for the present document, however, it is necessary to recall that recommendations in these fields were put forward in the first Medium-Term Economic Policy Programme back in July 1963. This was the start of a process which was to result by successive stages in the production of the "Maréchal Report" in 1967 and the Resolution of the first R & D Council dated 31 October 1967, to be followed by numerous Council decisions.

4. At the Hague Conference (1-2 December 1969) the Heads of State or Government reaffirmed "their desire to pursue more vigorously the activity of the Community in regard to the coordination and promotion of industrial research and development in the principal sectors of importance, in particular by Community programmes, and to provide financial resources for this purpose." They recognized, furthermore, that it was both necessary and urgent to draw up a research programme in the light of the requirements of modern industrial practice which would ensure that the most efficient use was made of the Joint Research Centre (JRC). In line with this declaration the Council of Ministers of the Communities laid down in particular in their Resolution of 6 December 1969 that "the resources of the JRC could be used for non-nuclear scientific and technological research activities."

The highest political authorities of the Community Member States have thus expressed their desire to organize and intensify the activity of the Community in regard to industrial research and development. The unequivocal expression of this desire committed the Community to drawing up a general table of R & D activities for implementation or coordination within the Community and to outlining the Community programmes—whether or not connected with the nuclear field—to be undertaken or pursued.

However, these directives, which represented a departure from previous aims and methods and which underlined the desire of Member States to coordinate their efforts in the principal sectors in question, with the emphasis on essential rather than secondary aspects, have not always been followed up or implemented.

II. THE PREPARATION OF PROGRAMMES AND DECISIONS IN REGARD TO R & D AT THE COMMUNITY LEVEL

A. Inadequacy of existing structures

6. The bodies responsible for undertaking studies and preparing programmes and Community decisions on R & D appear to be both uncoordinated and incomplete and for this reason not well suited to implement the overall brief assigned to them by the Resolution adopted at the Hague Conference.

(a) Studies and work in this field are being carried out by various authorities of different status, terms of reference and composition whose actions are not always coordinated, such as the Scientific and Technical Research Policy Group (Prest), the Nuclear Questions Group, the Euratom Scientific and Technical Committee and the ad hoc Industrial Policy Group, all of which include representatives of the six Member States, and the Scientific and Technical Cooperation Group (Cost), which includes representatives from 15 European Countries.

In spite of the number of existing Community groups, their studies and work do not cover the whole range of the scientific and technical activities of Member States.

Lastly, none of these groups is able to ensure a measure of effective agreement on the position of the Community Member States in regard to scientific activities carried out by other international organizations or joint projects undertaken in collaboration with non-member countries.

(b) The Commission, for its part, by a series of successive approaches on various aspects of the question, asked the Council in its note of 17 June 1970 to adopt a position on a procedure for consultation between the Six in regard to the principal national R & D projects—both nuclear and non-nuclear—and also on various proposals for action in specific sectors. Furthermore, as regards the JRC, the Commission passed to the Council a note on the administrative reorganization of the Centre and instructed a group of four experts to draw up a report on the role of the Centre and the orientation of its activities. Finally, the Commission's memorandum on industrial policy contains a series of proposals relating to the technological development of the Community.

7. It is clear that the procedures adopted and the limited action initiated by the institutions of the Community are insufficient to solve the problems enumerated above. Only the Scientific and Technical Research Policy Group is

attempting, by comparing the scientific plans and programmes of Member States, to present an overall picture of the aims and activities of R & D within the Community, thus making it possible to define useful fields for coordination or joint action. This approach has, however, run up against numerous snags, namely, the effective limits of the Group's terms of reference, the composition of the Group or the restrictions imposed on the implementation of its brief, which are such that consultation of all the interested parties—industry, universities, trade unions, etc.—is only permitted in exceptional cases or by indirect means, and the national reservations or difficulties in defining their medium-term aims and programmes. It should be recalled in particular that the Prest Group is not concerned with nuclear R & D.

8. Lastly, in the work which has been undertaken only sporadic attention has been paid, and merely in relation to particular sections, to the prospect of an enlarged Community. However, in the event of such an enlargement the participation of the United Kingdom would alter the dimensions of the overall problem. Since negotiations are now open, any consideration of the problem as a whole should take into account all possible aspects of the participation of new members of the Community.

9. There is little reason and certainly no advantage to the Community in remaining inactive pending the conclusion of the negotiations. On the one hand, any considerable loss of time may entail serious consequences in these fields. On the other hand, although the problem to be faced by an enlarged Community will be on a different scale from those faced by the Six, there will be no change in the nature of the data. Furthermore, knowledge of the R & D potential of the applicant countries is sufficiently precise and contacts at the technological level with these countries sufficiently frequent to avoid any decision likely to be prejudicial to future action.

10. If the Community had not been engaged in R & D activities (Euratom) since its foundation, the first step would be to set up the policy-making and administrative bodies, to ensure approval of its programmes and budget and to create a Joint Research Centre. The force of circumstances, however, has imposed an opposite priority in regard to the sequence of steps to be taken.

Reorganization of the JRC

11. The Community already possesses a JRC, which has been in a state of crisis for several years, and its house urgently requires putting in order. The reorganization of the JRC would be an essential token of the Community's desire to undertake the ambitious tasks entrusted to it by the Hague Conference. For this reason the Commission is making a start by taking or proposing a series of measures to be taken by the Commission itself or by the Council, in order to

restore the vitality of the JRC.* The characteristic features of these measures have been debated at length at all levels. They constitute an indivisible whole even though for legal reasons they have been presented in the form of separate instruments.

It should be stressed, furthermore, that the reorganization of the JRC will only make sense if the Council adopts a multiannual R & D programme for the Community in the Coming months.

The multiannual programme

12. The prolonged failure to draw up multiannual programme and the repeated carry-over of research budgets cannot be allowed to continue if the Community and its JRC is not to lose all credibility in this field. Although in the long-term the preparation of programmes and the implementation of R & D activity in the Community presupposes the creation of the policy-making and administrative bodies outlined in the following pages, a first draft multiannual programme should be prepared immediately by the Commission. This first programme will therefore be in a certain sense a transition programme : it will need to be added to, modified and adapted at the proper time in consultation with the Community organizations, the creation of which is proposed in the following pages and which can only be brought into existence after implementation of these first measures.

The draft programme, which the Commission will present as soon as possible, will consist of further action on those agreed or proposed projects which deserve to be pursued or undertaken, projects suggested by the committee of four experts and any other new projects for which the Commission believes a good case can be made out.

A first working document concerning the programme is submitted at the same time as the proposals for the reorganization of the JRC.

Need for new structures

13. Owing to the importance, complexity and the shifting nature of the problems which have to be solved in order to arrive at a Community-level

*1 Draft decision by the Commission setting up the JRC as a largely autonomous body, defining the powers of the Director-General and the consultative structures to assist him, in particular in regard to the drawing up and execution of programmes.

2 Proposals by the Commission for revision of the budgetary system within the framework of the reorganization.

3 A working document on the multiannual programme, to used as a basis for the draft Resolution by the Council containing this programme. The amendments to the Statute of Service will only come into force in conjunction with final approval of the programme (covered in Para. 12).
The Commission intends shortly to submit a draft regulation on future personnel policy.

definition and implementation of the required R & D activities, however, new administrative structures are needed which will be permanently employed for preparing and administering overall programmes.

The setting-up of these structures, which are outlined in the following pages, is bound to be gradual. The Commission will only put forward appropriate proposals after broad consultation with interested circles.

A certain period must inevitably elapse before these new structures can be set up. It is nevertheless necessary to bear in mind right from the start that the first steps in the reorganization of the JRC, and the transition programme, will only acquire their full significance against the background of the completion of the overall project.

B. The European Community for Research and Development (CERD)

14. With a view to promoting a clear choice in the future between national, Community and concerted international action, the Commission believes that it will be necessary to create a programme and study body responsible for the preparation of decisions by the Community authorities with a view to:

(a) defining the fields or sectors in which Community projects should be undertaken;

(b) drawing up joint programmes in R & D fields or sectors in which the implementation of joint projects appears necessary or appropriate;

(c) defining the aims and forms of cooperation between the Community and non-member countries and international organizations;

(d) defining and proposing the forms of initiative or executive action to be adopted in order to achieve the agreed aims, including the organization of information and data centres, the harmonization of action in the public sector, the granting of financial aid to certain R & D programmes, etc.

15. In order to ensure that the brief outlined in Para. 14 above is carried out, the Commission proposes that a European Research and Development Committee (CERD) be set up. This Committee would take over in extended form the terms of reference of the various working groups at present in existence on the Community level and would, depending on the particular case, either replace them or make use of the work already carried out in order to prepare the overall reviews which would be required from time to time.

16. CERD will consist of senior officials responsible for R & D policy in Member States, representatives of bodies for the general promotion of research,

and leading figures from universities, industry and trade unions. The CERD could be divided into sections in order to reconcile considerations of proper representation and efficiency.

17. The general terms of reference of CERD will be to draw up and submit to the Commission all draft plans and programmes for R & D cooperation and coordination within the Community. On the basis of these recommendations the Commission will present its proposals for decisions to the Council.

18. In the year following its creation CERD would be required to submit a first outline of the projects for development, coordination or gradual implementation within the Community. These initial proposals will incorporate, with possible amendments, the transition programmes drawn up prior to completion of the first overall studies by the CERD.

At the same time they will key into the overall picture of those individual joint projects which have been decided on or undertaken—by dint of their urgency or value—by the Community Member States (projects studied by the Prest or Cost groups, for example).

19. These suggested projects should be accompanied by details of the measures or executive action necessary to ensure their implementation and of the financial backing required.

Depending on the intended aims and agreed projects, the range of such measures should cover the following:

(a) Organization of information and data centres. Creation of networks for the transmission and dissemination of such information—standardization activity;

(b) steps to harmonize action in the public and in certain cases the private sector, in order to avoid duplication of effort and to prevent the creation of new barriers between Member States (concerted action—coordinated programmes —public services . . .);

(c) organization of, or support for, training and respecialization courses for scientists, engineers and technicians;

(d) the granting of financial aid for R & D programmes and specific industrial development projects conducted by public or private centres or undertakings which could be regarded by the Community as being of prime importance.

In particular cases, for the financing of projects which would not be carried out at joint centres, a decision might be taken to avoid contracts, grants or loans for:

— the promotion of programmed research projects by the public authorities,

— the development of programmed R & D projects by public authorities in agreement with industry,

— the promotion of contracts of association with financial participation by the Community,

— the encouragement of industrial growth by the development of saleable products or manufacturing processes. The proposals would in this case come from industrial firms.

In all such cases the conditions for the granting of financial aid would have to be defined in advance (industrial property rights, dissemination of knowledge, transfer of know how, etc.);

(e) possible granting of the status of Joint Enterprise to industrial firms participating in a Community project;

(f) participation in the activities of other international scientific and technical organizations and possibly in intergovernmental cooperative projects;

(g) direct implementation of R & D programmes which by their nature or their conditions of implementation would have to be carried out in a Community centre or at the initiative of or under the supervision of Community authorities.

III. COMMUNITY PROJECTS: THE RANGE OF ACTIVITIES FOR CONSIDERATION

A. Spheres of activity

20. On the basis of the aims and intentions formulated in different fields by the governments and industries of Member States, it appears possible to present an initial rundown of the fields or subjects requiring to be examined on the Community level.

The following breakdown has been adopted here:

— pure or oriented fundamental research

— applied research

— public services

— industrial development

— environment.

21. If one were to look beyond the first multiannual programme, to which reference was made in paragraph 12, it would not be difficult to draw up a summary table of the main projects included in each of the above categories. Such a table would contain all the projects which the various bodies listed in paragraph 6 deemed worthy of consideration by the Community, either alone or in association with non-member countries. This table, although undoubtedly incomplete, might give the impression that large-scale and sustained Community activity or scientific and technological R & D is possible. Nevertheless, neither this nor any similar table, compiled from other sources, could claim to give a general picture of possible tangible R & D projects within the Community.

Such a picture could only be obtained as a result of a dialogue in depth between a Community policy-making body, such as CERD, and the Community's political organizations.

For this reason the brief observations below will be restricted to general considerations of the value of the above categories of research activity to Community action.

B. Pure or oriented fundamental research

22. Pure or oriented fundamental research constitutes the first stage in the process of the advancement of knowledge. The Economic Community can hardly fail to be interested in what is the very fountainhead of technological development.

A characteristic feature of this vast field is, however, a large measure of decentralization in regard to both planning and execution. The best solution would therefore be for the Community to restrict itself essentially to promoting cooperation between different teams, the mobility of scientific research workers, teachers and students and the circulation of information between states.

23. Cases do nevertheless arise which require a more direct initiative on the European level. These include certain large-scale programmes involving very considerable expenditure on equipment or the participation of highly specialized teams. Various important European projects—CERN may be regarded as one of the most succesful attempts of international cooperation—have evolved in this way both in the Community and within the framework of specialist international bodies. These efforts should be pursued or intensified and in some cases extended to cover other fields of comparable interest where similar conditions apply.

C. Applied research

24. Pure or oriented fundamental research and the "development" stage are separated by a vast zone of research without clearly-drawn boundaries, which can often only be defined in relation to the underlying motives, this is applied research.

Applied research covers in particular many projects with humanitarian or social aims, such as medical research, numerous exploratory research projects for industrial purposes designed to raise the technological level of production plant, exploratory research on instruments (e.g., prototype trials) and materials, etc.

D. Scientific and technical public services

25. The term public service includes here two types of activity:

— the setting-up and management of installations placed at the disposal either of administrative bodies fulfilling regulatory functions or of a group of undertakings concerned with the solution of similar problems;

— the creation and maintenance of technical infrastructures to serve the economy as a whole.

26. For the first category of activity the public authorities at present assume many responsibilities in relation to the utilization of scientific data, whether in the field of standardization, safety regulations or the approval of products which may present a danger to the public. They also make available for general use

large-scale test facilities, thus enabling industries to make substantial improvements to various technical processes.

In this way the public authorities finance and provide technical services of general value (test beds, standards, reference samples, control laboratories).

These various services constitute the technical infrastructure of a complete administrative and regulatory apparatus, which exercises a considerable influence on the marketing both of high-technology products and of foodstuffs or pharmaceuticals. In order to help to eliminate divergences between national regulations, which constitute technical obstacles to trade, it will become more and more necessary for the Community to have such an infrastructure at its disposal. This would enable Member States and their industrial undertakings to adopt regulations, standards and test methods which had been worked out jointly and which, furthermore, could be used by industry for solving various technical problems.

The aim of such a body of public services, expanded on a European scale, would be closely linked to the setting-up of a large unified market.

27. In the case of the second type of public service activity—the creation and maintenance of technical infrastructures to serve the economy as a whole—action by the Community would be justified on other grounds. Whether such services were concerned with meteorology or oceanography or activities based on the existence of communications networks, action at a Community level could prove more advantageous or economic for Member States than projects undertaken on a purely national scale.

Since technological progress will render it both possible and necessary to set up numerous *new* services in the public sector, it would be undesirable for Member States, by means of uncoordinated decisions and separate investment in national infrastructures, to place additional difficulties in the way of the organization of all those European services regarded as indispensable for the future.

The forms of Community action could extend from devising dovetailed solutions to "interface" problems to the creation of genuine European centres or public services. These activities would assume considerable importance for the overall competitive basis of the European economy, since this is a highly technical infrastructure which is growing rapidly in other parts of the world.

E. Industrial development

28. Research, and to an even greater extent development work, with a scientific aim is basically the responsibility of industry.

However, the public authorities frequently have an essential part to play in financing the most important programmes, in view of the high cost involved, the deadlines imposed and the risks inherent in such programmes.

Member States all help, in fairly similar ways (by loans and grants), to finance the development work carried out by their industrial companies. By their national character, such forms of assistance frequently constitute an obstacle to cooperation between undertakings in different countries, let alone their integration into multinational groups of sufficient size. They also have the effect of consolidating the divisions between the markets for technologically advanced products and in certain cases can jeopardize competition, since each country endeavours to reserve its national market for the companies and products which benefit from its financial support. Experience has shown that such obstacles can only be in part overcome by long and complex international negotiations, resulting most frequently in an irrational breakdown of responsibilities between the various participants.

29. A whole range of Community solutions should therefore be examined with a view to overcoming these disadvantages and above all to developing on a wider base the competitive capacity of Community undertakings.

Various measures might be considered, such as:

(a) the granting of the status of Joint Enterprise in non-nuclear fields;

(b) a concerted and properly organized participation on the Community level in international programmes;

(c) the granting of Community contracts for industrial developments;

(d) the authorization of the JRC to undertake research work for companies or governments on a contractual basis.

The submission of projects likely to benefit from Community aid would be mainly the responsibility of the undertakings themselves, so as to encourage them to set up cooperative ties extending beyond national frontiers. Such ties, if initiated right from the start, i. e., at the development stage of products or processes, would avoid the dispersion of financial effort and the subsequent division of markets and would ultimately constitute a powerful stimulus to the foundation of multinational European enterprises.

F. Training — Information

30. The projects described in the preceding pages cannot become fully effective unless backed up by a number of general measures, in particular in regard to the training and mobility of personnel and the improvement in the flow of information and in scientific and technical documentation. Horizontal

developments in these fields constitute, furthermore, a general contribution to scientific development and innovation and deserve particular support for this reason.

The training of men of all ages and at all levels is one of the vital conditions for the progress of society in Europe and will largely determine its dynamic vitality in the future. Priority should be given in this context to reaching agreement on the reorganization and reshaping higher education—at a time when it is a subject of controversy throughout Europe—and the organization of post-graduate training, particularly in fields which touch most closely on the science and technology of the future. The training requirements for top-grade data-processing experts and the need for teachers in this discipline, a field in which various steps have already been taken, should be reviewed with particular urgency in the light of the exponential growth in scientific information.

The Community should, furthermore, evolve an ambitious programme of support for scientific and technical information and documentation, either by the gradual setting-up of a European documentation and information network, or by the implementation of a Community policy for scientific-technical information and documentation based on the harmonization of national policies or by the setting-up of a permanent working group. A first step towards the achievement of this aim should be the rapid implementation of the metallurgical documentation and information system recommended by the members of the Prest Group and the successful completion of the work on systems under study in other fields.

In the same context, steps should be taken to develop and coordinate studies on technological forecasting and to ensure the dissemination of their results to users in both the public and the private sector.

G. *Environment*

31. An environment policy is concerned with the overall negative and sometimes dangerous effects of our advanced industrial system on nature and on society, the social aspect being no less important than ecological considerations.

There are numerous factors which militate in favour of vigorous action by the Community in this vast and important field, the data of which are as yet relatively unknown.

It is essential at this time:

— to avoid any adverse effect on the campaign against pollution due to the conditions of competition established and guaranteed by the Common Market, since each State will hesitate to impose new restrictions on its national industry;

— to prevent the uncontrolled growth of new national regulations which will ultimately have to be harmonized;

— to coordinate the actions taken to protect natural features (in particular rivers) which cross national frontiers;

— to undertake the essential studies and multidisciplinary research on a joint rather than a separate basis.

32. The Community can take advantage of current activities carried out by other international organizations and must avoid duplication of effort. It is already studying the work of the OECD Environment Committee, the terms of reference of which are to harmonize the views of participant states both on the assessment of the cost of pollution and on the extent of the funds which should be devoted to its prevention or elimination. It is also following closely the studies undertaken by the Council of Europe in this field and is participating directly in the work of the Cost Group on this subject.

It is nevertheless clear that the Community is in a position to undertake measures both of a more concrete nature and on a wider scale by drawing up multidisciplinary research programmes and issuing Community regulations based on the results of its own studies or those of other organizations. It will in general be necessary to await the result of such studies before issuing new regulations.

33. In its communication to the Council dated 17 June 1970 and in the declaration made by the Chairman of the Commission to the European Parliament on 15 September 1970, the Commission notified its intention to submit to the Council as soon as possible its initial proposals for measures to be taken in this connection.

34. The JRC, which has already done useful work on nuclear pollution, should be authorized to extend its researches, especially in fields closely allied to nuclear pollution, so as to become by stages a pilot centre for technological pollution research.

35. It appears essential, moreover, to consider setting up an "Institute for the study of Environmental Problems," having an indisciplinary structure, which would be in a position to

(a) determine the measures to be taken;

(b) promote the necessary studies and research to enable an overall European policy on the environment to be worked out;

(c) draft Community or national legislation for submission to the political authorities of the Community or of Member States. These studies and the relevant research could be undertaken by the Institute itself, calling on the assistance of the JRC or other institutions where necessary, or in co-operation with them.

H. Preparation of Community projects and relations with applicant countries

36. The possible setting-up of CERD and the examination of a Community R & D policy could present problems to the applicant countries.

It would be desirable for the Community authorities to take careful note at all times of any declarations made or written statement issued by the applicant countries on this subject.

IV. ADMINISTRATION, FINANCING AND IMPLEMENTATION OF COMMUNITY PROJECTS

A. Aims of the Commission

37. In this attempt to produce an overall analysis of the problems of orientation and organization facing the Community in regard to R & D, the Commission has sought to meet the following requirements:

— to take into account the field of scientific and technical activity as a whole;

— to submit proposals for complete structures capable of implementing the ambitious Community decisions reached at the Hague Conference;

— in planning these structures, to draw on the experience of the great industrial powers and, having done so, to achieve a correct balance between responsibility for management and for execution;

— to restrict the action of the Community to those cases where it appears necessary and to avoid at the same time placing obstacles in the way of Member States and undertakings in any of the steps which they may take or associations which they may form with states or undertakings outside the Community. Action by the Community cannot and should not provide anything more than a frame of reference, a centre for the promotion of R & D activity in the public and private sector, the extent of which should not be reduced.

B. The administration and financing of Community projects

38. Only the requirements for research programming and the preparation of decisions would be met by the creation of CERD. The implementation of Community decisions on the steps to be taken will, however, involve financial resources and administrative bodies, however small these may be initially. For example, even the possible implementation of the individual projects studied by the Cost Group would require a minimum organization to support the agreed cooperative projects.

C. European Research and Development Agency (ERDA)

39. The Commission therefore proposes to set up its own European Research and Development Agency (ERDA) with a separate allocation of Community funds ; this body would be responsible for the implementation of the measures enumerated in paragraph 19 above.

40. The Agency will be the repository of the funds made available to the Community as a result of the conclusions reached in the study of the overall Community R & D policy. They will be placed under the control of the Commission.

41. The Agency will exercise its functions within the framework of the options and programmes adopted by the Council at the instance of the Commission, which will in turn base its proposals on the opinion of CERD. The programmes will be multiannual, subject to two-yearly revision. They will indicate the R & D sectors which the Community undertakes to promote, the measures to be taken and the breakdown of funds between the various operations to be undertaken.

42. The allocation of funds available to the Agency will be included in the Community budget, which after 1 January 1971 will be covered by the Community's own resources.

43. The regulation setting up the Agency will provide for its division into sections corresponding to the various forms of activity enumerated in paragraph 19 above. The JRC will come under the control of ERDA as soon as the latter has been set up.

44. Within the framework of its activities the Agency will be able to conclude agreements and enter into contracts, including financial participation, with one or more states outside the Community or with nationals of such states.

The Agency will have a considerable measure of autonomy to decide on such agreements or contracts. It will be organized according to the principles and requirements of modern industrial management.

45. The creation of the Agency may in the future raise certain problems in connection with the enlargement of the Community. Here again it would be desirable for the Community authorities to take careful note at all times of any declaration made or written statement issued by applicant countries on this subject.

V. CONCLUSIONS

46. The implementation of a Community R & D policy forms part of the process of extension in depth which is an essential facet of the creation of the economic and monetary union. The same remark may be made in connection with R & D policy, the complexity of whose aims and methods, as was made by the Council of the European Communities on 8 June 1970 with respect to the economic and monetary union, namely, that the main decisions should be taken "on the Community level and that the necessary powers should therefore be transferred from the national to the Community level."

In the long term the R & D policy will help to bring about far-reaching changes in the existing treaties and institutions. The implementation of this policy should not, however, be made contingent upon introduction of these changes.